

2025 PENNSYLVANIA DAIRY PRODUCER SURVEY RESULTS



EXECUTIVE SUMMARY

The 2025 Pennsylvania Dairy Producer Survey was conducted by the Center for Dairy Excellence and the Penn State Extension Dairy Team in early 2025 to evaluate current demographics and trends and to identify needs within the dairy sector. The survey was distributed by mail and online to Pennsylvania's dairy farm community. The response rate represents between 12 – 15 percent of the total dairy farm population in Pennsylvania. Surveys were completed by 777 respondents, with 603 of them identifying as active dairy producers in 49 counties with an average herd size of 152 cows. Sixty-seven percent of the respondents had sole proprietorships, while 19 percent had limited liability corporations. The average number of acres for respondents who leased land was 201 acres. Dairy was the sole source of income for 69 percent of the respondents, while only 8 percent received less than 50 percent of their income from dairy.

Most respondents were producing less than 4 million pounds of milk annually, with 80 percent having somatic cell counts ranging between 100,000 and 250,000 cells per milliliter. Slightly less than 80 percent of respondents were marketing their milk to a cooperative, while 83 percent reported having a closed herd. More than 70 percent had at least one paid employee, while 84 percent had established standard operating procedures. Ninety percent reported participating in an animal welfare program, while more than 85 percent sought advice from their nutritionist and/or veterinarian. More than 60 percent of the respondents reported milking in tie stalls, while 35 percent were milking in a parlor. Just below 79 percent were using a total mixed ration, while 50 percent reported having a written biosecurity plan or being in the process of writing a plan.

In comparing results from the 2025 Pennsylvania Dairy Producer Survey to the 2020 Pennsylvania Dairy Producer Survey, respondents showed an increased interest in calculating their feed costs and production costs, although an understanding of core financial ratios still fell at or below 50 percent. Respondents also showed increased interest in future investments in their dairy than they did in 2020, with 27 percent planning to transition to the next generation, 22 percent planning to modernize, and 18 percent planning to expand. Participants in the survey in 2025 also ranked key performance factors higher in their ability to improve their operation than they did in 2020. The four performance factors that increased the most were increasing herd size, upgrading their facility, applying new technologies, and increasing milk production per cow.

SURVEY REPRESENTATION

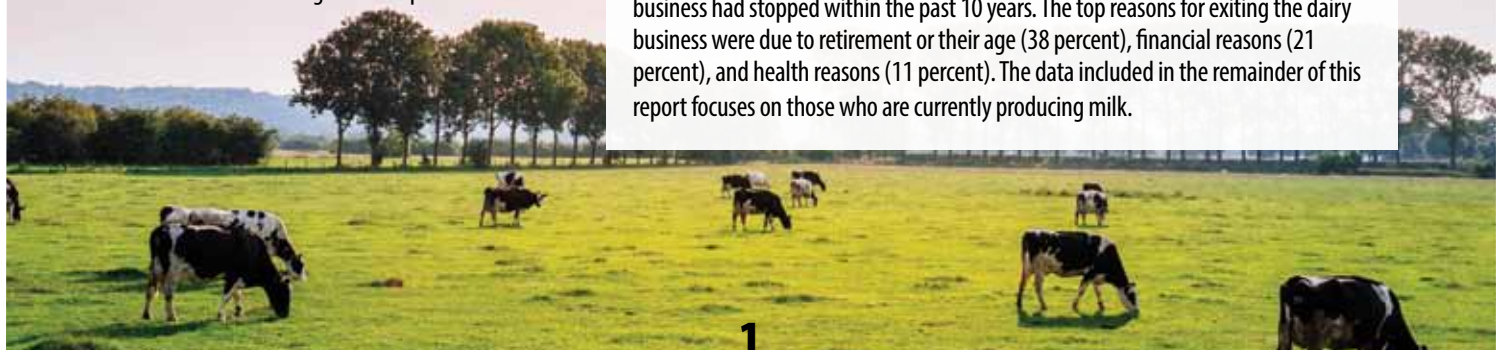
A survey developed by the Center for Dairy Excellence and Penn State Extension and funded through a Pennsylvania Department of Agriculture Research Grant was delivered using mixed modes. It was mailed and made available online for completion by current and former Pennsylvania dairy farmers in February 2025. The purpose of the survey was to evaluate current demographics and trends within the dairy farm community, as well as identify needs that exist within the dairy farm sector. The deadline to submit surveys was April 30, 2025.

The survey included 60 questions covering nine topics:

1. Demographics
2. Marketing and replacements
3. Employees and protocols
4. Facilities and operation
5. Future plans
6. Investments
7. Risk management
8. Biosecurity
9. Climate-smart grants and practices

Surveys were completed by 777 farms. The USDA reported 4,850 farms in Pennsylvania as of December 2024, according to the USDA Milk Production Report released in February 2025 (USDA, 2025). However, USDA's 2022 Census of Agriculture contradicts the USDA Milk Production Report with a lower number of Pennsylvania dairy farms, at 4,027 total farms (USDA NASS, 2024). Of the respondents, 78 percent (603 farms) indicated they were currently producing milk for sale, while the other 22 percent (174 farms) were no longer producing milk for sale. Based on the USDA data, this survey represents between 12-15 percent of dairy farms in Pennsylvania.

The majority (87 percent) of the 121 farms that disclosed when they left the dairy business had stopped within the past 10 years. The top reasons for exiting the dairy business were due to retirement or their age (38 percent), financial reasons (21 percent), and health reasons (11 percent). The data included in the remainder of this report focuses on those who are currently producing milk.

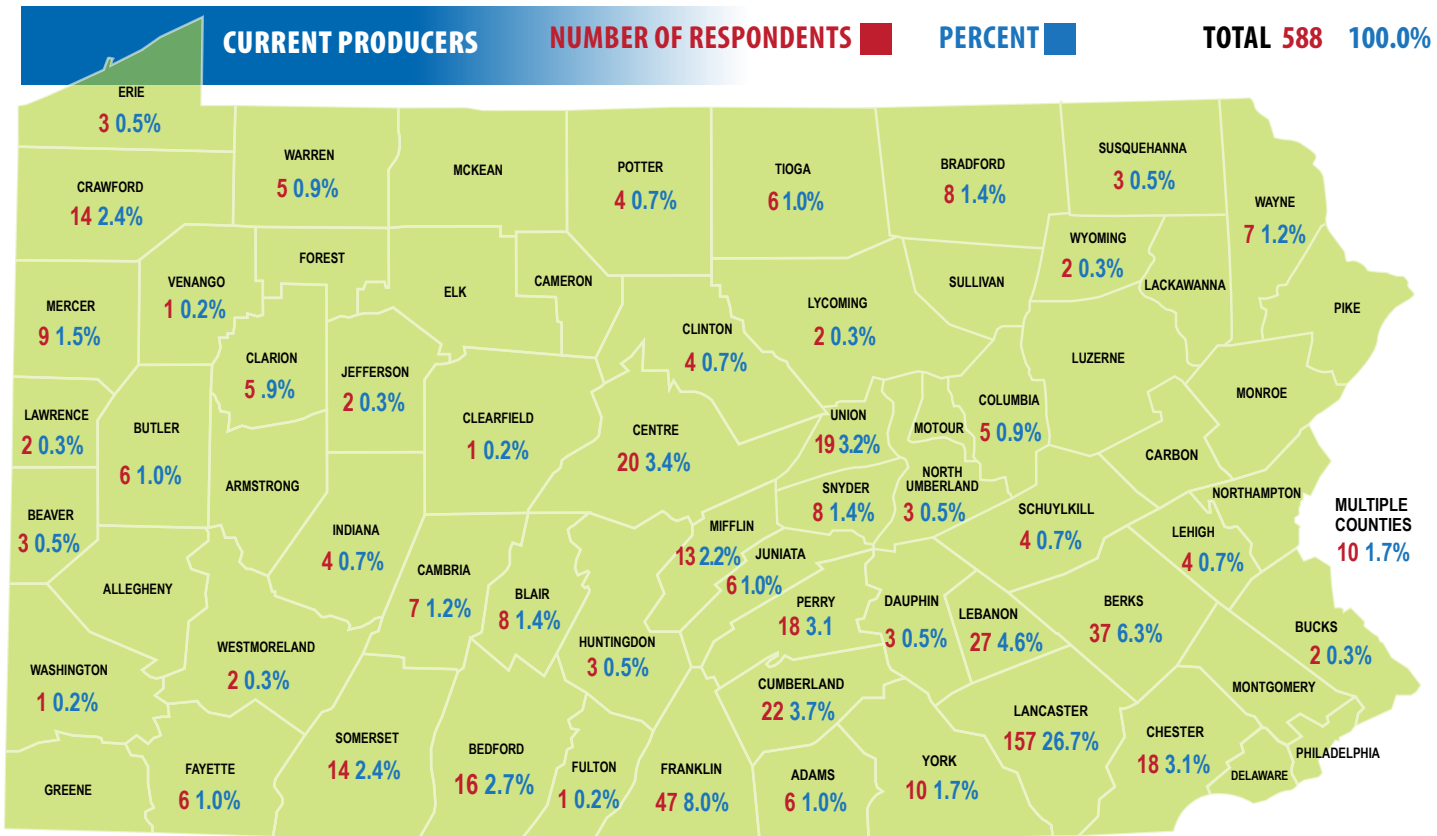


DEMOGRAPHICS

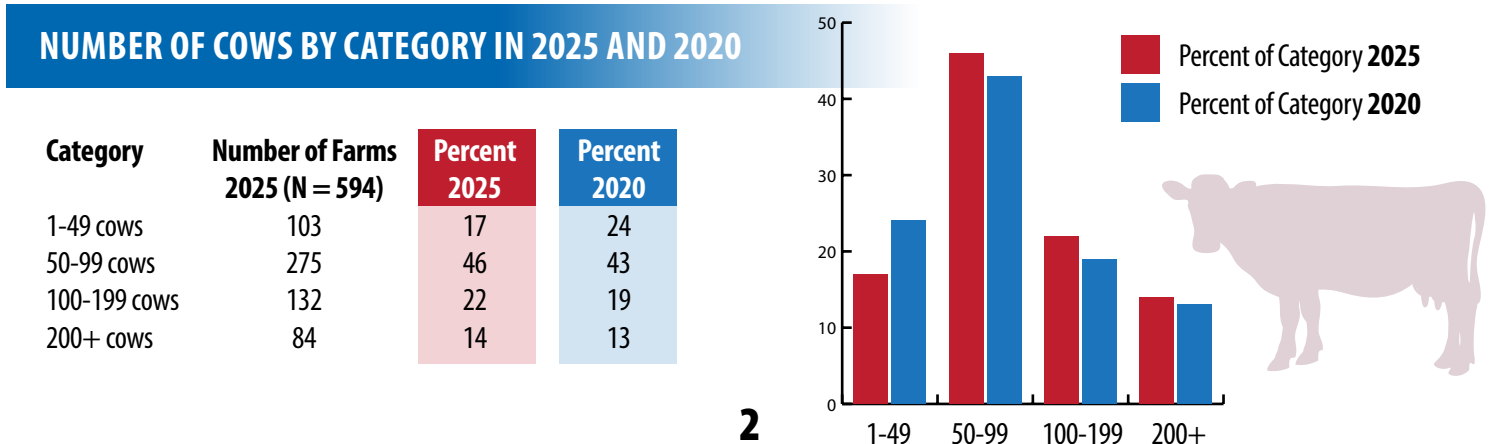
Most of the active dairy producers responding (79 percent or 466 farms) have been in the dairy industry for more than 15 years, while only 4 percent (23 farms) have been in the industry for 5 years or less.

Dairy farms from 49 of the 67 counties in Pennsylvania responded.

- Lancaster County accounted for 27 percent (157 farms) of survey respondents. Lancaster County is ranked #13 in the top milk producing counties in the United States. (Source: May 2024 Federal Milk Marketing Data)
- The top ten highest counties with the most survey responses represented 65 percent of the total surveys received. Of the top 10 counties by response, seven of those counties were also in the top ten in number of total dairy farms, according to the USDA Ag Census Report.
- The counties in the Pennsylvania Department of Agriculture's Region 6 (Adams, Cumberland, Dauphin, Franklin, Lebanon, Lancaster, Perry and York) comprised 50 percent of the survey response.
- Ten farms reported having cows in more than one county, while seven also had cows in states outside Pennsylvania. Fifteen did not report on the county where their farm was located.



The average herd size reported by the respondents (594 farms) was 152 cows, while the average number of heifers on the farms (587 farms) was 119 heifers. The following chart compares the current survey with data collected during the 2020 Pennsylvania Dairy Survey, in which respondents had an average herd size of 133 mature cows. The average herd size among survey respondents is 55 head larger than the average herd size across all dairy farms in Pennsylvania, which is 97 cows per farm according to USDA's Milk Production Report. In 2020, the USDA reported the average herd size for PA dairies at 89 cows. While the average herd size in Pennsylvania increased by 9 percent from 2020 to 2025, the average herd size among respondents in this survey is 14 percent larger than the average herd size of respondents in 2020. Based on this comparison, a shift in the size by category of the responding farms was observed between 2020 and 2025, with a higher percentage of larger farms responding.

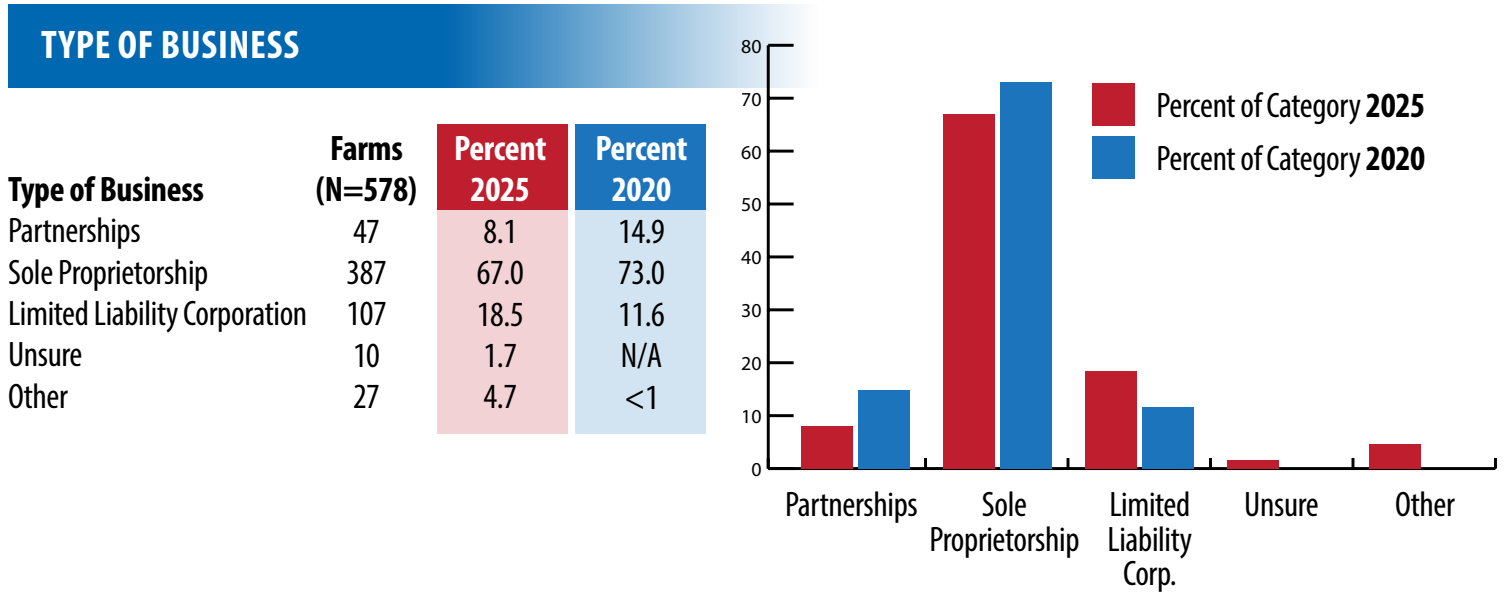


On-Farm Income

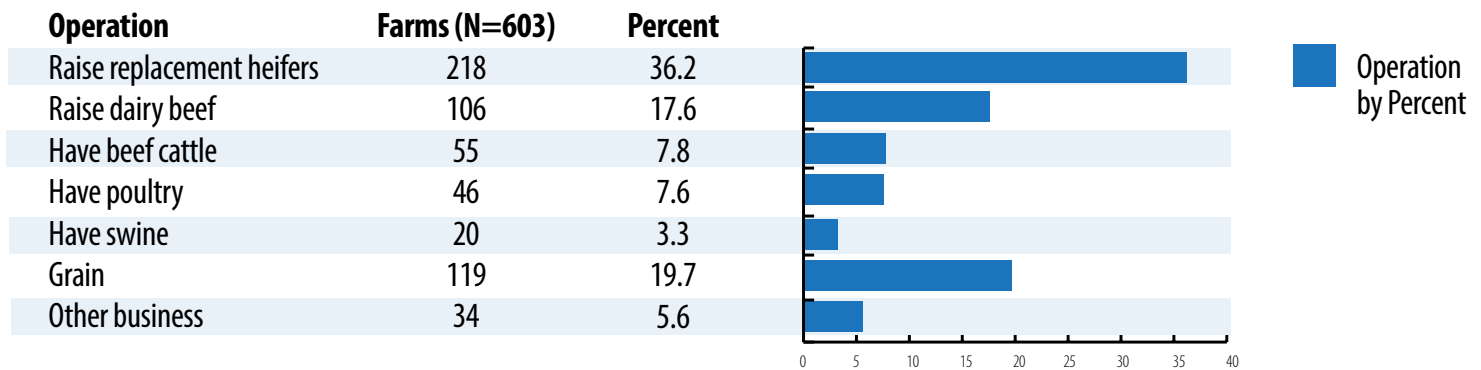
77.8 percent of the respondents indicated that over 75 percent of their income was solely from the dairy farm. This is consistent with the number that reported they had an off-farm job which was 128 or 21.2 percent. Additionally, 2 respondents (0.3 percent) said they had solar leases, 39 (6.5 percent) said they had income from other agricultural enterprises, and another 22 (3.6 percent) said they had other non-farm income.

Business Structure and Other Enterprises

The most frequently reported business types were sole proprietorships (67 percent or 387 farms), followed by Limited Liability Corporations (19 percent or 107 farms) and partnerships (8 percent or 47 farms). Other types of business structures were reported by 5 percent (27 farms) of the respondents. Comparing the current response to data from five years ago, a general shift is observed away from partnerships and sole proprietors to limited liability corporations.



FARMS WITH MULTIPLE ENTERPRISES



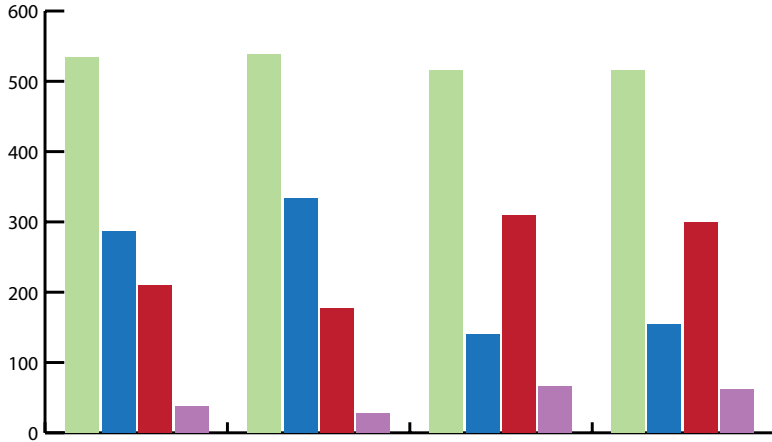
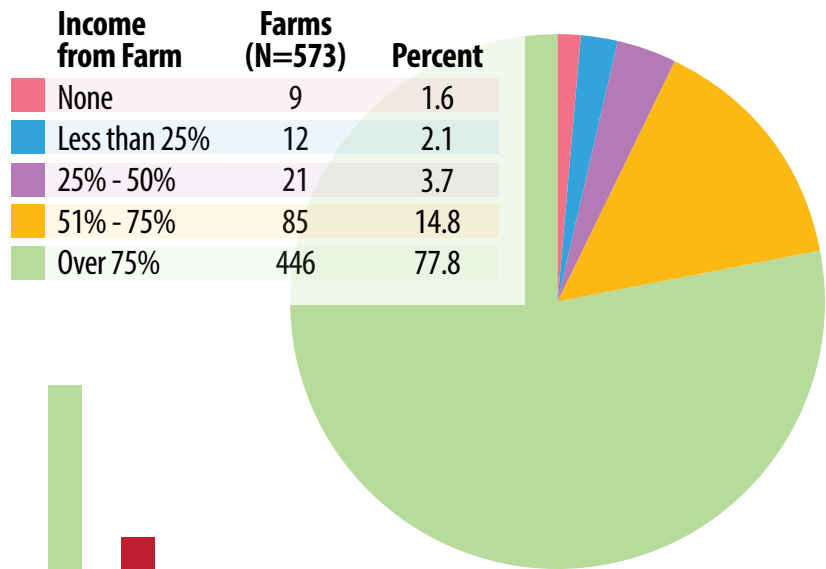
When asked about other operations respondents are involved in, raising heifers was most frequently reported with 218 farms (36 percent) noting involvement in this enterprise. Additional enterprises included raising grain (20 percent or 119 farms) and raising dairy beef (18 percent or 106 farms). Additionally, 8 percent or 55 farms had beef cattle while another 8 percent (46 farms) had poultry and 3 percent or 20 farms also had swine. Another 6 percent or 34 farms indicated involvement with other enterprises, including tobacco, custom work, and dairy processing, among others.

Leased Farmland

Slightly more farms (46 percent or 272 farms) reported both owning and leasing land for their operations, while 269 farms (46 percent) reported owning the land where they dairy. About 7 percent or 42 farms lease their land exclusively with no ownership of the land, while 5 respondents had another arrangement. Farms that leased land or both leased and owned land reported leasing an average of 201 acres. The range of acres leased ranged from 3 to 4,875 acres.

Financial Information

Dairy was reported as the sole source of income by 69 percent (or 400) of the respondents. In addition, 78 percent of the farms, or 446, receive over 75 percent of their income from the dairy enterprise, with the other quartiles having much lower responses. Only 42 total farms, less than 8 percent of the total respondent base, reported receiving less than 50 percent of their income from dairy.



Calculated	N	Yes	No	Unsure
Production costs	534	286 (53.6%)	210 (39.3%)	38 (7.1%)
Feed costs	538	333 (61.9%)	177 (32.9%)	28 (5.2%)
Return on assets	516	140 (27.1%)	310 (60.1%)	66 (12.8%)
Debt to asset ratio	516	155 (30%)	299 (57.9%)	62 (12%)

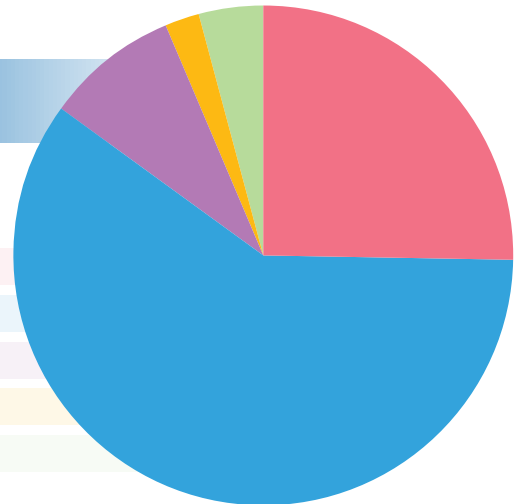
The farms that indicated they had calculated and understood their financial ratios in the previous year varied depending on the specific ratio. The most frequent calculation that respondents had documented was feed costs, with 62 percent, or 333 farms, indicating they had calculated this figure. More than half of the respondents, 54 percent or 286 farms, reported calculating their production costs. Only 30 percent or 155 farms indicated they had calculated their debt-to-asset ratio, while 27 percent or 140 farms, indicated that they had calculated their return on assets. As a comparison to this dataset, only 147 respondents in 2020 calculated their cost of production, representing 29 percent, which indicates that more producers understand their cost of production now than they did in 2020 when the last study was conducted.

MARKETING & REPLACEMENTS

The survey results indicated that the bulk of the participating farms produced less than 4 million pounds annually in 2024. Slightly more than 59 percent (342 farms) reported that their operation produced between 1.1 and 4 million pounds in total last year, with the next largest percentage (25.4 percent) producing less than 1 million pounds. Based on the 2024 year-end data in the USDA Milk Production report released in February, Pennsylvania's calculated annual milk production per farm averaged approximately 2 million pounds.

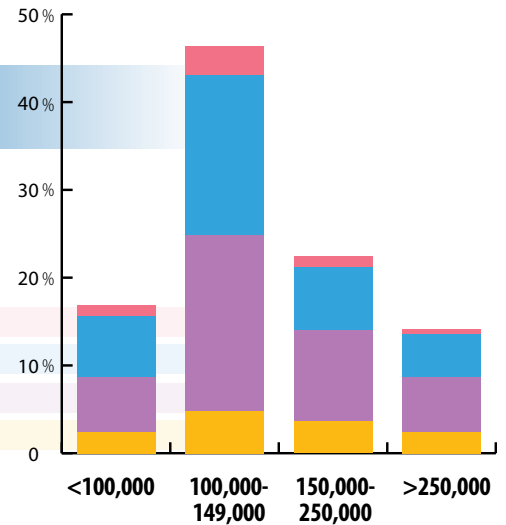
POUNDS OF MILK PRODUCED LAST YEAR

Production (pounds)	Farms (N=574)	Percent
<1 million	146	25.4
1.1 - 4 million	342	59.6
4.1 - 8 million	50	8.7
8.1 - 12 million	13	2.3
>12 million	23	4.0



AVERAGE SOMATIC CELL COUNT LAST YEAR BY HERD SIZE CATEGORY

Number of Cows	<100,000	100,000-149,000	150,000-250,000	>250,000
1-49 cows	2.4%	6.2%	7.0%	1.3%
50-99 cows	4.8%	20.0%	18.3%	3.2%
100-199 cows	3.6%	10.4%	7.2%	1.2%
200+ cows	2.4%	6.2%	5.0%	0.5%



Just under half of the participating dairies (42.8 percent) indicated that their somatic cell count (SCC) fell between 100,000 and 149,000 cells per milliliter. More than a third (37.5 percent) of respondents indicated their farm's average SCC was in the range of 150,000 and 250,000 cells per milliliter. For comparison, the average SCC according to the Pennsylvania DHI* data averaged 184,000 cells per milliliter for 2024, so most of the participants' average SCCs were reported lower than the state average. When looking at the breakdown of last year's average SCC by herd size, most of the respondents (20.0 percent) reported having between 50 and 99 cows with an average SCC between 100,000 and 149,000 cells per milliliter. This was followed by 18.3 percent of participants who had between 50 and 99 cows and reported their farm's average SCC for 2024 falling between 150,000 and 250,000 cells per milliliter. For this question, approximately 40 percent of the respondents fell between 50 and 199 cows and 100,000 to 250,000 cells per milliliter.

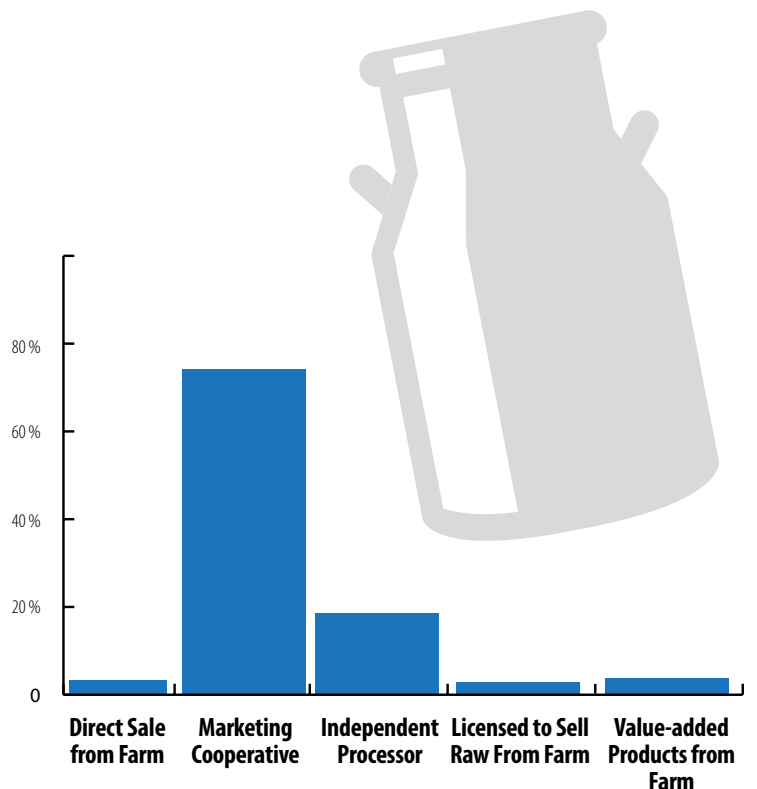
*Source: Council of Dairy Cattle Breeding (CDCB) <https://webconnect.uscdbc.com/#/national-performance-metrics>. Updated 2/25/2025.

MILK MARKET AND END USES

Market Milk	Farms (N=584)	Percent
Marketing cooperative	464	79.5
Independent processor	113	19.3
Pasteurized and bottled on farm for direct sales	18	3.1
Value-added sales from farm	19	3.3
Licensed to sell raw milk from farm	15	2.6

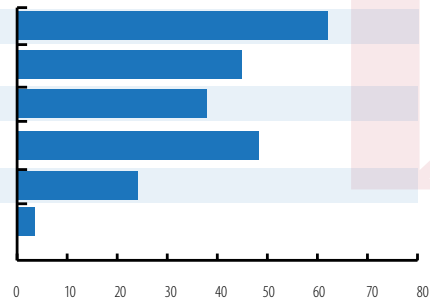
Of the 584 total respondents, most participants (79.5 percent) ship their milk through a cooperative. There were 35 different milk markets mentioned by the 578 respondents that answered the question regarding their milk market, with the top ones listed including Dairy Farmers of America (141 farms or 24 percent), Land O' Lakes (114 farms or 19 percent), and Maryland & Virginia/Maola Dairies (70 farms or 12 percent). The mean number of years the respondents were with their milk market averaged 17.5 years.

Slightly more than 19 percent of the respondents indicated they work with an independent dairy processor. Several subsets of respondents indicated they either sell direct to consumers in some way. This included pasteurizing and bottling fluid milk, processing value-added milk products, and/or being permitted to sell raw fluid milk. The answers are not mutually exclusive, considering some producers utilize their milk for multiple end-uses, such as pasteurized bottled milk and value-added products, in addition to shipping their milk through a cooperative or an independent processor.



PRODUCTS MANUFACTURED ON-FARM

Product	Farms (N=29)	Percent
Pasteurized fluid milk	18	62.1
Raw milk	13	44.8
Cheese	11	37.9
Ice cream	14	48.2
Cultured products	7	24.1
Other products -butter	1	3.4



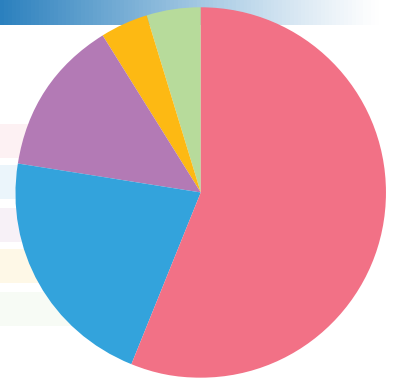
Products Manufactured On-Farm by Percent

The survey data shows only 29 respondents engage in on-farm processing with an average of 46.6 percent of their milk processed on site. The average herd size of these farms is 120 cows. Of the participating dairies that process on the farm, pasteurized fluid milk (62.1 percent) was the most popular end product, followed by ice cream (48.2 percent), raw milk (44.8 percent), and cheese (37.9 percent).

When asked to rate their interest on a scale of 1 to 5, with 1 not being interested at all and 5 being extremely interested, over half (56.1 percent) of the respondents (472 farms) who are not already engaged in on-farm processing indicated that they had no interest at all in pursuing it in the future. Conversely, only 4.7 percent of participants expressed that they were extremely interested in engaging in on-farm processing.

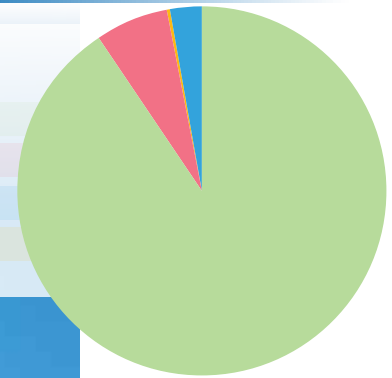
INTEREST IN PROCESSING

Interest Level	Farms (N=472)	Percent
1 = No interest	265	56.1
2	101	21.4
3	65	13.8
4	19	4.0
5 = Extremely interested	22	4.7



TYPE OF MARKET

Market	Farms (N=574)	Percent
Conventional	520	90.6
Organic	38	6.6
Kosher	1	0.2
Unsure	15	2.6



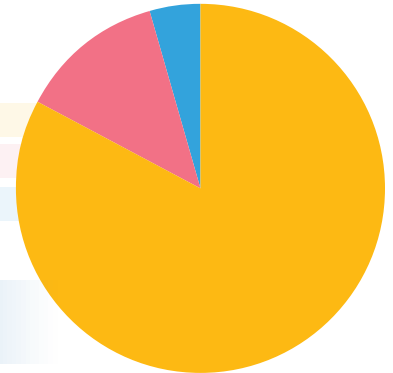
Most respondents (90.6 percent) indicated they ship their milk to conventional markets. Of the 574 total participants that answered this question, only 6.6 percent or 38 total farms market their milk as organic. Only one farm indicated that they ship to a kosher market.

Replacements and Animal Care Programs

The majority of respondents reported that they had a closed herd, with 83 percent or 489, indicating they do not purchase any replacements. Of those who indicated that they purchase replacement cattle, only 12 respondents answered that they purchase out-of-state animals. Those participants indicated that they purchased replacements from Maryland, New York, Vermont, and Wisconsin, among other states. In comparison, 33 participants indicated that they sell replacement heifers out of state, with destinations including New York, Maryland, Connecticut, Wisconsin, Ohio, and several other states. When asked where they are purchasing replacements, respondents selected a variety of sources, with the most popular source for replacements being directly from another producer.

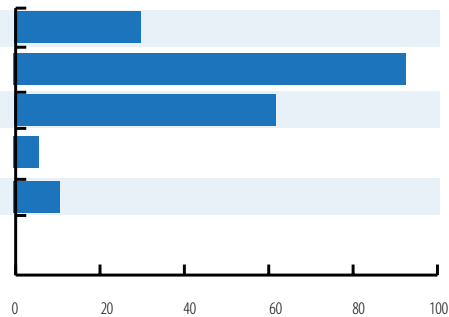
REPLACEMENT HEIFERS

Herd Replacement	Farms (N=589)	Percent
Closed herd	489	83.0
Purchase replacements	75	12.7
Unsure if closed herd	26	4.4



WHERE REPLACEMENTS ARE PURCHASED FROM

Herd Replacement	Farms (N=589)	Percent
From cattle buyer	30	5.1
Direct from another producer	93	15.8
From a sale barn	62	10.5
Buy online	6	1.0
Buy some other way (consignment sales, breed sales)	11	1.9



■ Herd Replacement

EMPLOYEES & PROTOCOLS

Of the 603 active producers completing the survey, only 440 responded to the question on the number of full-time and part-time employees they had. This analysis is based on the assumption that the other 163 producers completing the survey did not have any employees. In addition to those 163, another 12 respondents indicated they had no employees. Based on this data, 71 percent of the active producers responding reported at least one or more full-time or part-time employees.

The average number of full-time paid employees was 4.1 employees. Excluding the 175 smallest herds from the survey, the average herd size increases to 202 cows per farm. This equates to an average of one full-time worker per 50 cows on average across the surveyed respondents who have paid full-time employees. The number of full-time employees ranged from 0 to 64, with the number of part-time employees ranging from 0 to 22.

A total of 75 respondents indicated that they employ either full-time, part-time or seasonal Latino employees. The number of Latino full-time workers ranged from 0 – 47 employees. The average number of Latino full-time workers per farm among the 75 respondents was 5 workers per farm. Farms were much less likely to hire Latino workers on a part-time or seasonal basis, with only 29 respondents indicating that they employed either seasonal or part-time Latino help. Only eight respondents indicated that they only have part-time or seasonal Latino workers without any full-time Latino workers.

EMPLOYEES ON FARM



235
Paid
Full-time

131
Latino



255
Paid
Part-time

100
Latino



61
Paid
Seasonal

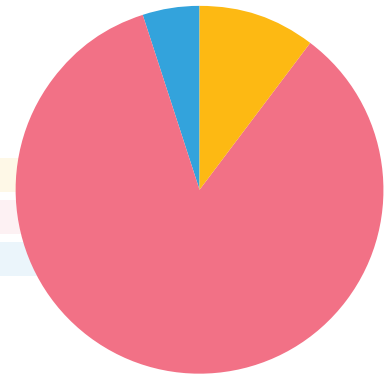
66
Latino

STANDARD OPERATING PROCEDURES

The majority of respondents (84.7 percent) indicated they had established protocols or standard operating procedures for routine areas of the operation. However, the survey did not ask if those procedures were in written form.

The survey documented that most producers (more than 50 percent) have regular conversations (at least once a week) with employees on key topics. Respondents indicated communicating with employees most often regarding health issues, followed by farm safety and farm management topics. Less than 40 percent of respondents indicated they talked regularly with employees about human resource-related topics. More than 80 percent of respondents indicated they communicate with employees on farm safety topics at least once every three months.

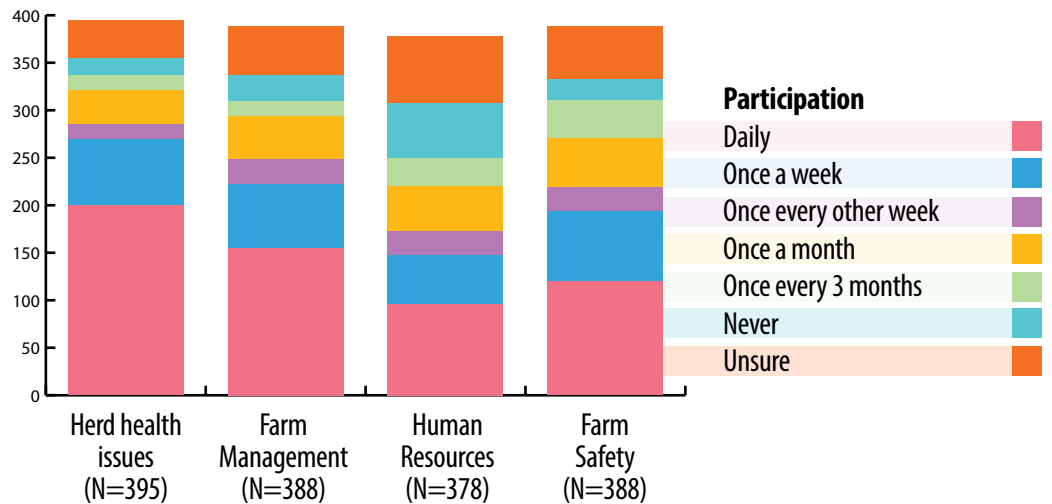
Farms (N=529) Percent		
No	55	10.4
Yes	448	84.7
Unsure	26	4.9



FREQUENCY OF COMMUNICATION WITH EMPLOYEES

Related to the farm safety discussion, half of the participating producers indicated they don't display farm safety signs where visitors and employees can see them on and around their farm. More than 42 percent of respondents indicated they do display farm safety signage with 7.5 percent were unsure.

The survey demonstrated that most producers recognize the importance of regular communications. More than 53 percent agreed that communicating regularly with employees on key farm issues is very to extremely important, while more than 30 percent said it was moderately important. Less than 16 percent said it was not important.



LANGUAGE USED FOR COMMUNICATION WITH EMPLOYEES

Language	Written	Verbal
English	324 (53.7%)	323 (53.6%)
Spanish	35 (5.8%)	36 (6.0%)
Other	24 (4.0%)	26 (4.3%)

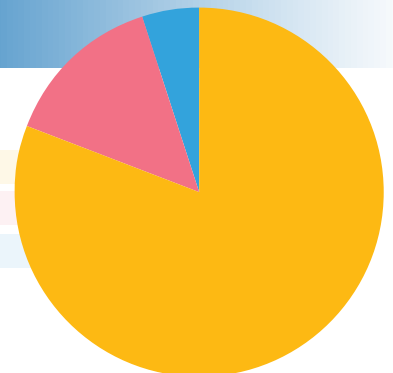
Although 75 respondents indicated they have Latino employees in their workforce, only 36 indicated that they communicate, either verbally or written, in Spanish with employees. While more than 53 percent of respondents said they communicate only in English, more than 5 percent said they were communicating with employees in Pennsylvania Dutch and/or German.

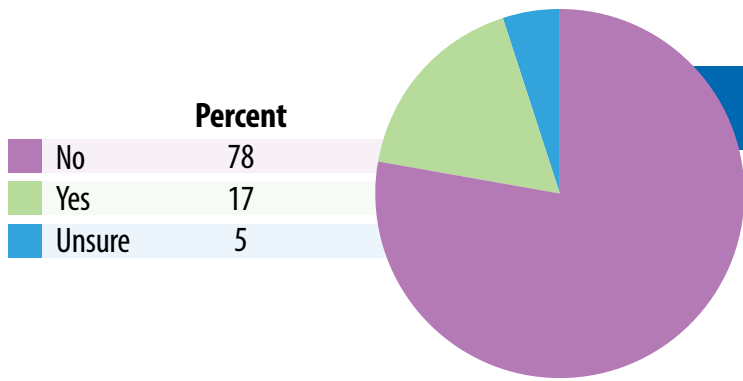
Communicate in PA Dutch 4.5% (27) and German 0.8% (5)
Unsure if written or verbal

OFFER INCENTIVE FOR MILK QUALITY

With many milk markets offering quality bonuses to producers, 14 percent of the respondents indicated they are sharing those bonuses through offering an incentive to employees for high quality milk. An additional 5 percent said they plan to do it within the next year.

Percent	
No	81
Yes	14
Plan to next year	5





CONDUCT ANNUAL REVIEW WITH EMPLOYEES

While the majority of producers indicated they communicate regularly with employees, a much smaller group has an annual review process as part of their feedback protocols for employees. Only 17 percent are currently conducting annual reviews.

SOURCES FOR FARM MANAGEMENT ADVICE AND RESOURCES

Veterinarians and nutritionists are among the most trusted advisors to dairy farms, with 88 percent and 87 percent of respondents, respectively, indicating they look to nutritionists and veterinarians to provide farm management advice. Around a third of respondents indicated they look to Penn State Extension for advice, while 28 percent look to the Center for Dairy Excellence. Accountants and consultants, along with other farmers, were the most popular write-ins in the "Other" column. Nearly 4 percent indicated they do not seek advice from any outside sources.

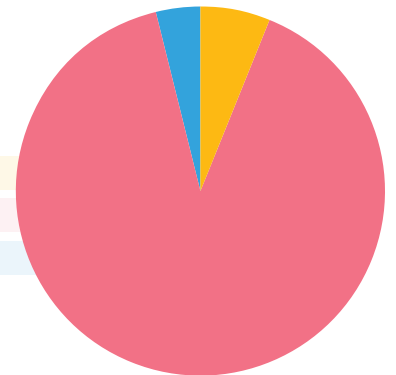
Source	Farms	Percent
Nutritionist	444	88.3
Veterinarian	438	87.1
Penn State Extension	174	34.6
Center for Dairy Excellence	143	28.4
Banker/Lender	126	25.1
*Accountant/consultant	13	2.6
*Other farmers	11	2.2
*Ag publications	10	2.0
*Other sources	8	1.6
Do not seek advice	18	3.6

*Write-ins provided by respondents in "Other" category



PARTICIPATION IN ANIMAL WELFARE PROGRAM

Participate	Farms (N=591)	Percent
No	37	6.3
Yes	532	90.0
Unsure	22	3.7



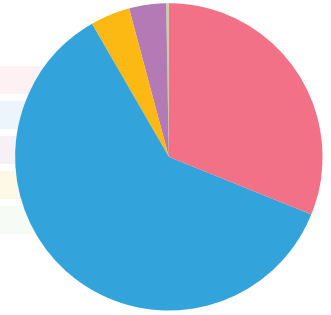
Ninety percent of the respondents indicated they are actively participating in some type of animal welfare program, such as the National Farmers Assuring Responsible Management (FARM) Program. Only a small percentage of participants (6.3 percent) indicated they are not actively enrolled in an animal welfare program. For reference, in the 2020 Dairy Producer Survey, only 80 percent of respondents indicated that they participate in the FARM Program, with 20 percent of participants reporting they do not. Compared to five years ago, more dairy farms are aware of and acknowledge their involvement in the FARM Program. As herd size category increased, so did participation in animal welfare programs with herds of 100 or more cows having a 95 percent participation rate.

FACILITIES AND OPERATIONS

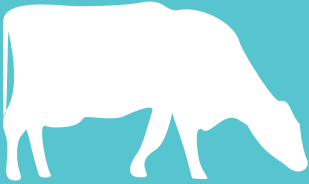
Tie stalls were still the most popular form of milking and housing facilities among survey respondents, with 60 percent indicating they use tie stalls to milk their cows and 55 percent indicating they house their cows in tie stalls. Approximately 35 percent of the respondents milk in some type of parlor, while 4 percent, only 20 respondents, are using robotic milking systems. According to average herd size, the largest herds are milked in an elevated parlor (327 cows) followed by robotic milking systems (185 cows). More than 45 percent of respondents are using freestalls, while 21 percent are housing milking cows in a bedded pack. Bedded pack barns are still the most popular form of heifer housing, while hutches are the most popular form of calf housing.

TYPE OF MILKING PARLOR

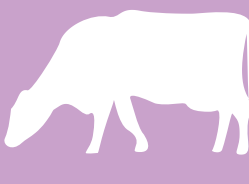
Parlor Type	Farms (N=525)	Percent
Elevated Parlor	164	31.2
Tie Stall	318	60.6
Flat/Step-up Parlor	22	3.8
Robotic	20	4.2
Other	1	0.2




HOUSING FOR CATTLE



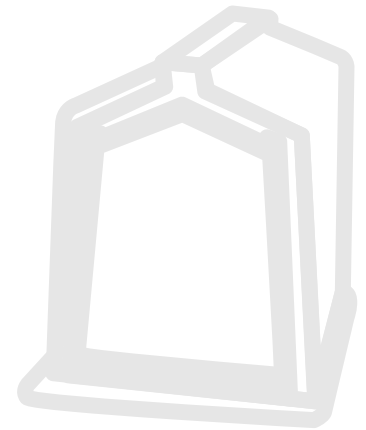
Cows	Percent
Tie stalls	55.7
Free stalls	45.4
Bedded pack barns	21.7
Group pens	7.5



Heifers	Percent
Bedded pack barns	67.8
Group pens	40.8
Free stalls	28.4
Hoop barns	3.3



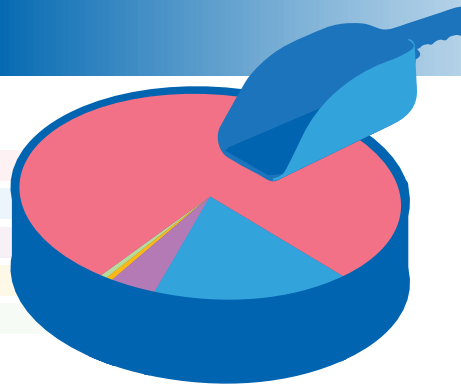
Calves	Percent
Hutches	48.4
Group pens	38.6
Individual pens	38.5
Bedded pack barns	28.0



*Percent calculated based on N=603 responses. Responses are not mutually exclusive so percent total is greater than 100%.

METHOD OF FEEDING

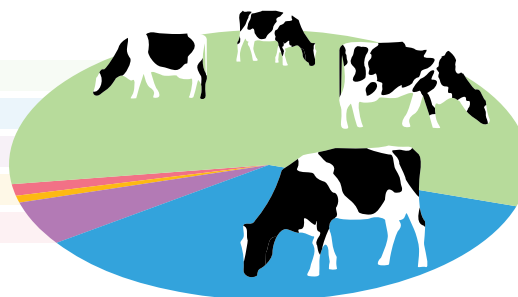
Method	Farms (N=570)	Percent
Total mixed ration (TMR)	445	78.7
Silage with top-dressed grain	98	17.2
Grazing with mineral mix	22	3.9
Partial mixed ration (PMR)	3	0.5
Other	2	0.4



More than 78 percent indicated they use a total mixed ration to feed their cattle, while 17 percent said they were feeding grain and silage and just under 4 percent said they were grazing with a mineral mix.

METHOD OF GRAZING CATTLE

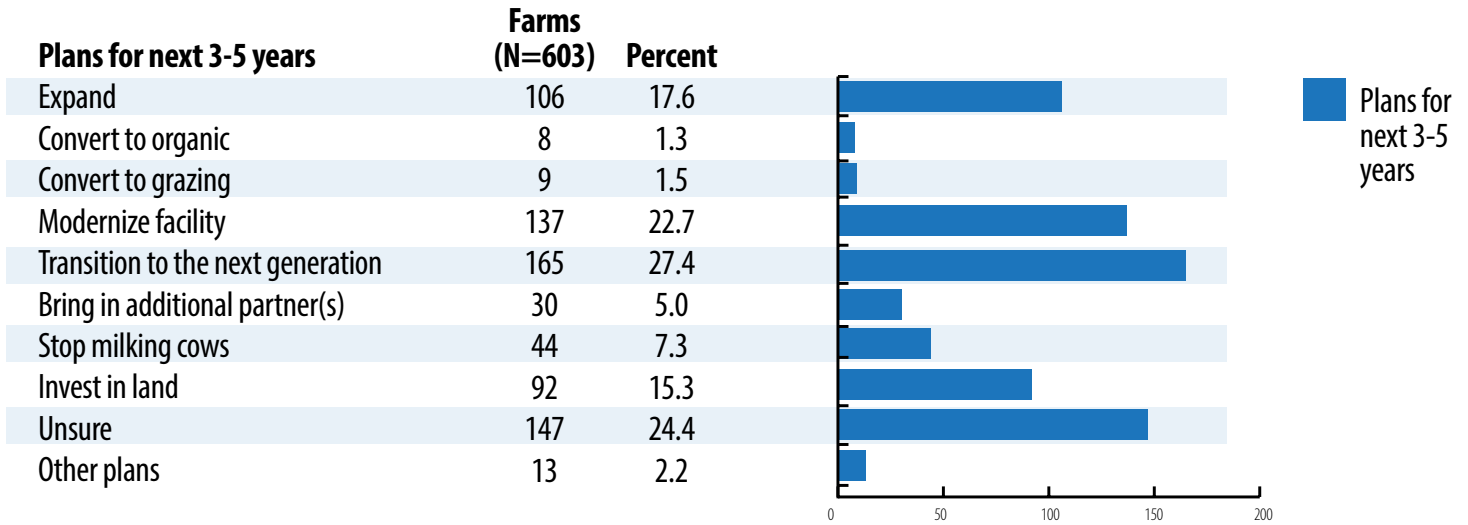
Grazing	Farms (N=234)	Percent
Rotational	134	57.3
Continuous	83	35.5
Strip grazing	12	5.1
Seasonal	2	0.9
Other	3	1.3



While only 22 total respondents indicated they are grazing their milking herd, nearly 39 percent of the active producers responding to the survey were using some form of grazing in their dairy operation. This would indicate that these producers are grazing their non-milking cattle, with 134 respondents indicating that they rotationally graze animals in their operation.

FUTURE PLANS

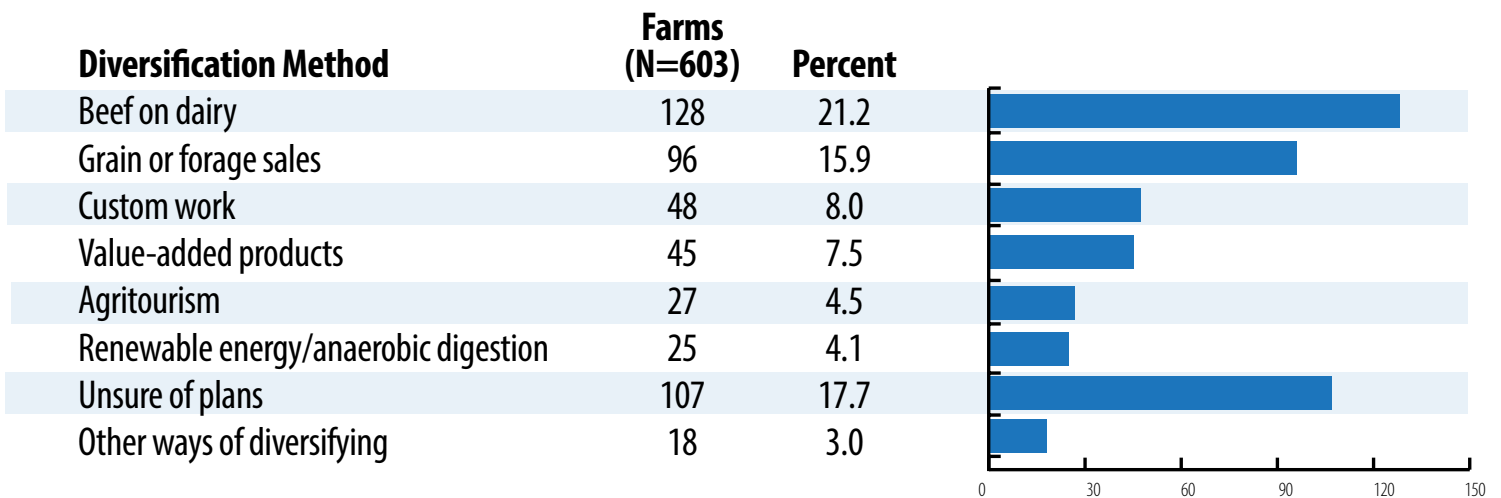
When asked about their plans over the next 3 to 5 years, the most frequent response was a plan to transition to the next generation (27 percent or 165 farms), indicating that many of the respondents are looking to retire or transition out of the business while the farm continues with the next generation. Seven percent or 44 total respondents plan to stop milking cows in the same timeframe. Twenty-four percent (or 147 farms) were unsure of their plans within the next 3 to 5 years. Expansion was anticipated by 18 percent or 106 farms, while 23 percent or 137 farms said they planned to modernize their facilities. An investment in land was anticipated by 15 percent or 92 farms. Fewer than ten respondents are planning to convert to organic or to grazing.



When asked why they would cease production in the next 3 years, less than half of the survey respondents or 46 percent currently producing milk provided a response, possibly indicating they do not anticipate exiting the dairy business. Of those that responded, 41 percent or 116 farms reported economic reasons, while 28 percent or 79 farms expressed concerns that the next generation was not interested or there wasn't a next generation.

When asked about their plans regarding diversification, the most frequently reported approach for diversifying dairy operations included beef on dairy (21.2 percent or 128 farms), followed by grain or forage sales (16 percent or 96 farms). Custom work was reported by 8.0 percent or 48 farms, value-added products by 8 percent or 45 farms, and 5 percent each reported agritourism (27 farms) and renewable energy/anaerobic digestion (25 farms). Eighteen percent (107 farms) were uncertain of any plans to diversify. Responses regarding current diversification on dairies indicated that 18 percent and 20 percent of producers were already raising dairy beef and grain, respectively.

DIVERSIFICATION OF OPERATIONS



Performance Factors

Survey respondents were asked to rate a list of factors in improving the farm's performance in the next 3 to 5 years on a scale of 1 to 5, with 1 representing "not important" and 5 representing "extremely important." When listed according to a mean score calculated for each item, the top three factors respondents viewed as most important were maximizing homegrown feed production, increasing milk components per cow, and improving udder health.

RESPONDENT RANKING BY MEAN SCORE IN ORDER OF IMPORTANCE

When comparing 2025 responses to this question to responses received in the 2020 survey, all factors increased in their mean score. Improving udder health replaced decreasing production cost as the third ranked most important factor from 2020 to 2025. The significant increases in the ranking of all factors shows a growing understanding in the past five years that all these factors influence a dairy farm's ability to improve. Improving udder health rose to third most important performance factor in 2025 compared to 2020's results.

2025's factors were ranked on a scale of 1 to 5, while 2020's factors were ranked on a scale of 1 to 3. Factors with an asterisk (*) note a mean score increase relative to herd size.

Complete ranked list by mean score:	2025 Survey	2020 Survey
Maximizing homegrown feed production*	4.24	2.54
Increasing milk components*	4.18	2.52
Improving udder health	3.98	2.35
Decreasing cost of production per cwt	3.90	2.44
Increasing milk production per cow	3.85	2.24
Facility upgrades or improvements	3.48	1.94
Land availability*	3.28	2.03
Milk hauling services*	2.98	2.20
Labor availability*	2.78	1.66
Outside advisors*	2.64	1.82
Applying technology*	2.57	1.48
Increasing herd size	2.32	1.28
Utilizing alternative markets for your milk	2.31	—

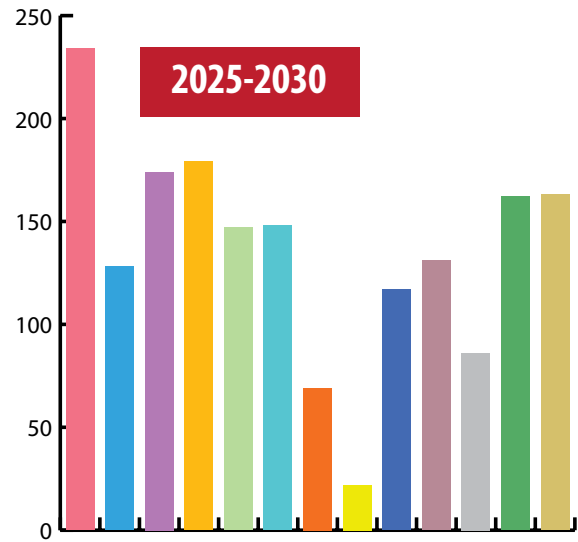
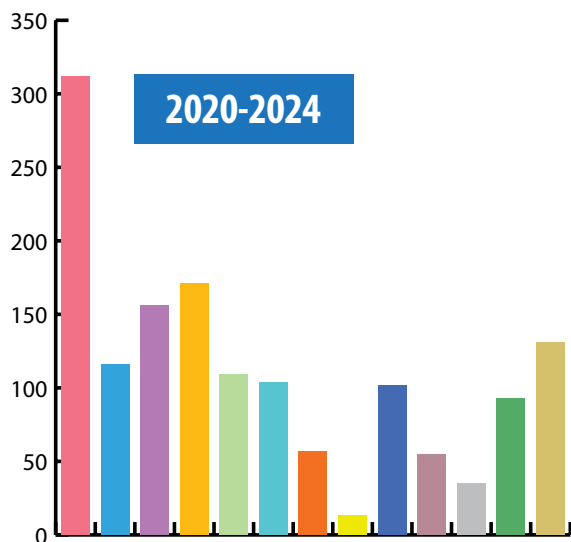


INVESTMENTS

When asked about investments that were made in the past years from 2020-2024 and anticipated investments in the next five years from 2025-2030, cow comfort improvements were the most frequently reported, with 52 percent or 312 farms previously investing and 39 percent or 234 planning future investments. Cow comfort improvements were also the only category on the list with a decrease in the percentage of respondents planning to invest in the future. Other investments in the past five years included feed handling facilities including storage (28 percent or 171 farms) and housing facilities for heifers and/or calves (26 percent or 156 farms). Additionally, the top planned investments for the next five years included feed handling facilities including storage (30 percent or 179 farms) and housing facilities for heifers and/or calves (29 percent or 174 farms).

When tallying the total number of anticipated investments in the next five years, the number of planned investments was greater than investments made in the past five years by more than 300 (1,760 as compared to 1,454). This represents a shift from the 2020 survey, in which respondents indicated that more changes occurred in the previous five years (2015-2020) than were anticipated in the next five years (2020-2025).

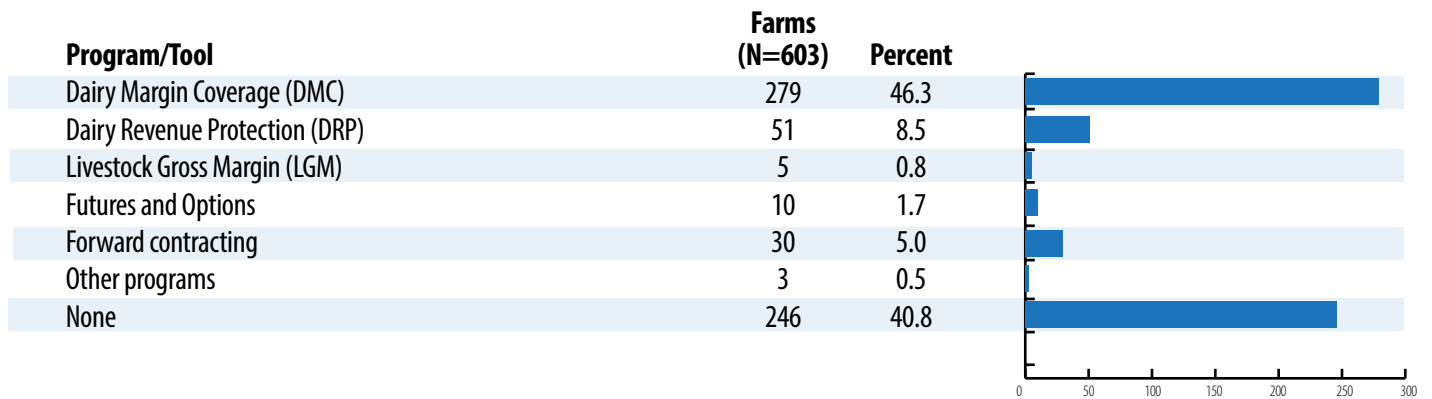
Investments in Past 5 Years and Next 5 Years Investment	2020-2024		2025-2030	
	Number	%	Number	%
Cow comfort improvements	312	(51.7)	234	(38.8)
Housing facilities for milk cows	116	(19.2)	128	(21.2)
Housing facilities for heifers and/or calves	156	(25.9)	174	(28.9)
Feed handling facilities including storage	171	(28.4)	179	(29.7)
Milking system or facility	109	(18.1)	147	(24.4)
Manure handling systems including facilities	104	(17.2)	148	(24.5)
Renewable energy or energy conservation practices	57	(9.5)	69	(11.4)
Methane digester	13	(2.2)	22	(3.6)
Environmental improvements	102	(16.9)	117	(19.4)
Change in ownership	55	(9.1)	131	(21.7)
Diversification into other enterprise	35	(5.8)	86	(14.3)
Land investment	93	(15.4)	162	(26.9)
Utilizing state, federal, or other agency funding	131	(21.7)	163	(27.0)



RISK MANAGEMENT

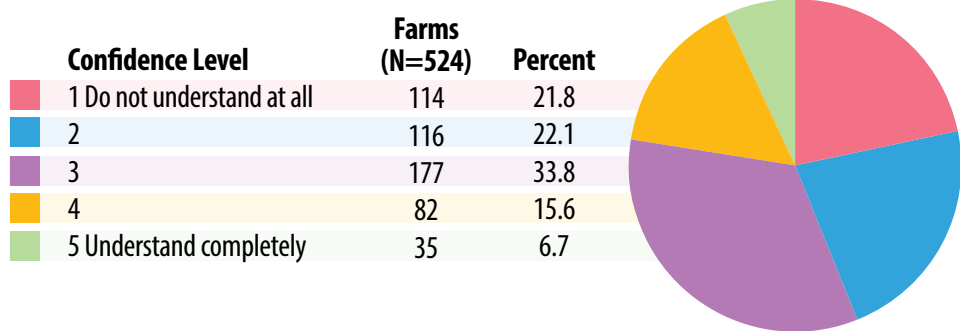
Risk management programs can help dairy producers better prepare and safeguard themselves against market volatility. Of the respondents that indicated they utilize some form of risk management, 40.6 percent participated in Dairy Margin Coverage (DMC) with 8.5 percent enrolled in Dairy Revenue Protection (DRP) and 5.0 percent using forward contracting. However, 40.8 percent of the surveyed producers indicated that they do not participate in any form of risk management programs.

PARTICIPATION IN RISK MANAGEMENT PROGRAMS/TOOLS



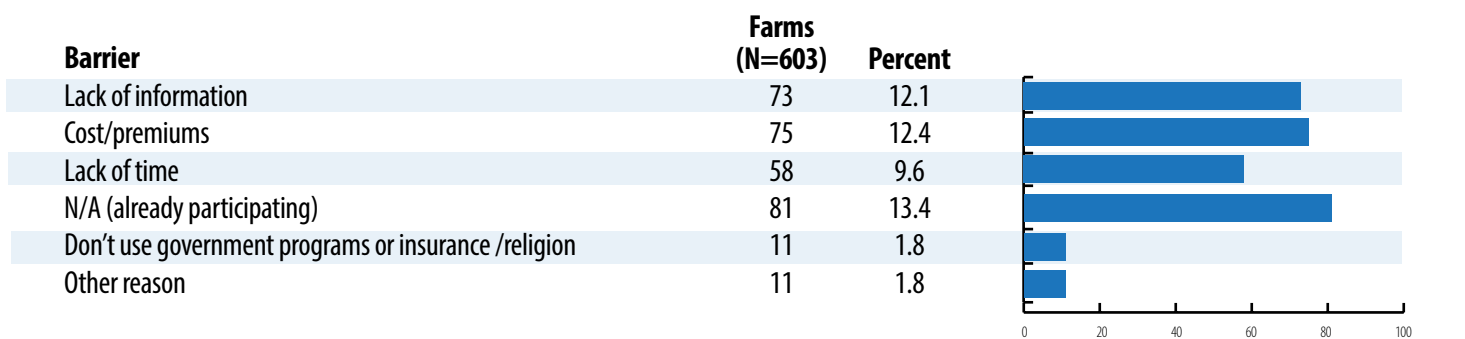
When asked to rate confidence in understanding risk management on a scale of 1 to 5, with 1 being “do not understand at all” and 5 being “understands completely,” over three quarters of the answers were 3 and under (77.7 percent), demonstrating that the majority of respondents fall on the lower end of the comprehension scale with a mean answer of 2.63. Only a combined 22.3 percent of respondents conveyed a moderate (4) to complete understanding (5) of risk management.

CONFIDENCE IN UNDERSTANDING RISK MANAGEMENT PROGRAMS AND TOOLS



Most participants indicated their primary barriers to participating in risk management programs were cost/premiums (12.4 percent) and lack of information (12.1 percent). Additionally, several respondents stated they did not participate in government or insurance programs.

BARRIERS TO PARTICIPATING IN RISK MANAGEMENT PROGRAMS

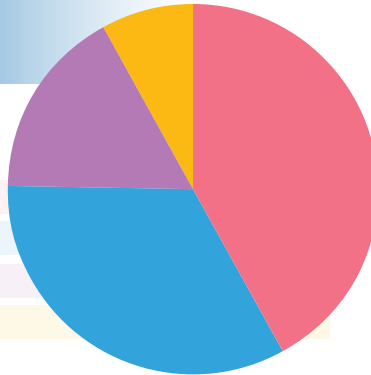


BIOSECURITY

With the outbreak of Highly Pathogenic Avian Influenza (HPAI) in US dairy in 2024 and the concern about the Food & Mouth Disease outbreak in Europe, biosecurity planning continues to be encouraged heavily among Pennsylvania dairy farms. While previous numbers are not available for comparison, this survey does indicate dairy farms are working to get plans implemented. More than half of the respondents indicated they either have a plan in place or are in the process of completing a plan, while 42 percent indicated they do not have a plan. The 7.9 percent who indicated if they were unsure whether they had a plan demonstrated a need to create more understanding about the plan itself.

BIOSECURITY PLAN CREATED

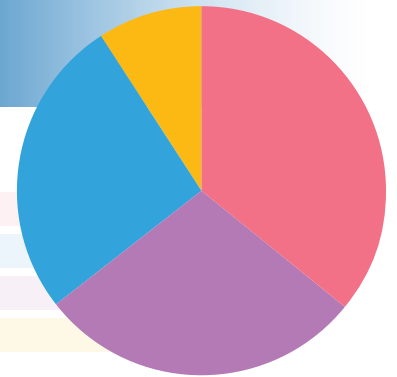
Plan Created	Farms (N=534)	Percent
No	224	41.9
Yes	179	33.5
In process	89	16.7
Unsure	42	7.9



On the positive side, of those who have a written plan, 28.6 percent have implemented it, while 26.5 percent are in the process of implementing it. However, on the negative side, 36 percent have a written plan in place but have not implemented that plan.

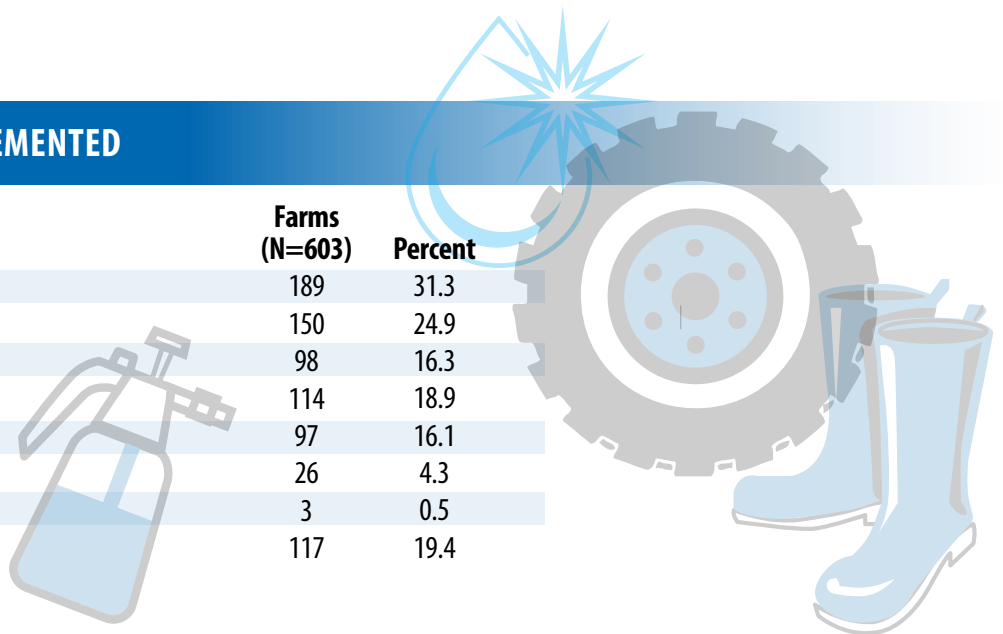
BIOSECURITY PLAN IMPLEMENTED (of those who have a plan in place)

Plan Implemented	Farms (N=392)	Percent
No	141	36.0
Yes	112	28.6
In process	104	26.5
Unsure	35	8.9



BIOSECURITY MEASURES IMPLEMENTED

Biosecurity Measure	Farms (N=603)	Percent
Signage to restrict visitor access	189	31.3
Regular disinfecting of equipment	150	24.9
Regular disinfecting of farm workers' boots	98	16.3
Regular disinfecting of visitors' boots	114	18.9
Use of Personal Protective Equipment (PPE)	97	16.1
Regular biosecurity training for employees	26	4.3
Others	3	0.5
No biosecurity measures implemented	117	19.4



Respondents were asked to identify which biosecurity measures they have implemented. Of those answering the question, 31 percent indicated they have signage restricting visitor access, while nearly 25 percent regularly disinfect equipment, and 16 percent require farm workers to regularly disinfect their boots. The number of respondents requiring visitors to disinfect their boots was higher at nearly 19 percent. Sixteen (16 percent) percent encourage the use of personal protective equipment, while only 4 percent do regular biosecurity training for employees. Nearly 20 percent of those responding said they have not implemented any biosecurity measures.

With HPAI first emerging in dairy cattle in early 2024, the survey asked producers about their understanding of the virus more than 12 months after the initial outbreak. Responses were evenly spread between “don’t understand” to “completely understand” with the majority (79 percent) in the middle, indicating they have some understanding. A similar question was asked about their understanding of the risks, and respondents answered that question similarly to the one regarding scope, with the majority (79 percent) indicating they have some understanding. In both charts, the remaining 21 percent was split evenly between the “don’t understand” and “completely understand” categories.

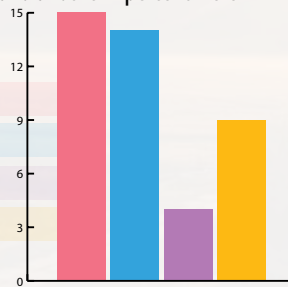
SCOPE AND UNDERSTANDING OF HIGHLY PATHOGENIC AVIAN INFLUENZA

HPAI Understanding	1 (Don't understand)	2	3	4	5 (Completely understand)
Scope of HPAI (N=530)	53 (10.0%)	122 (23.0%)	191 (36.0%)	108 (20.4%)	56 (10.6%)
Risks of HPAI (N=524)	53 (10.1%)	117 (22.3%)	185 (35.3%)	116 (22.1%)	53 (10.1%)

CLIMATE-SMART GRANTS AND PRACTICES

A question was asked regarding whether producers are interested or have implemented climate-smart strategies. Fifteen percent indicated they were interested in applying for climate-smart grants, while 14 percent indicated they had implemented climate-smart strategies, and another 4 percent were in the process of implementing strategies. Nine percent have indicated they applied for grant funding to support those strategies.

- **Interested** in applying for climate-smart grants
- **Implemented** climate-smart strategies
- **In process** of implementing strategies
- **Applied** for grant funding



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