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# **Dairy Farm Operating Trends**

**December 31, 2002**



**MOORE STEPHENS WURTH FRAZER AND TORBET, LLP**

Certified Public Accountants and Consultants

**Creating New Horizons By Building Relationships and Exceeding Expectations**

## ***To Our Valued Clients and Other Friends in the Dairy Industry***

*The following pages contain the Moore Stephens Wurth Frazer and Torbet, LLP's Dairy Farm Operating Trends for the year ended December 31, 2002.*

*The data is compiled from dairy operations in Southern California, the San Joaquin Valley, Arizona, Idaho, and New Mexico with a combined milk production of over 3.2 billion pounds and more than 159,000 head of mature cows in the current year.*

*This report includes a comparison of the results in the regions listed above for the year ended December 31, 2002 both on a "per hundredweight of milk" basis and on a "per head" basis. Also included are selected financial ratios and other information for the period.*

*This publication is designed as a reference tool and a management aid for dairy farm managers and advisors. Moore Stephens Wurth Frazer and Torbet, LLP believes the information to be reliable, but is not responsible for errors in reported source information.*

*Our publication continues to be recognized as the top industry source for relevant dairy statistics. This report is provided to and widely utilized by dairy farmers, lending institutions, universities, colleges and other agribusiness industries.*

*We appreciate all of your past and present support and thank you for your continued reliance on Moore Stephens Wurth Frazer and Torbet, LLP. If you have any comments or questions, please contact Sharon A. Davis at our City of Industry office at (909) 594-2713 or Bob Matlick or Mike Edwards at our Visalia office at (559) 732-4135.*

*Sincerely,*

*Moore Stephens Wurth Frazer and Torbet LLP*

MOORE STEPHENS WURTH FRAZER AND TORBET, LLP  
Certified Public Accountants and Consultants

May 2003



# DAIRY FARM OPERATING TRENDS

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## 2002 IN REVIEW

### Comparative Net Income (Loss) By Region:

2002 has been an extremely difficult year for dairymen. All areas except New Mexico experienced net losses primarily due to the huge decline in the milk price. Idaho has been hit the hardest by the reduced milk price primarily due to their cheese market.

Net income (loss) per head:	Southern California	San Joaquin Valley	Arizona	Idaho	New Mexico
2002	\$ (69)	\$ (2)	\$ (60)	\$ (106)	\$ 103
2001	553	555	382	543	499
Change	\$ (622)	\$ (557)	\$ (442)	\$ (649)	\$ (396)

### Comparative Feed Cost By Region:

Feed costs have increased from 2001 across the regions for the year. These costs will carry into 2003. Feed costs per head are lowest in New Mexico and highest in the San Joaquin Valley.

Feed cost per head:	Southern California	San Joaquin Valley	Arizona	Idaho	New Mexico
2002	\$ 1,152	\$ 1,298	\$ 1,165	\$ 1,259	\$ 1,051
2001	1,067	1,200	1,091	1,171	1,006
Change	\$ 85	\$ 98	\$ 74	\$ 88	\$ 45

### Comparative Production By Region:

Milk production per cow per day was stable in most areas, with Southern California experiencing the largest decrease and Arizona realizing the largest increase.

Lbs. per milk cow per day	Southern California	San Joaquin Valley	Arizona	Idaho	New Mexico
2002	63.7	69.4	68.5	70.9	65.3
2001	66.2	67.6	64.2	72.0	64.8
Change	(2.5)	1.8	4.3	(1.1)	0.5

### **Herd Turnover Rate By Region:**

---

Herd turnover rates remained fairly stable in Southern California, San Joaquin Valley and Idaho, while New Mexico experienced the largest decrease in turnover rate and Arizona experienced the largest increase in herd turnover.

	<u>Southern California</u>	<u>San Joaquin Valley</u>	<u>Arizona</u>	<u>Idaho</u>	<u>New Mexico</u>
2002	29.7%	31.7%	34.9%	32.5%	29.2%
2001	32.4%	32.5%	29.5%	32.5%	38.9%

### **Average Cost of Replacement Per Head By Region:**

---

The cost of replacements increased at the beginning of 2002 throughout most areas. The trend began a downward move towards the end of 2002 finally reflecting the low milk price. This decrease will continue into 2003.

	<u>Southern California</u>	<u>San Joaquin Valley</u>	<u>Arizona</u>	<u>Idaho</u>	<u>New Mexico</u>
2002	\$ 1,772	\$ 1,694	\$ 1,618	\$ 1,375	\$ 1,521
2001	\$ 1,729	\$ 1,584	\$ 1,558	\$ 1,423	\$ 1,452

# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

COMPARISON BY AREA  
FOR THE YEAR ENDED DECEMBER 31, 2002  
(BASED ON AVERAGE AMOUNTS PER HEAD)

	Southern California	San Joaquin Valley	Arizona
Income:			
Milk sales	\$ 2,283	\$ 2,525	\$ 2,420
Calves and other	27	74	71
Total income	\$ 2,310	\$ 2,599	\$ 2,491
Cost of operations:			
Feed:			
Grain	\$ 782	\$ 907	\$ 757
Hay and other	370	391	408
Total feed	\$ 1,152	\$ 1,298	\$ 1,165
Labor, (including fringe costs)	\$ 278	\$ 262	\$ 247
Herd replacement costs	\$ 236	\$ 256	\$ 330
Other costs:			
Milk hauling	\$ 64	\$ 61	\$ 98
State and association charges	34	39	47
Veterinary, breeding, testing, etc.	60	69	42
Supplies	100	105	107
Repairs and maintenance	152	92	74
Utilities	47	65	51
Occupancy costs	104	105	116
Depreciation - equipment	25	64	38
Interest	65	109	125
Miscellaneous	62	76	111
Total other costs	\$ 713	\$ 785	\$ 809
Total cost of operations	\$ 2,379	\$ 2,601	\$ 2,551
Net income (loss)	\$ (69)	\$ (2)	\$ (60)

See accompanying explanation of income and cost factors.



Your  
December 31, 2002  
Amounts

Idaho	New Mexico	
\$ 2,490 61	\$ 2,284 77	\$
\$ 2,551	\$ 2,361	\$
\$ 800 459	\$ 755 296	\$
\$ 1,259	\$ 1,051	\$
\$ 270	\$ 260	\$
\$ 303	\$ 275	\$
\$ 49 51 81 134 105 47 78 72 105 103	\$ 96 39 55 117 73 36 59 46 88 63	\$
\$ 825	\$ 672	\$
\$ 2,657	\$ 2,258	\$
\$ (106)	\$ 103	\$

# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

COMPARISON BY AREA  
FOR THE YEAR ENDED DECEMBER 31, 2002  
(BASED ON AVERAGE AMOUNTS  
PER HUNDREDWEIGHT OF MILK)

	Southern California	San Joaquin Valley	Arizona
Income:			
Milk sales	\$ 11.69	\$ 11.66	\$ 12.04
Calves and other	0.13	0.34	0.36
Total income	\$ 11.82	\$ 12.00	\$ 12.40
Cost of operations:			
Feed:			
Grain	\$ 4.01	\$ 4.19	\$ 3.77
Hay and other	1.90	1.79	2.03
Total feed	\$ 5.91	\$ 5.98	\$ 5.80
Labor, (including fringe costs)	\$ 1.42	\$ 1.21	\$ 1.24
Herd replacement costs	\$ 1.21	\$ 1.18	\$ 1.64
Other costs:			
Milk hauling	\$ 0.33	\$ 0.28	\$ 0.49
State and association charges	0.17	0.18	0.23
Veterinary, breeding, testing, etc.	0.30	0.32	0.21
Supplies	0.51	0.49	0.53
Repairs and maintenance	0.78	0.43	0.37
Utilities	0.24	0.30	0.25
Occupancy costs	0.53	0.49	0.57
Depreciation - equipment	0.13	0.30	0.19
Interest	0.33	0.50	0.62
Miscellaneous	0.31	0.36	0.56
Total other costs	\$ 3.63	\$ 3.65	\$ 4.02
Total cost of operations	\$ 12.17	\$ 12.02	\$ 12.70
Net income (loss)	\$ (0.35)	\$ (0.02)	\$ (0.30)

See accompanying explanation of income and cost factors.

Your  
December 31, 2002  
Amounts

Idaho	New Mexico	
\$ 11.62 0.29	\$ 12.09 0.41	\$
\$ 11.91	\$ 12.50	\$
\$ 3.74 2.15	\$ 4.00 1.56	\$
\$ 5.89	\$ 5.56	\$
\$ 1.25	\$ 1.38	\$
\$ 1.41	\$ 1.46	\$
\$ 0.23 0.24 0.37 0.63 0.49 0.22 0.37 0.34 0.49 0.48	\$ 0.51 0.21 0.29 0.62 0.39 0.19 0.31 0.25 0.46 0.34	\$
\$ 3.86	\$ 3.57	\$
\$ 12.41	\$ 11.97	\$
\$ (0.50)	\$ 0.53	\$

## SUMMARY OF FINANCIAL STATISTICS

### COMPARISON BY AREA FOR THE YEAR ENDED DECEMBER 31, 2002

	Southern California	San Joaquin Valley	Arizona
1. Current Ratio	1.06:1	1.23:1	0.78:1
2. Debt Per Cow	\$ 958	\$ 1,464	\$ 1,577
3. Debt to Equity Ratio	0.94:1	1.11:1	2.45:1
4. Return on Total Assets	-1.4%	-0.04%	-1.5%

1. The current ratio represents current assets divided by current liabilities.
2. Debt per cow equals the total long-term debt divided by the average total herd size. Heifers are included on a mature equivalent basis.
3. Debt to equity ratio represents total debt divided by total equity.
4. The return on total assets represents the net income divided by the total assets, stated at cost.

**Idaho**

**New  
Mexico**

**Your 2002  
Results**

1.00:1

1.16:1

\$ 1,614

\$ 1,132

1.66:1

1.20:1

-3.2%

2.0%

# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
SOUTHERN CALIFORNIA  
(BASED ON AVERAGE AMOUNTS)

	PER HEAD		
	2002	2001	2000
Income:			
Milk sales	\$ 2,283	\$ 2,888	\$ 2,444
Calves and other	27	33	60
Total income	\$ 2,310	\$ 2,921	\$ 2,504
Cost of operations:			
Feed:			
Grain	\$ 782	\$ 740	\$ 738
Hay and other	370	327	329
Total feed	\$ 1,152	\$ 1,067	\$ 1,067
Labor, (including fringe costs)	\$ 278	\$ 287	\$ 262
Herd replacement costs	\$ 236	\$ 257	\$ 271
Other costs:			
Milk hauling	\$ 64	\$ 69	\$ 62
State and association charges	34	37	40
Veterinary, breeding, testing, etc.	60	69	53
Supplies	100	103	88
Repairs and maintenance	152	159	107
Utilities	47	47	41
Occupancy costs	104	104	91
Depreciation - equipment	25	21	22
Interest	65	83	96
Miscellaneous	62	65	85
Total other costs	\$ 713	\$ 757	\$ 685
Total cost of operations	\$ 2,379	\$ 2,368	\$ 2,285
Net income (loss)	\$ (69)	\$ 553	\$ 219

See accompanying explanation of income and cost factors.

**YOUR 2002  
RESULTS**

PER CWT. OF MILK			PER HEAD	PER CWT. OF MILK
2002	2001	2000		
\$ 11.69 0.13	\$ 14.46 0.16	\$ 12.04 0.30		
\$ 11.82	\$ 14.62	\$ 12.34		
\$ 4.01 1.90	\$ 3.71 1.65	\$ 3.64 1.62		
\$ 5.91	\$ 5.36	\$ 5.26		
\$ 1.42	\$ 1.44	\$ 1.29		
\$ 1.21	\$ 1.29	\$ 1.34		
\$ 0.33 0.17 0.30 0.51 0.78 0.24 0.53 0.13 0.33 0.31	\$ 0.35 0.19 0.34 0.52 0.79 0.23 0.52 0.11 0.41 0.32	\$ 0.30 0.20 0.26 0.43 0.53 0.20 0.44 0.11 0.47 0.41		
\$ 3.63	\$ 3.78	\$ 3.35		
\$ 12.17	\$ 11.87	\$ 11.24		
\$ (0.35)	\$ 2.75	\$ 1.10		

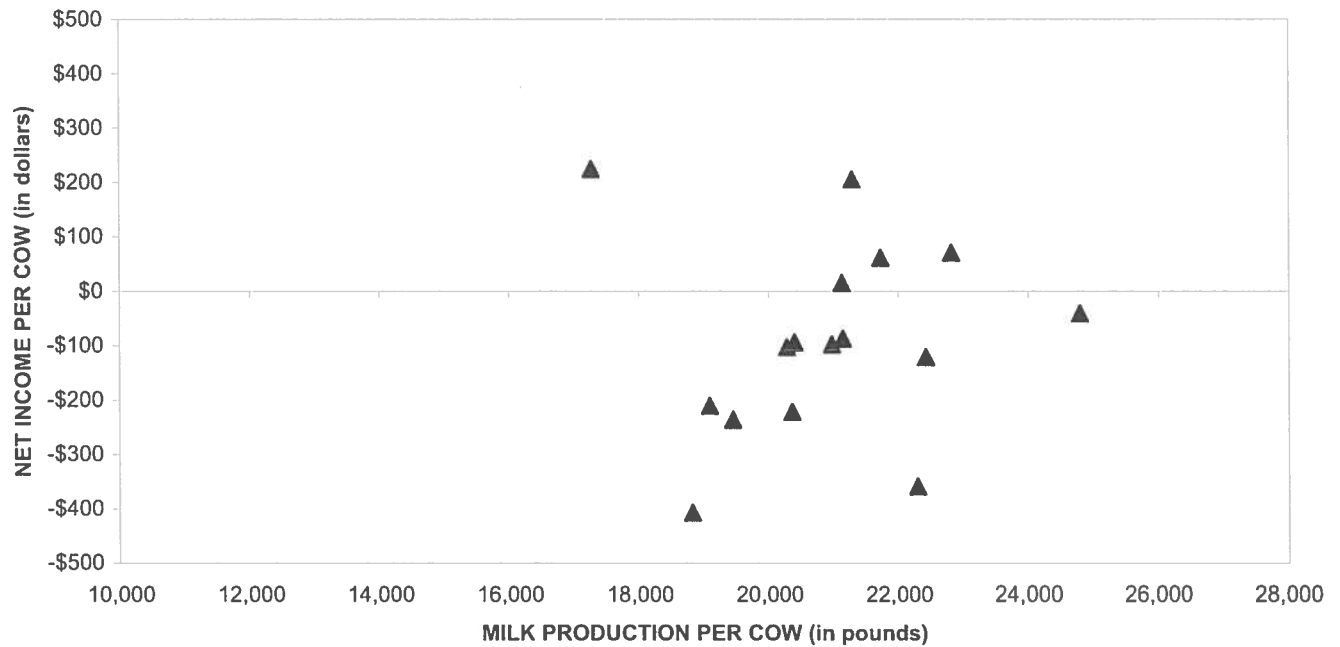
## SUMMARY OF DAIRY FARM STATISTICAL ANALYSIS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
SOUTHERN CALIFORNIA  
(BASED ON AVERAGE AMOUNTS)

	2002	2001	2000
<b>PRODUCTION AND PRICE INFORMATION:</b>			
Annual pounds of milk, per cow (including dry cows)	19,519	19,958	20,294
Daily pounds of milk, per milking cow	63.7	66.2	66.7
Butterfat test	3.57 %	3.61 %	3.56 %
Solids-non-fat test	8.73 %	8.71 %	8.73 %
Blend price per hundredweight	\$ 11.69	\$ 14.46	\$ 12.04
Milk receipts, per milking cow	\$ 2,720	\$ 3,495	\$ 2,932
<b>HERD INFORMATION:</b>			
Herd size - total	1,951	1,628	1,611
Percent of dry cows	16.1 %	17.4 %	16.7 %
Herd turnover rate	29.7 %	32.4 %	36.4 %
Composition of herd:			
Purchased cows	21 %	30 %	20 %
Self-raised cows	79 %	70 %	80 %
Cost of purchased cows	\$ 1,772	\$ 1,729	\$ 1,496
Beef price received	\$ 455	\$ 497	\$ 452
<b>FEED INFORMATION:</b>			
Cost of feed as a percent of milk income:			
Grain	34.3 %	25.6 %	30.2 %
Hay and other	16.2 %	11.3 %	13.5 %
Totals	50.5 %	36.9 %	43.7 %

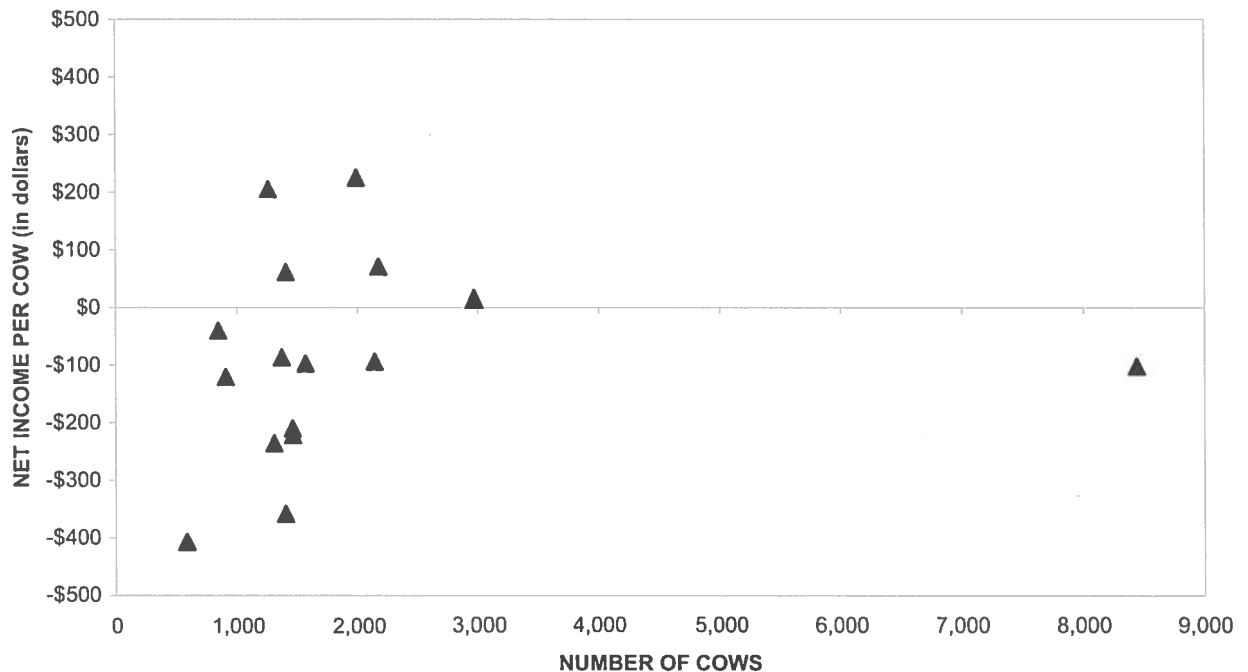


## PROFITABILITY BY MILK PRODUCTION PER COW Southern California

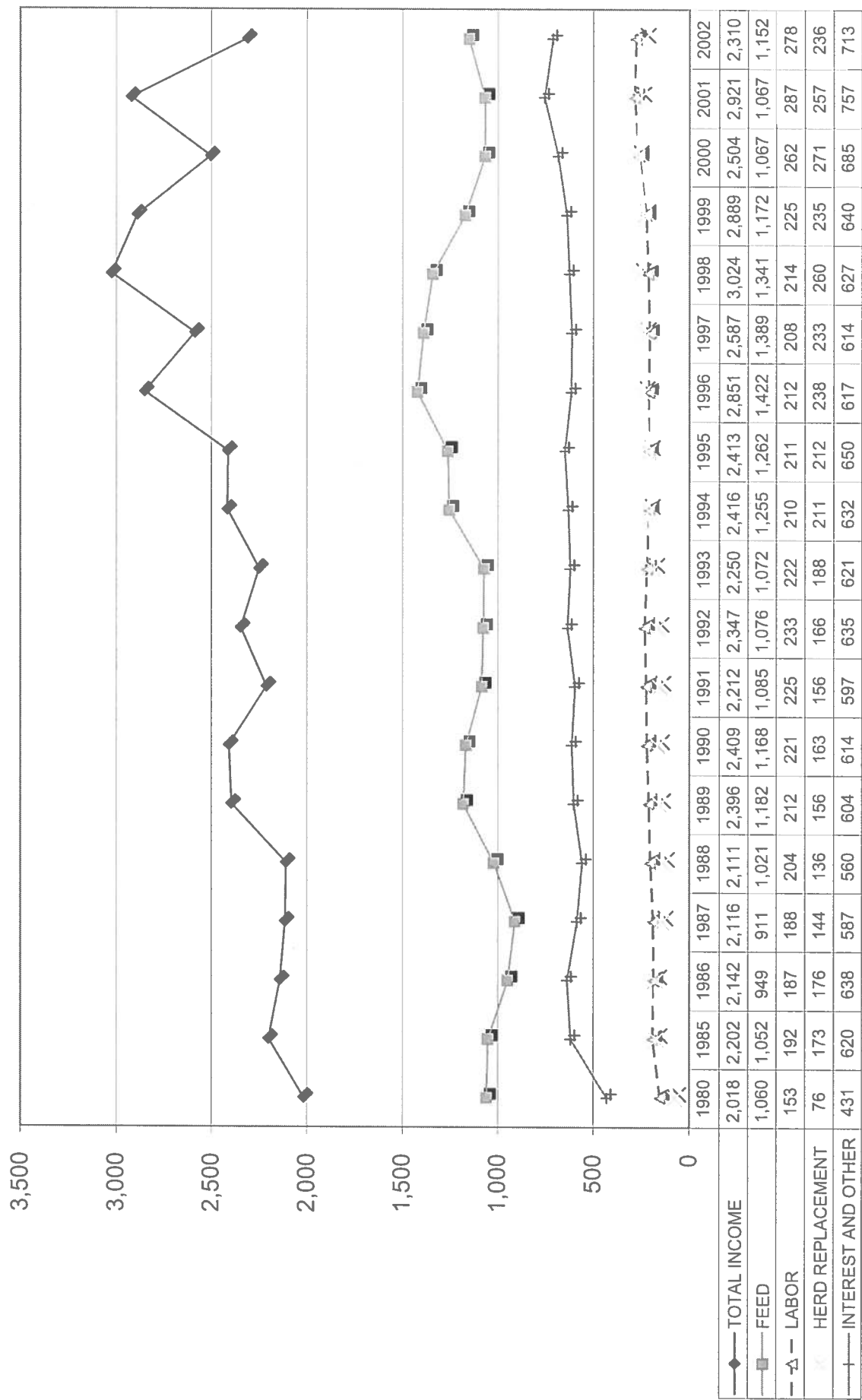


Milk production per cow is the actual pounds of milk produced for the year divided by the average total cows in the herd (milking and dry)

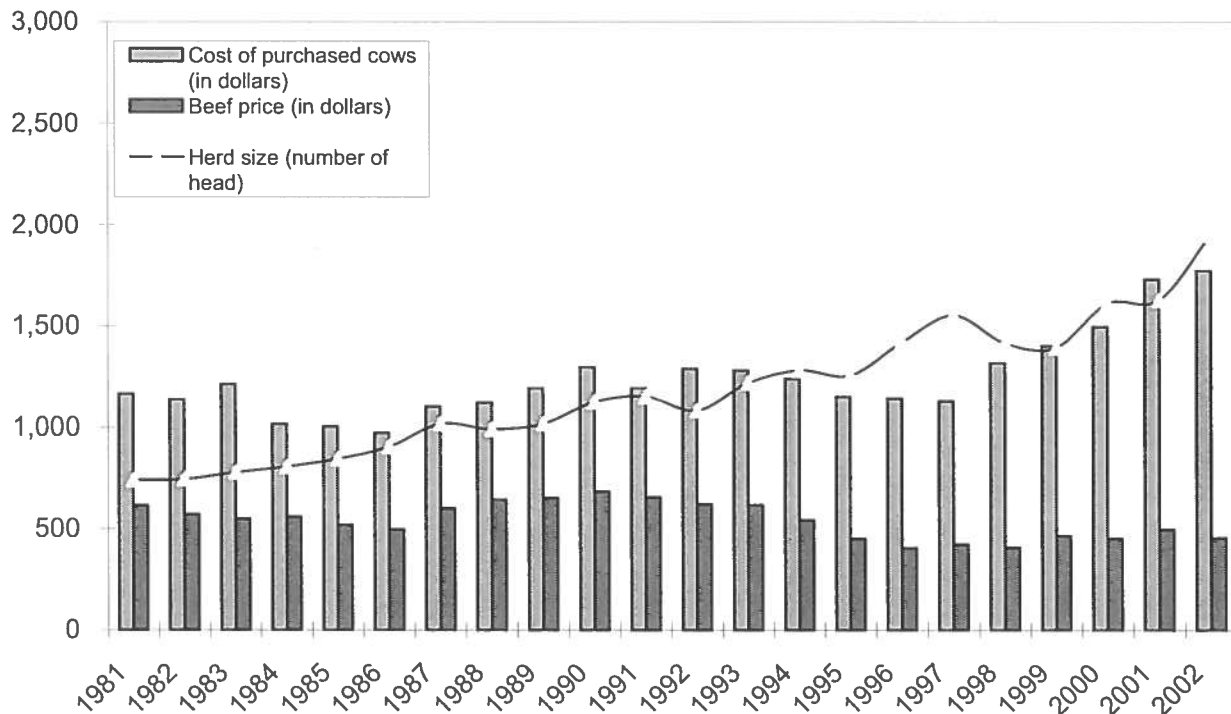
## PROFITABILITY BY HERD SIZE Southern California



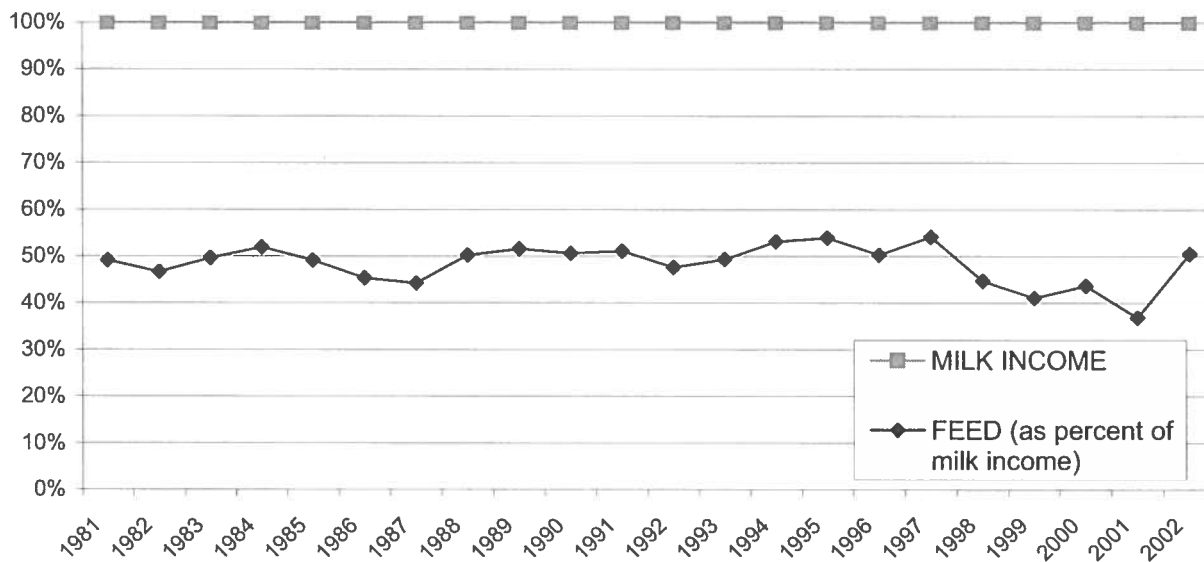
LONG-TERM TREND - ON A "PER HEAD" BASIS  
SOUTHERN CALIFORNIA  
INCOME AND OPERATING COSTS  
1980 - 2002



# **LONG TERM TREND - COST OF PURCHASED COWS, BEEF PRICE, AND HERD SIZE SOUTHERN CALIFORNIA**



## **FEED COST vs. MILK INCOME SOUTHERN CALIFORNIA**



# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
SAN JOAQUIN VALLEY  
(BASED ON AVERAGE AMOUNTS)

## PER HEAD

	2002	2001	2000
<b>Income:</b>			
Milk sales	\$ 2,525	\$ 2,931	\$ 2,495
Calves and other	74	106	82
<b>Total income</b>	<b>\$ 2,599</b>	<b>\$ 3,037</b>	<b>\$ 2,577</b>
<b>Cost of operations:</b>			
Feed:			
Grain	\$ 907	\$ 851	\$ 806
Hay and other	391	349	280
<b>Total feed</b>	<b>\$ 1,298</b>	<b>\$ 1,200</b>	<b>\$ 1,086</b>
Labor, (including fringe costs)	\$ 262	\$ 239	\$ 241
Herd replacement costs	\$ 256	\$ 255	\$ 249
<b>Other costs:</b>			
Milk hauling	\$ 61	\$ 53	\$ 54
State and association charges	39	40	40
Veterinary, breeding, testing, etc.	69	67	61
Supplies	105	94	90
Repairs and maintenance	92	88	94
Utilities	65	53	43
Occupancy costs	105	99	82
Depreciation - equipment	64	56	63
Interest	109	148	191
Miscellaneous	76	90	84
<b>Total other costs</b>	<b>\$ 785</b>	<b>\$ 788</b>	<b>\$ 802</b>
<b>Total cost of operations</b>	<b>\$ 2,601</b>	<b>\$ 2,482</b>	<b>\$ 2,378</b>
<b>Net income (loss)</b>	<b>\$ (2)</b>	<b>\$ 555</b>	<b>\$ 199</b>

See accompanying explanation of income and cost factors.

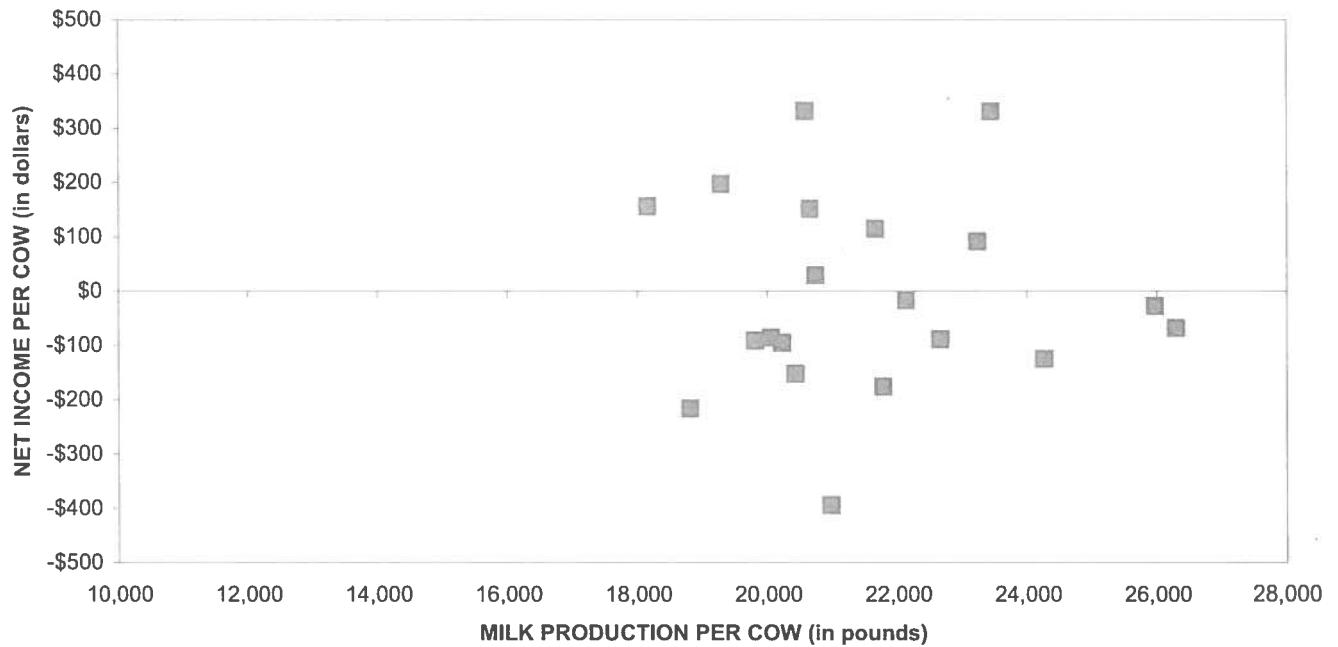
PER CWT. OF MILK			YOUR 2002 RESULTS	
2002	2001	2000	PER HEAD	PER CWT. OF MILK
\$ 11.66 0.34	\$ 14.18 0.51	\$ 11.88 0.40		
\$ 12.00	\$ 14.69	\$ 12.28		
\$ 4.19 1.79	\$ 4.12 1.68	\$ 3.84 1.33		
\$ 5.98	\$ 5.80	\$ 5.17		
\$ 1.21	\$ 1.15	\$ 1.15		
\$ 1.18	\$ 1.23	\$ 1.19		
\$ 0.28 0.18 0.32 0.49 0.43 0.30 0.49 0.30 0.50 0.36	\$ 0.26 0.19 0.33 0.46 0.43 0.25 0.48 0.27 0.72 0.43	\$ 0.26 0.19 0.30 0.43 0.45 0.21 0.39 0.30 0.91 0.38		
\$ 3.65	\$ 3.82	\$ 3.82		
\$ 12.02	\$ 12.00	\$ 11.33		
\$ (0.02)	\$ 2.69	\$ 0.95		

## SUMMARY OF DAIRY FARM STATISTICAL ANALYSIS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
SAN JOAQUIN VALLEY  
(BASED ON AVERAGE AMOUNTS)

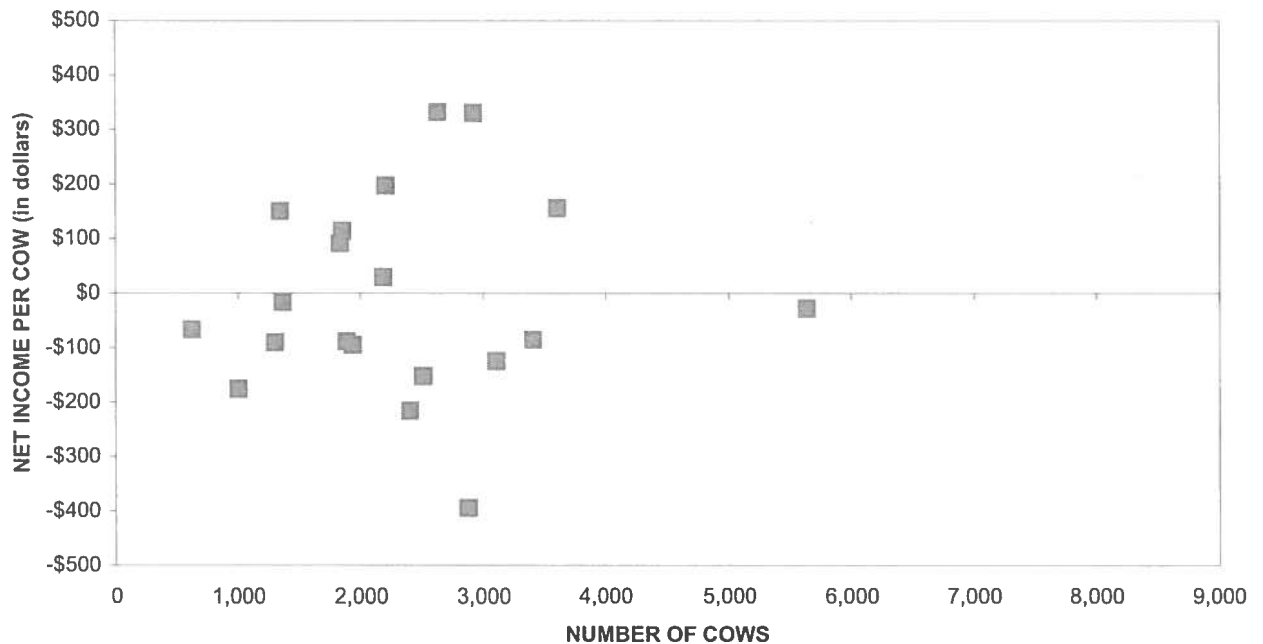
	2002	2001	2000
<b>PRODUCTION AND PRICE INFORMATION:</b>			
Annual pounds of milk, per cow (including dry cows)	21,647	20,660	21,005
Daily pounds of milk, per milking cow	69.4	67.6	69.0
Butterfat test	3.69 %	3.65 %	3.66 %
Solids-non-fat test	8.73 %	8.71 %	8.74 %
Blend price per hundredweight	\$ 11.66	\$ 14.18	\$ 11.88
Milk receipts, per milking cow	\$ 2,955	\$ 3,499	\$ 2,991
<b>HERD INFORMATION:</b>			
Herd size - total	2,334	2,328	2,143
Percent of dry cows	14.6 %	16.2 %	16.6 %
Herd turnover rate	31.7 %	32.5 %	34.5 %
Composition of herd:			
Purchased cows	28 %	39 %	15 %
Self-raised cows	72 %	61 %	85 %
Cost of purchased cows	\$ 1,694	\$ 1,584	\$ 1,456
Beef price received	\$ 484	\$ 489	\$ 460
<b>FEED INFORMATION:</b>			
Cost of feed as a percent of milk income:			
Grain	35.9 %	29.0 %	32.3 %
Hay and other	15.5 %	11.9 %	11.2 %
Totals	51.4 %	40.9 %	43.5 %

## PROFITABILITY BY MILK PRODUCTION PER COW San Joaquin Valley

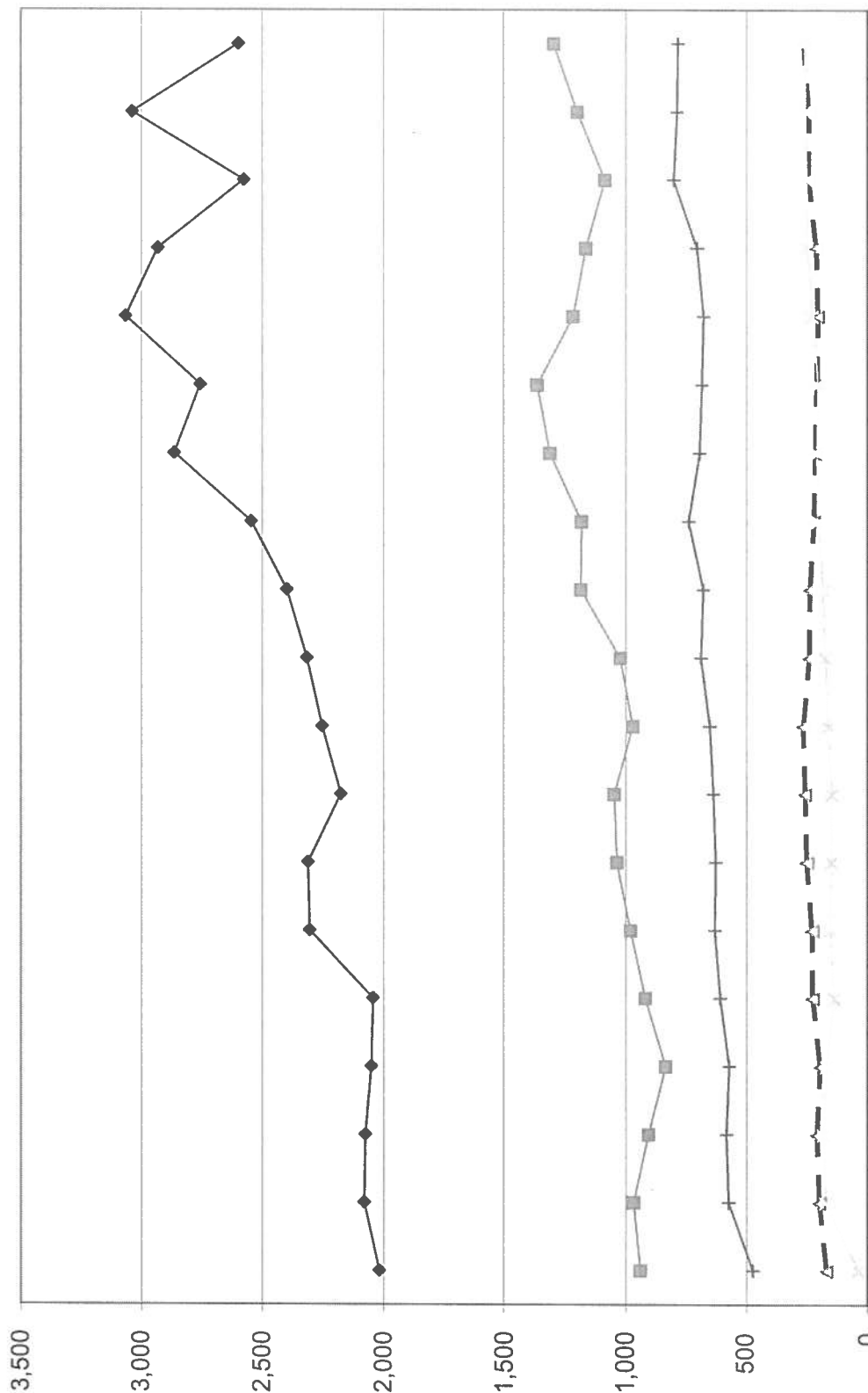


Milk production per cow is the actual pounds of milk produced for the year divided by the average total cows in the herd (milking and dry)

## PROFITABILITY BY HERD SIZE San Joaquin Valley



# LONG-TERM TREND - ON A "PER HEAD" BASIS SAN JOAQUIN VALLEY INCOME AND OPERATING COSTS 1980 - 2002



	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL INCOME	2,018	2,080	2,075	2,051	2,044	2,305	2,312	2,176	2,253	2,316	2,399	2,546	2,863	2,756	3,064	2,931	2,577	3,037	2,599
FEED	941	968	907	836	920	981	1,037	1,047	972	1,023	1,185	1,183	1,313	1,365	1,217	1,165	1,086	1,200	1,298
LABOR	167	198	207	193	225	227	249	255	263	238	235	219	213	207	203	210	241	239	262
HERD REPLACEMENT	38	172	180	168	138	154	149	148	163	175	185	203	206	201	227	247	249	255	256
INTEREST AND OTHER	475	575	584	573	610	632	629	638	653	689	680	739	695	685	679	705	802	788	785





## OUR FIRM AND THE DAIRY INDUSTRY

Moore Stephens Wurth Frazer and Torbet, LLP has been associated with the dairy industry since the early 1950's. At that time, many immigrants from Europe were arriving in California's "Dairy Valley" and establishing their farming operations. These early dairies averaged 50 cows and the families provided most of the labor.

Moore Stephens Wurth Frazer and Torbet, LLP's partners, situated in "Dairy Valley", were instrumental in the creation of federal and state laws to help dairymen. We have consistently supported pro-agricultural organizations in their efforts to help shape policy and better the living and working environments for dairy families.

As development expanded in the dairy farming area, our firm helped many dairies relocate throughout California and other Western states. Many families we are servicing now have their third generation stepping into the operation's management. We have grown with these families into their multiple operations, often totaling 10,000 cows or more. Today, Moore Stephens Wurth Frazer and Torbet, LLP has clients in California, Arizona, Texas, New Mexico, Colorado, Idaho, Oregon, Washington, Nevada and Kansas. Also, we actively consult with many dairies throughout the United States.

As we look to the future, the trend to larger, more efficient dairies will continue. Along with this trend, the dairy industry is facing continued challenges in its expansion and relocation activities including the ability to construct new dairies. The dairy industry brings many jobs to an area and allows associated businesses to grow and flourish. This creates further conflict between the local communities and the environmentalists.

The environmental issues are extremely important and the dairies need to monitor and control the impact on the surrounding community including air quality, water quality and odor issues. The regulatory controls and enforcement will increase in impact to the dairies in 2003.

The low milk prices in 2002 which has followed into 2003 coupled with the increasing feed costs have placed considerable financial strain on many dairies.

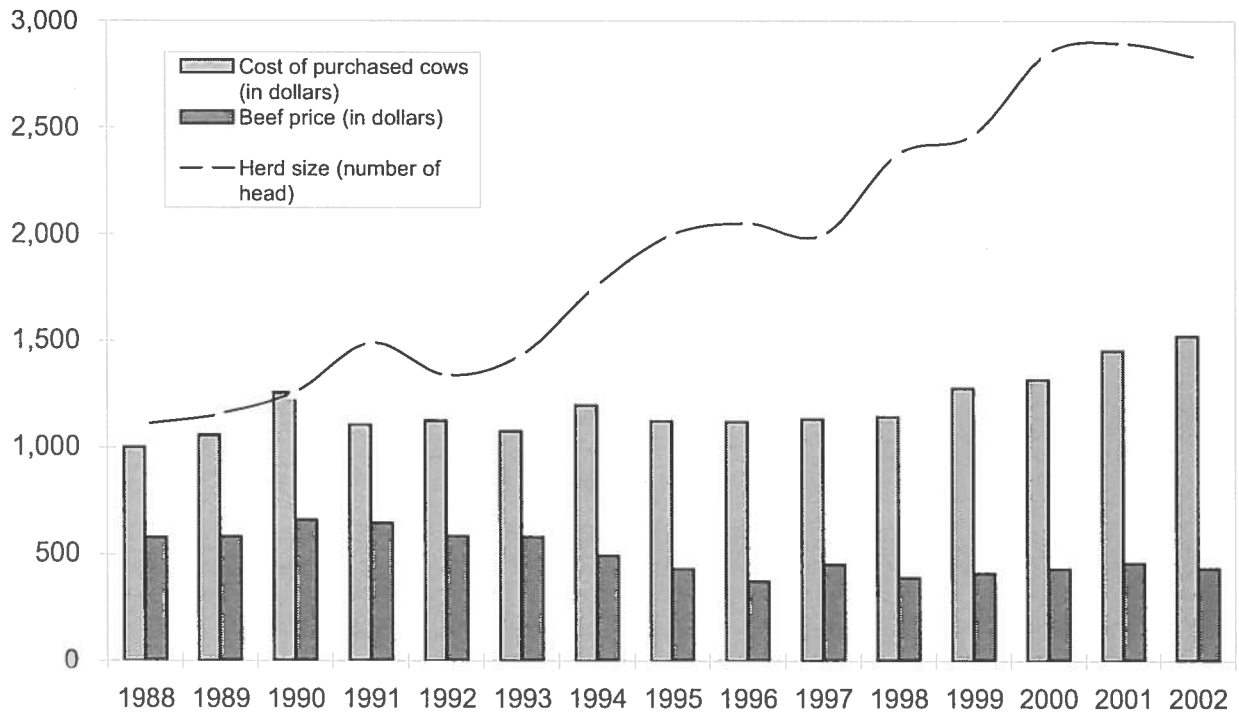
All of these factors culminate in a substantial amount of capital required to maintain a dairy farm and will put increasing pressure on dairy operators to make critical financial decisions. Moore Stephens Wurth Frazer and Torbet, LLP will be instrumental in providing the assistance needed to make these decisions.

We are proud of our dairy clients' social, political and charitable contributions to their communities.

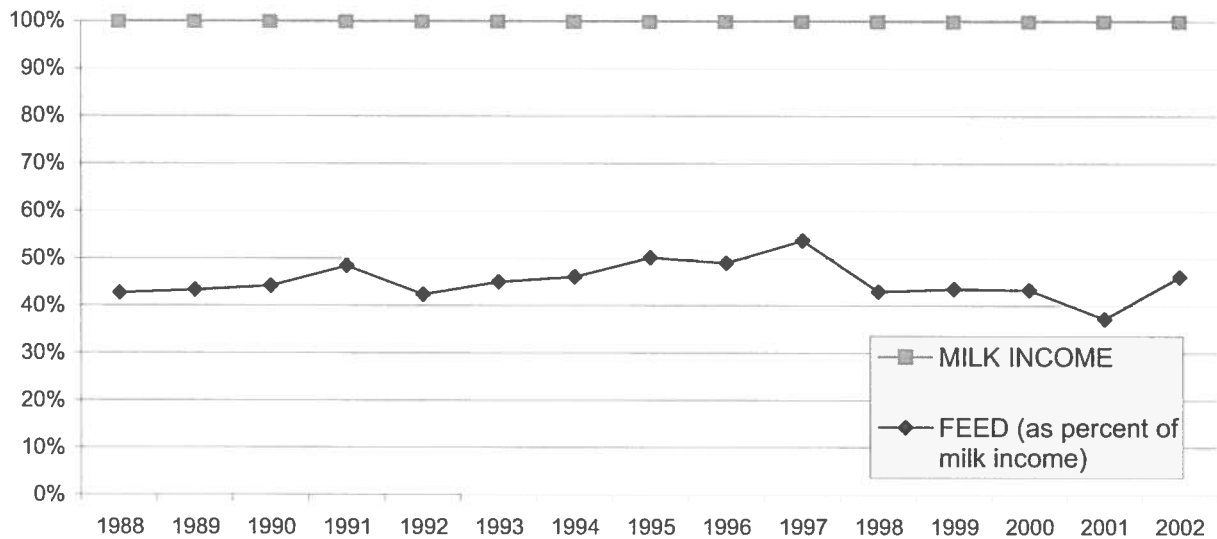
## EXPLANATION OF INCOME AND COST FACTORS

<b>Basis of presentation</b>	Information is included both on a "per head" basis and a "per hundredweight of milk" basis. The "per head" statistics are based on the total average number of milking and dry cows in a herd for the period.
<b>Milk sales</b>	Includes milk income, quality and production bonuses, patronage dividends, and USDA program payments.
<b>Calves and other income</b>	This is primarily composed of the sale of calves, heifers, other livestock and equipment, and net crop income.
<b>Feed</b>	Grain includes all minerals and BST expense.
<b>Labor</b>	Includes wages and fringe costs such as payroll taxes, workers' compensation insurance, medical insurance, union benefits, etc. Compensation to owner-employees or partners is not included.
<b>Herd replacement cost</b>	Represents the difference between the actual price paid for purchased cows (or estimated cost of self-raised cows) at the time the cows were added to the milking herd less the sales price received for cows disposed of. This difference is amortized over the productive life of the cows.
<b>Occupancy cost</b>	Includes property taxes and depreciation of buildings on owner occupied facilities, rent paid and depreciation of improvements on leased facilities. It does not include interest paid on real property.
<b>Miscellaneous cost</b>	Includes auto and truck expenses, insurance, professional fees, quality penalties and other dairy expenses not otherwise classified. In Arizona, this also includes the UDA operating losses.
<b>Net income</b>	Is stated before a provision for income taxes or a return on the dairy owner's investment.

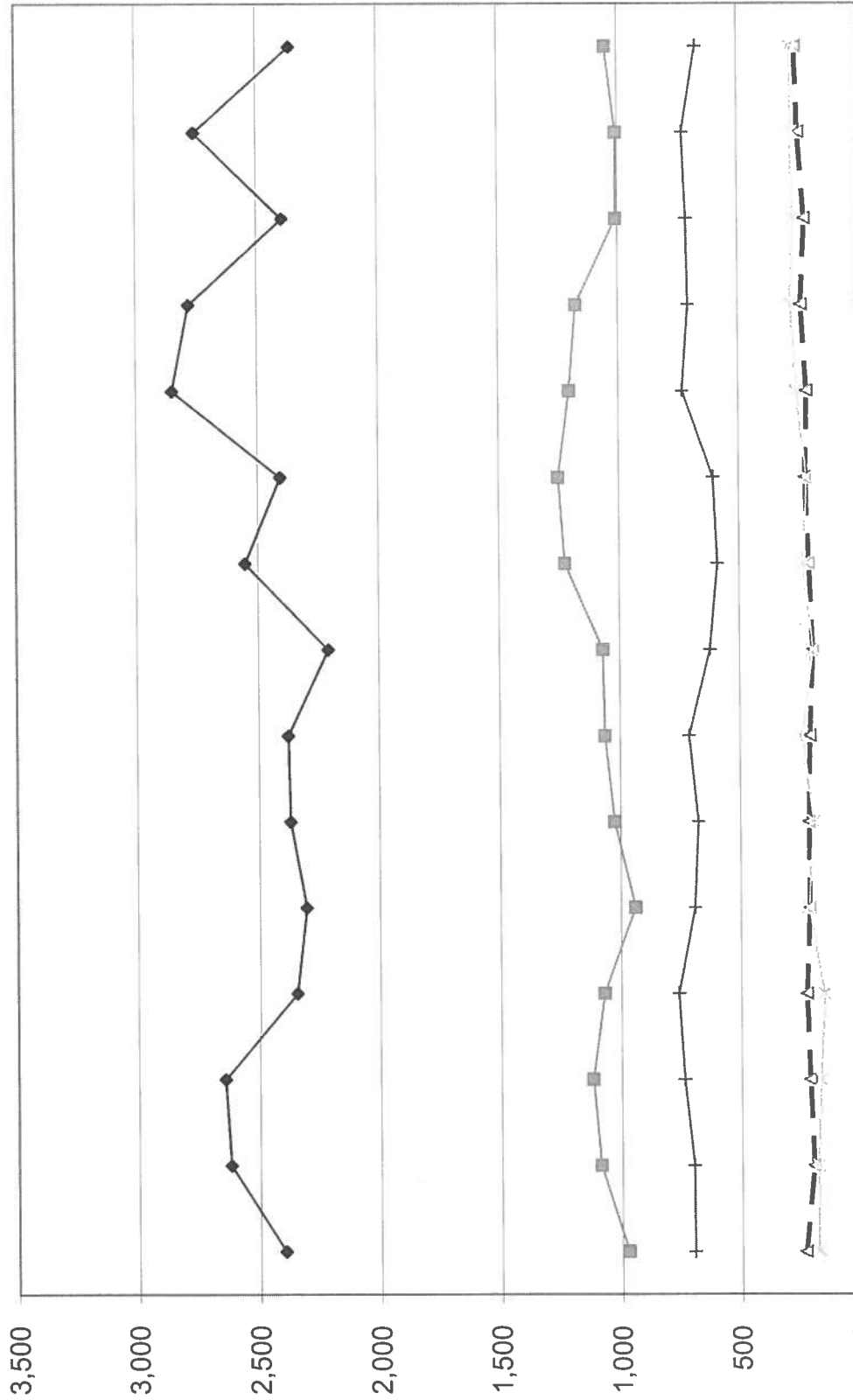
# **LONG TERM TREND - COST OF PURCHASED COWS, BEEF PRICE, AND HERD SIZE NEW MEXICO**



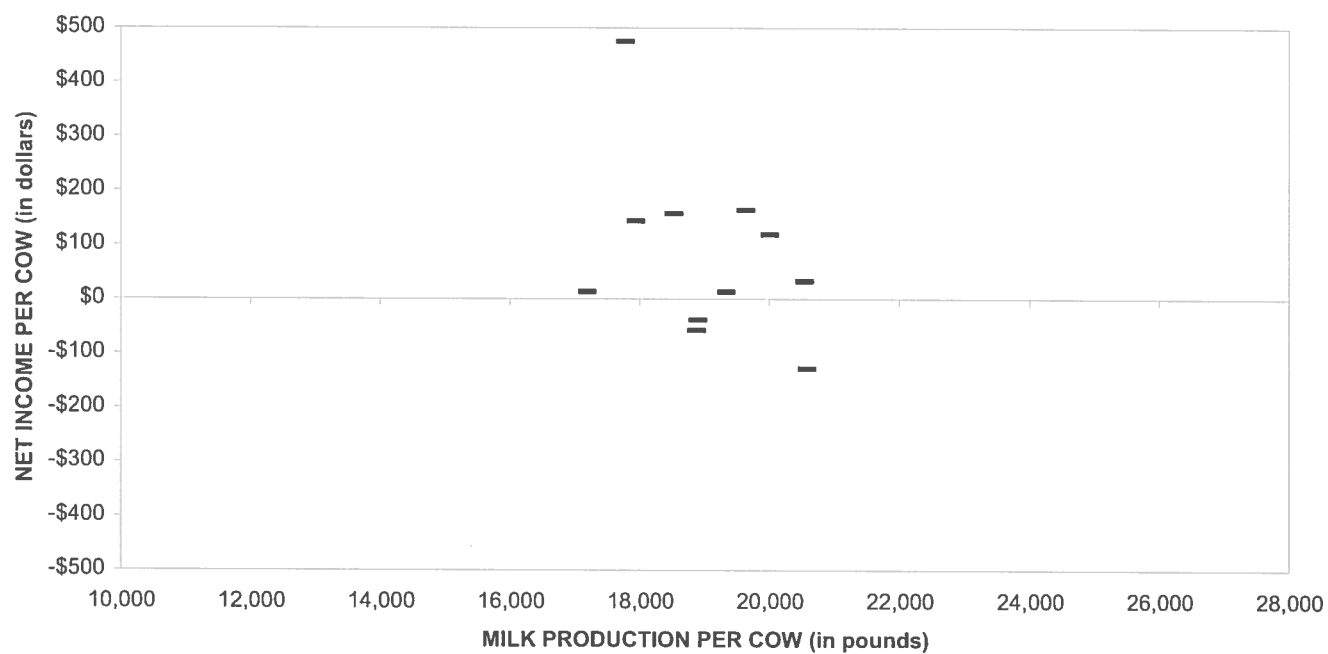
## **FEED COST vs. MILK INCOME NEW MEXICO**



LONG-TERM TREND - ON A "PER HEAD" BASIS  
NEW MEXICO  
INCOME AND OPERATING COSTS  
1988 - 2002

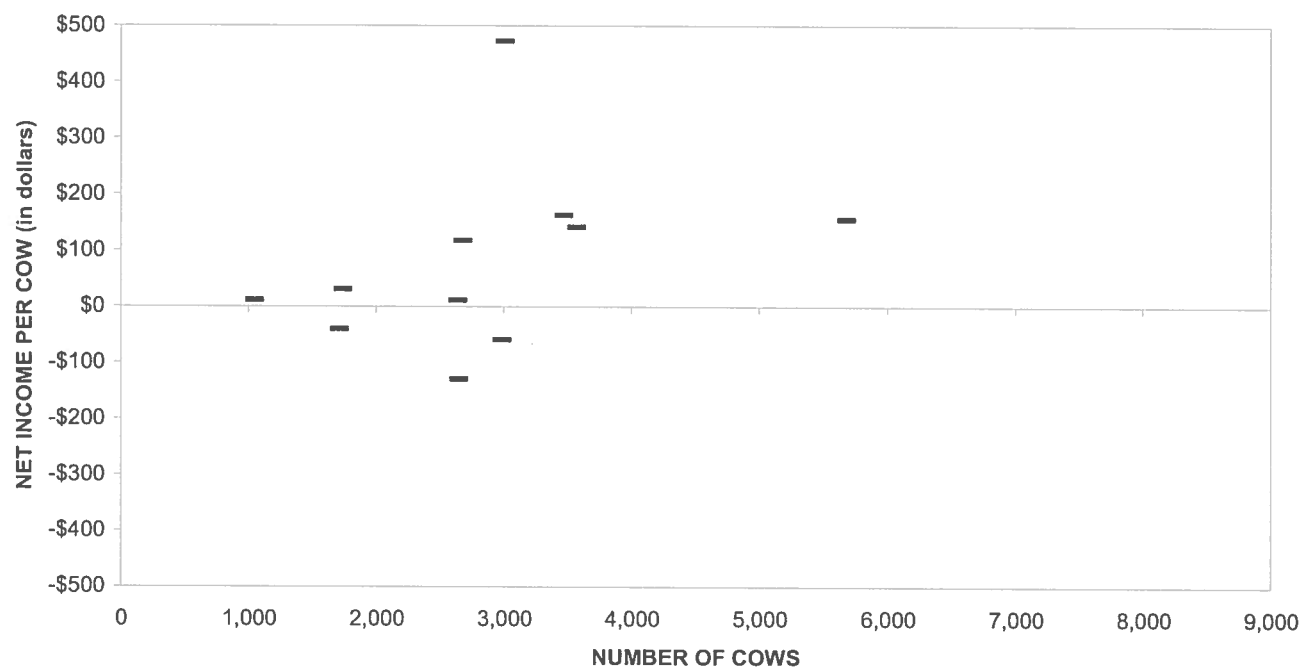


## PROFITABILITY BY MILK PRODUCTION PER COW New Mexico



Milk production per cow is the actual pounds of milk produced for the year divided by the average total cows in the herd (milking and dry)

## PROFITABILITY BY HERD SIZE New Mexico



## SUMMARY OF DAIRY FARM STATISTICAL ANALYSIS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
NEW MEXICO  
(BASED ON AVERAGE AMOUNTS)

	2002	2001	2000
<b>PRODUCTION AND PRICE INFORMATION:</b>			
Annual pounds of milk, per cow (including dry cows)	18,888	18,516	19,301
Daily pounds of milk, per milking cow	65.3	64.8	66.3
Butterfat test	3.56 %	3.53 %	3.54 %
Blend price per hundredweight	\$ 12.09	\$ 14.58	\$ 12.06
Milk receipts, per milking cow	\$ 2,883	\$ 3,449	\$ 2,922
<b>HERD INFORMATION:</b>			
Herd size - total	2,829	2,896	2,852
Percent of dry cows	20.8 %	21.7 %	20.3 %
Herd turnover rate	29.2 %	38.9 %	31.5 %
Composition of herd:			
Purchased cows	43 %	53 %	37 %
Self-raised cows	57 %	47 %	63 %
Cost of purchased cows	\$ 1,521	\$ 1,452	\$ 1,317
Beef price received	\$ 430	\$ 456	\$ 429
<b>FEED INFORMATION:</b>			
Cost of feed as a percent of milk income:			
Grain	33.1 %	27.0 %	31.7 %
Hay and other	13.0 %	10.3 %	11.6 %
Totals	46.1 %	37.3 %	43.3 %

PER CWT. OF MILK			YOUR 2002 RESULTS	
2002	2001	2000	PER HEAD	PER CWT. OF MILK
\$ 12.09 0.41	\$ 14.58 0.29	\$ 12.06 0.33		
\$ 12.50	\$ 14.87	\$ 12.39		
\$ 4.00 1.56	\$ 3.94 1.50	\$ 3.83 1.39		
\$ 5.56	\$ 5.44	\$ 5.22		
\$ 1.38	\$ 1.34	\$ 1.15		
\$ 1.46	\$ 1.48	\$ 1.40		
\$ 0.51 0.21 0.29 0.62 0.39 0.19 0.31 0.25 0.46 0.34	\$ 0.66 0.21 0.26 0.64 0.43 0.21 0.32 0.22 0.60 0.40	\$ 0.55 0.17 0.22 0.50 0.38 0.17 0.33 0.19 0.79 0.39		
\$ 3.57	\$ 3.95	\$ 3.69		
\$ 11.97	\$ 12.21	\$ 11.46		
\$ 0.53	\$ 2.66	\$ 0.93		



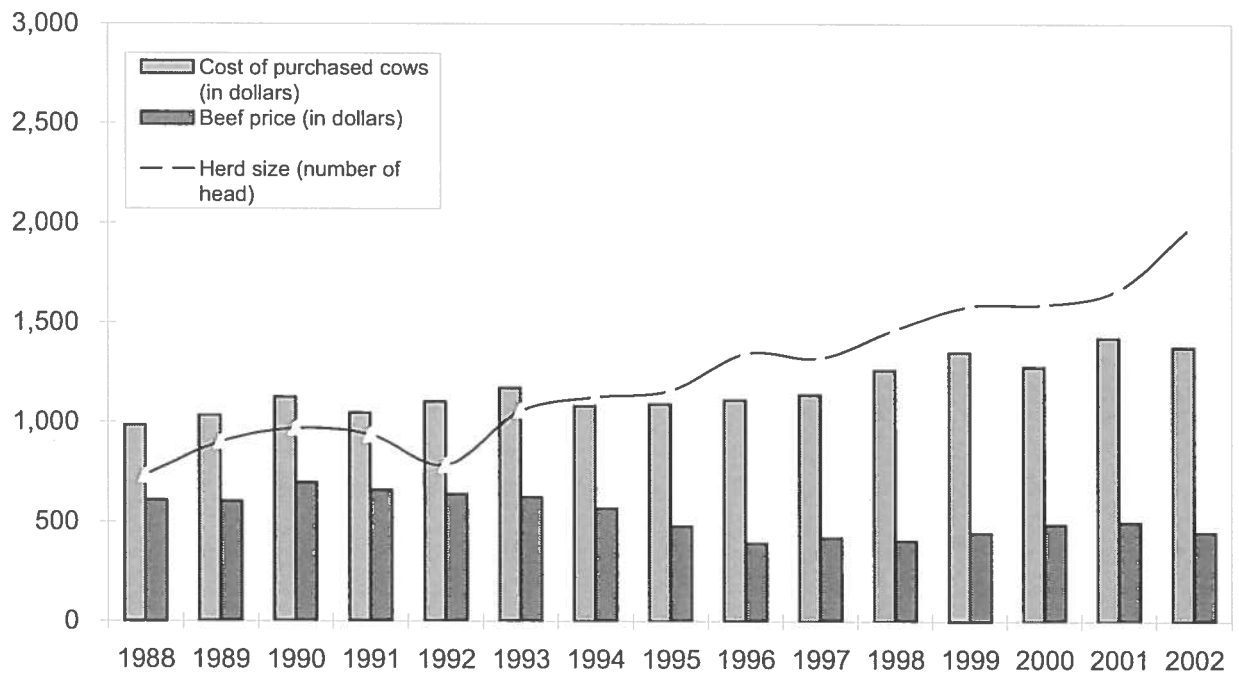
# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
NEW MEXICO  
(BASED ON AVERAGE AMOUNTS)

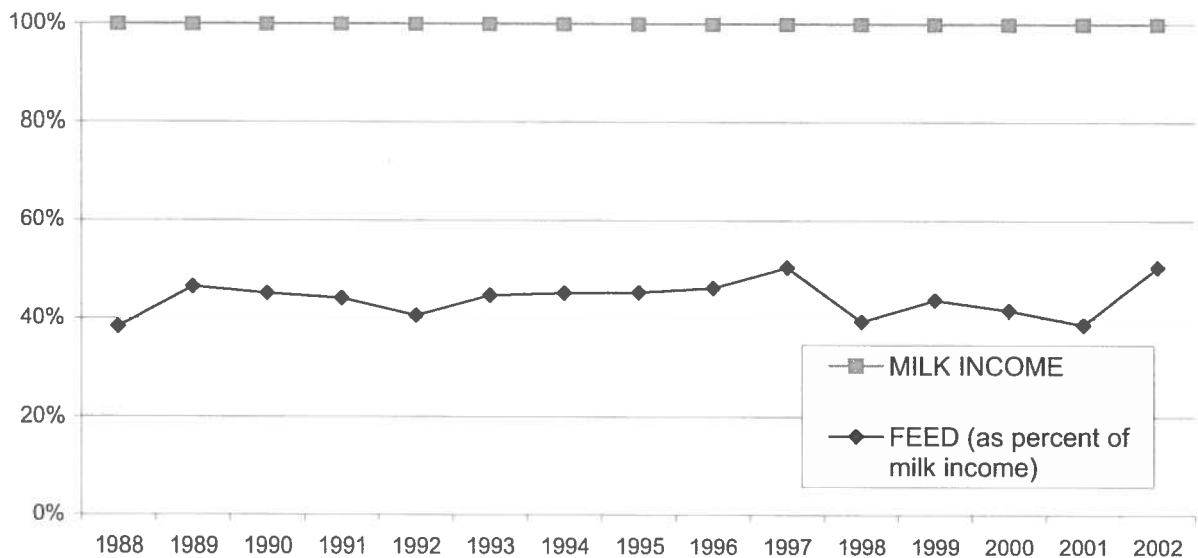
	PER HEAD		
	2002	2001	2000
Income:			
Milk sales	\$ 2,284	\$ 2,701	\$ 2,329
Calves and other	77	55	64
Total income	\$ 2,361	\$ 2,756	\$ 2,393
Cost of operations:			
Feed:			
Grain	\$ 755	\$ 729	\$ 739
Hay and other	296	277	269
Total feed	\$ 1,051	\$ 1,006	\$ 1,008
Labor, (including fringe costs)	\$ 260	\$ 248	\$ 222
Herd replacement costs	\$ 275	\$ 273	\$ 270
Other costs:			
Milk hauling	\$ 96	\$ 123	\$ 107
State and association charges	39	38	33
Veterinary, breeding, testing, etc.	55	49	43
Supplies	117	118	96
Repairs and maintenance	73	80	74
Utilities	36	39	32
Occupancy costs	59	60	65
Depreciation - equipment	46	40	37
Interest	88	111	152
Miscellaneous	63	72	76
Total other costs	\$ 672	\$ 730	\$ 715
Total cost of operations	\$ 2,258	\$ 2,257	\$ 2,215
Net income	\$ 103	\$ 499	\$ 178

See accompanying explanation of income and cost factors.

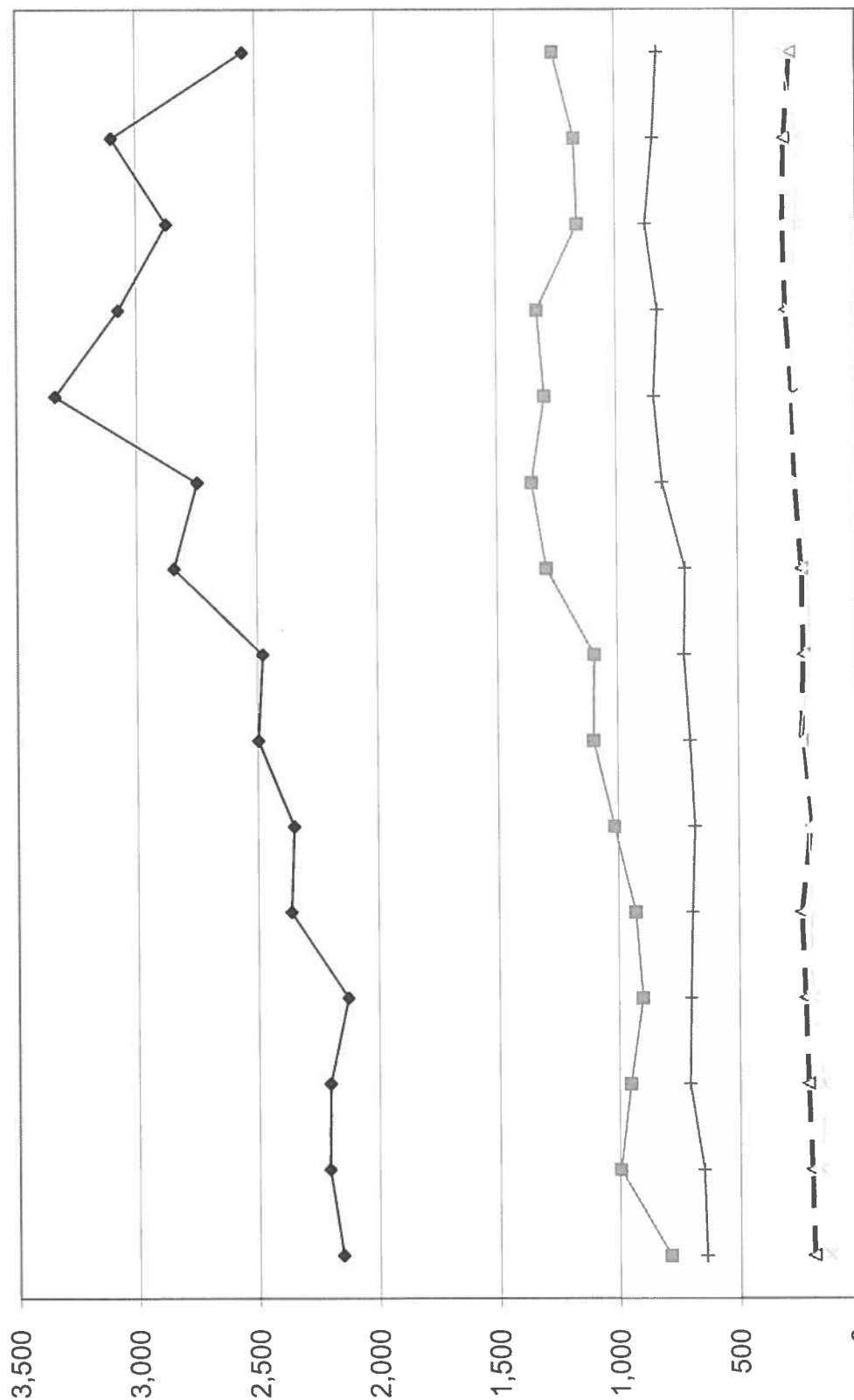
# **LONG TERM TREND - COST OF PURCHASED COWS, BEEF PRICE, AND HERD SIZE** IDAHO



## **FEED COST vs. MILK INCOME** IDAHO

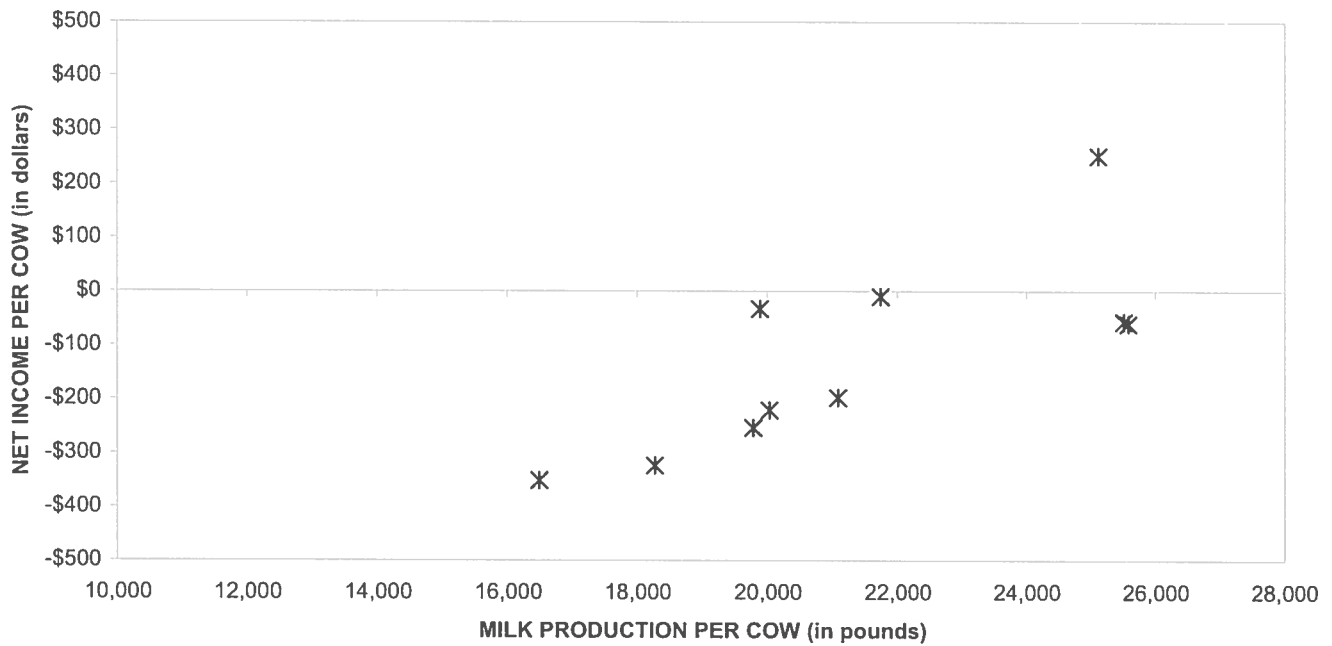


LONG-TERM TREND - ON A "PER HEAD" BASIS  
IDAHO  
INCOME AND OPERATING COSTS  
1988 - 2002



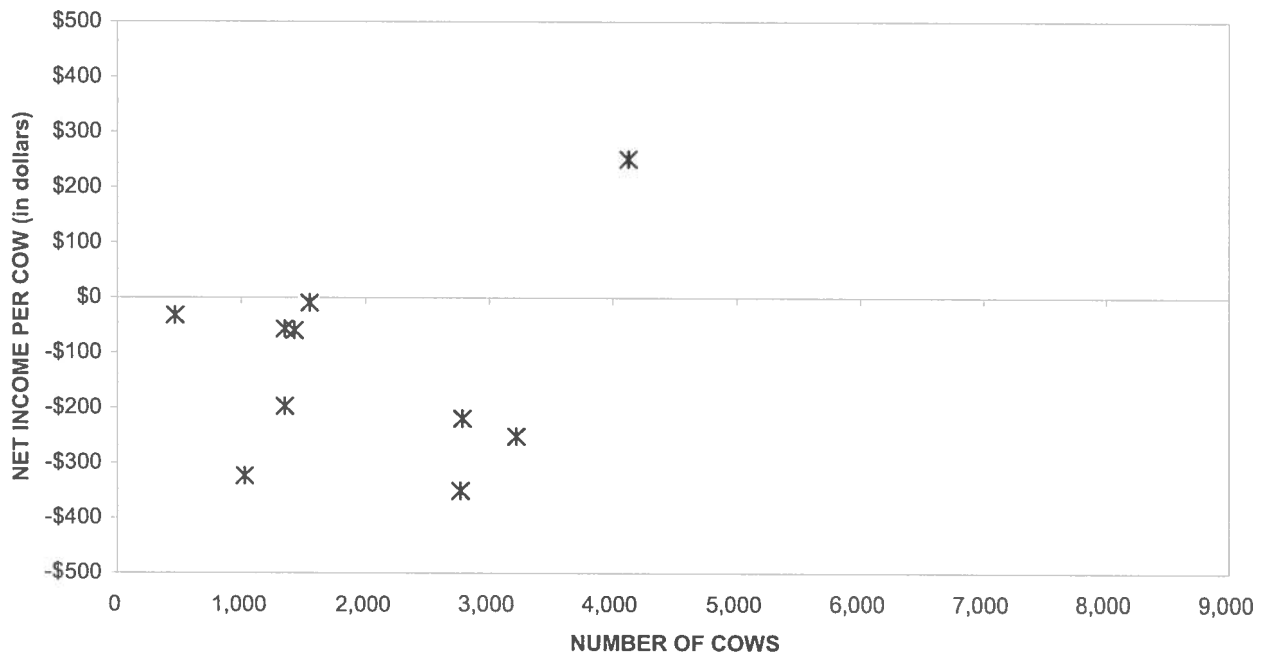
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
TOTAL INCOME	2,153	2,208	2,204	2,129	2,363	2,350	2,497	2,478	2,845	2,747	3,338	3,073	2,871	3,099	2,551
FEED	789	997	954	902	930	1,016	1,102	1,097	1,294	1,354	1,299	1,329	1,159	1,171	1,259
LABOR	192	201	215	225	239	200	237	228	233	259	268	293	303	297	270
HERD REPLACEMENT	124	159	151	197	199	209	242	198	211	245	261	273	250	244	303
INTEREST AND OTHER	639	650	707	701	693	682	700	723	718	811	844	828	876	844	825

## PROFITABILITY BY MILK PRODUCTION PER COW Idaho



Milk production per cow is the actual pounds of milk produced for the year divided by the average total cows in the herd (milking and dry)

## PROFITABILITY BY HERD SIZE Idaho



## SUMMARY OF DAIRY FARM STATISTICAL ANALYSIS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
IDAHO  
(BASED ON AVERAGE AMOUNTS)

2002 2001 2000

### PRODUCTION AND PRICE INFORMATION:

Annual pounds of milk, per cow  
(including dry cows) 21,420 22,104 24,380

Daily pounds of milk, per milking cow 70.9 72.0 72.0

Butterfat test 3.55 % 3.52 % 3.62 %

Blend price per hundredweight \$ 11.62 \$ 13.68 \$ 11.40

Milk receipts, per milking cow \$ 3,007 \$ 3,598 \$ 2,997

### HERD INFORMATION:

Herd size - total 2,002 1,669 1,592

Percent of dry cows 17.2 % 15.9 % 7.3 %

Herd turnover rate 32.5 % 32.5 % 32.5 %

Composition of herd:  
Purchased cows 51 % 60 % 33 %  
Self-raised cows 49 % 40 % 67 %

Cost of purchased cows \$ 1,375 \$ 1,423 \$ 1,277

Beef price received \$ 444 \$ 495 \$ 484

### FEED INFORMATION:

Cost of feed as a percent of milk income:  
Grain 32.1 % 25.0 % 26.5 %  
Hay and other 18.4 % 13.7 % 15.2 %

Totals 50.5 % 38.7 % 41.7 %

PER CWT. OF MILK			YOUR 2002 RESULTS	
2002	2001	2000	PER HEAD	PER CWT. OF MILK
\$ 11.62 0.29	\$ 13.68 0.34	\$ 11.40 0.36		
\$ 11.91	\$ 14.02	\$ 11.76		
\$ 3.74 2.15	\$ 3.41 1.89	\$ 3.02 1.74		
\$ 5.89	\$ 5.30	\$ 4.76		
\$ 1.25	\$ 1.34	\$ 1.25		
\$ 1.41	\$ 1.11	\$ 1.03		
\$ 0.23 0.24 0.37 0.63 0.49 0.22 0.37 0.34 0.49 0.48	\$ 0.23 0.22 0.39 0.64 0.45 0.18 0.34 0.29 0.56 0.52	\$ 0.23 0.23 0.32 0.55 0.39 0.14 0.27 0.31 0.61 0.56		
\$ 3.86	\$ 3.82	\$ 3.61		
\$ 12.41	\$ 11.57	\$ 10.65		
\$ (0.50)	\$ 2.45	\$ 1.11		

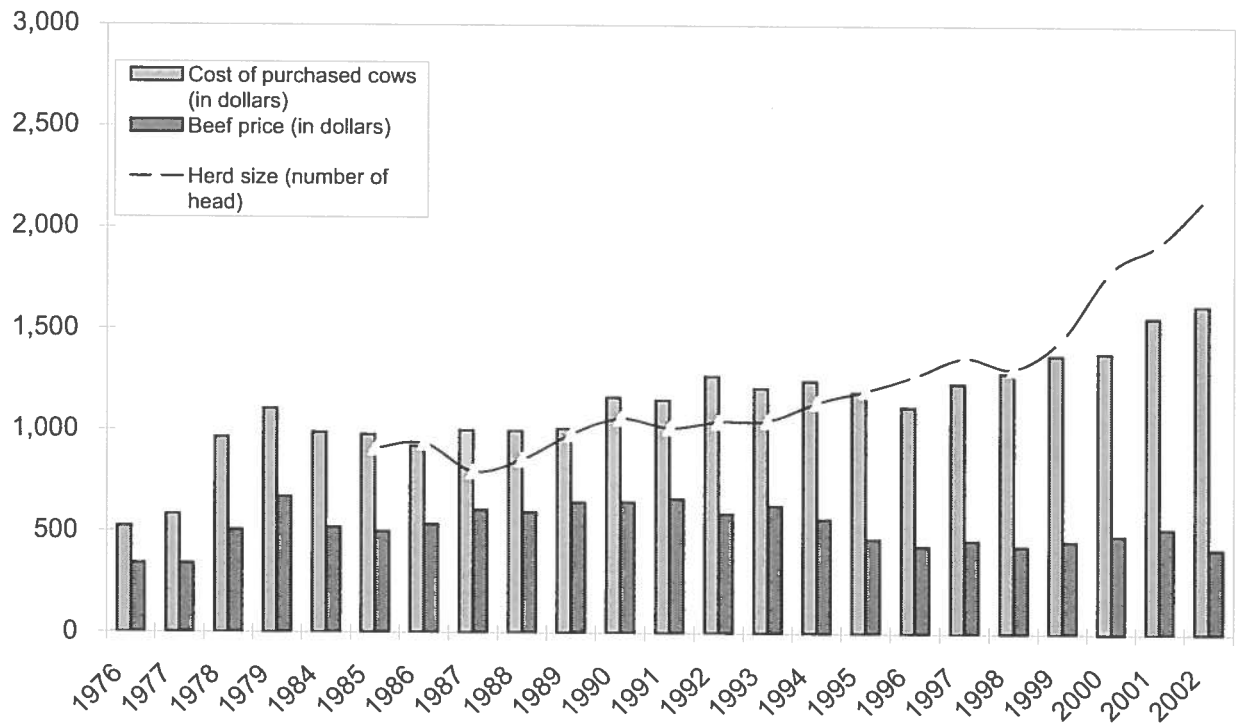
# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
IDAHO  
(BASED ON AVERAGE AMOUNTS)

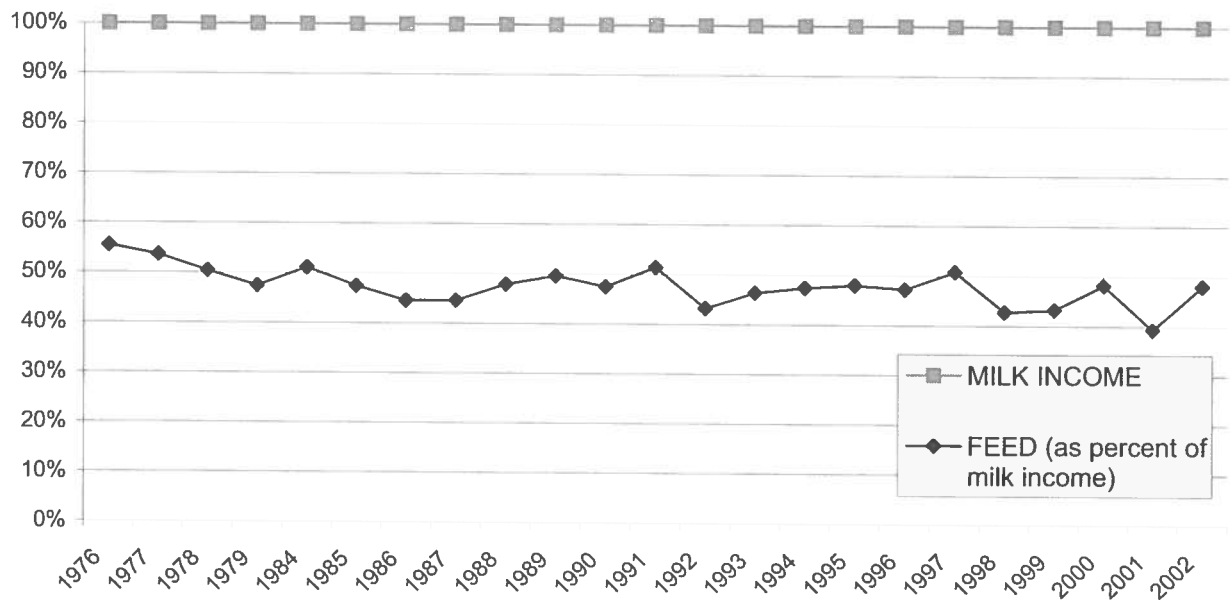
	PER HEAD		
	2002	2001	2000
Income:			
Milk sales	\$ 2,490	\$ 3,024	\$ 2,779
Calves and other	61	75	92
Total income	\$ 2,551	\$ 3,099	\$ 2,871
Cost of operations:			
Feed:			
Grain	\$ 800	\$ 755	\$ 736
Hay and other	459	416	423
Total feed	\$ 1,259	\$ 1,171	\$ 1,159
Labor, (including fringe costs)	\$ 270	\$ 297	\$ 303
Herd replacement costs	\$ 303	\$ 244	\$ 250
Other costs:			
Milk hauling	\$ 49	\$ 50	\$ 55
State and association charges	51	49	57
Veterinary, breeding, testing, etc.	81	86	78
Supplies	134	142	133
Repairs and maintenance	105	99	94
Utilities	47	40	34
Occupancy costs	78	76	66
Depreciation - equipment	72	65	74
Interest	105	123	148
Miscellaneous	103	114	137
Total other costs	\$ 825	\$ 844	\$ 876
Total cost of operations	\$ 2,657	\$ 2,556	\$ 2,588
Net income (loss)	\$ (106)	\$ 543	\$ 283

See accompanying explanations of income and cost factors.

# **LONG TERM TREND - COST OF PURCHASED COWS, BEEF PRICE, AND HERD SIZE** ARIZONA

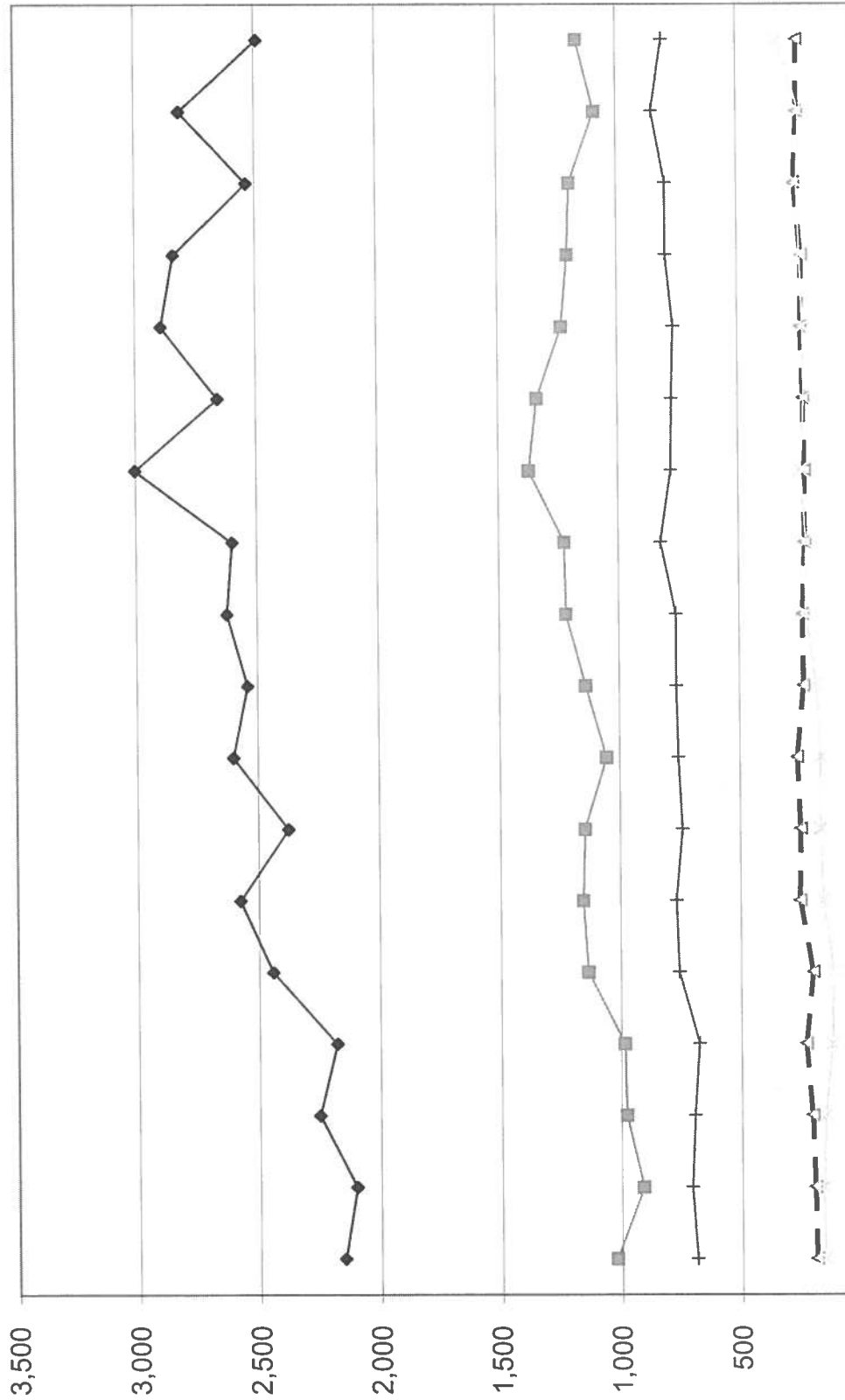


## **FEED COST vs. MILK INCOME** ARIZONA



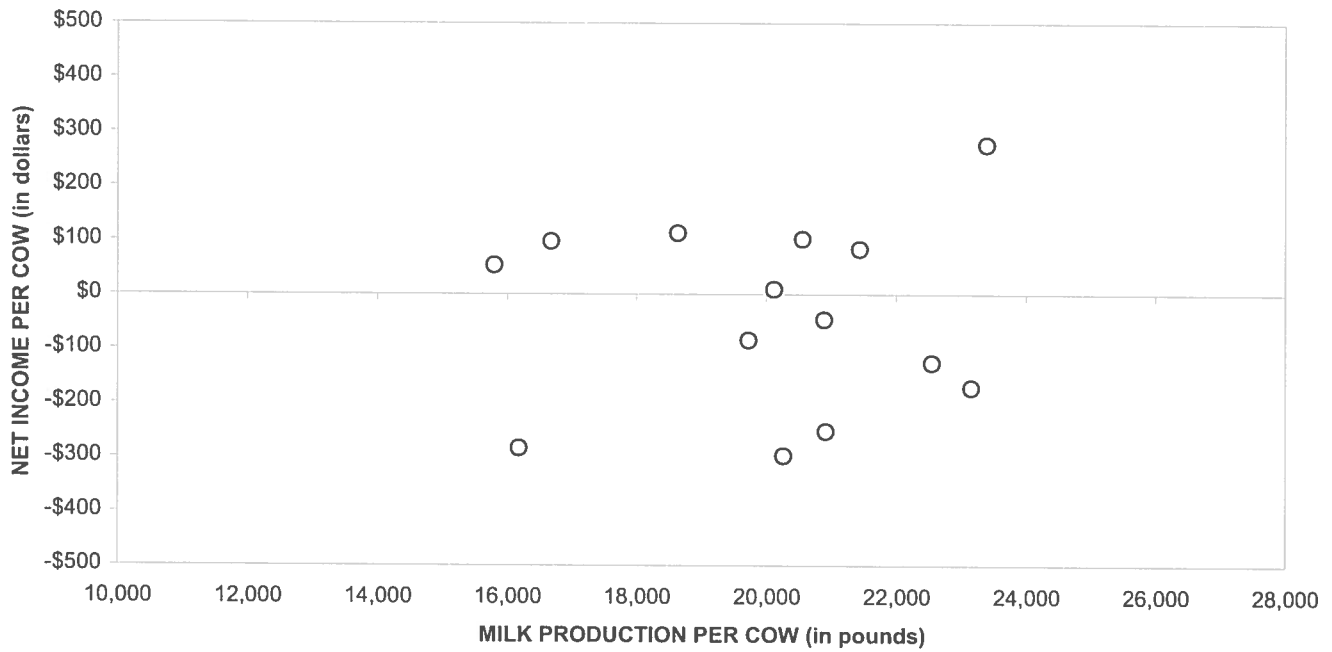


LONG-TERM TREND - ON A "PER HEAD" BASIS  
ARIZONA  
INCOME AND OPERATING COSTS  
1985 - 2002



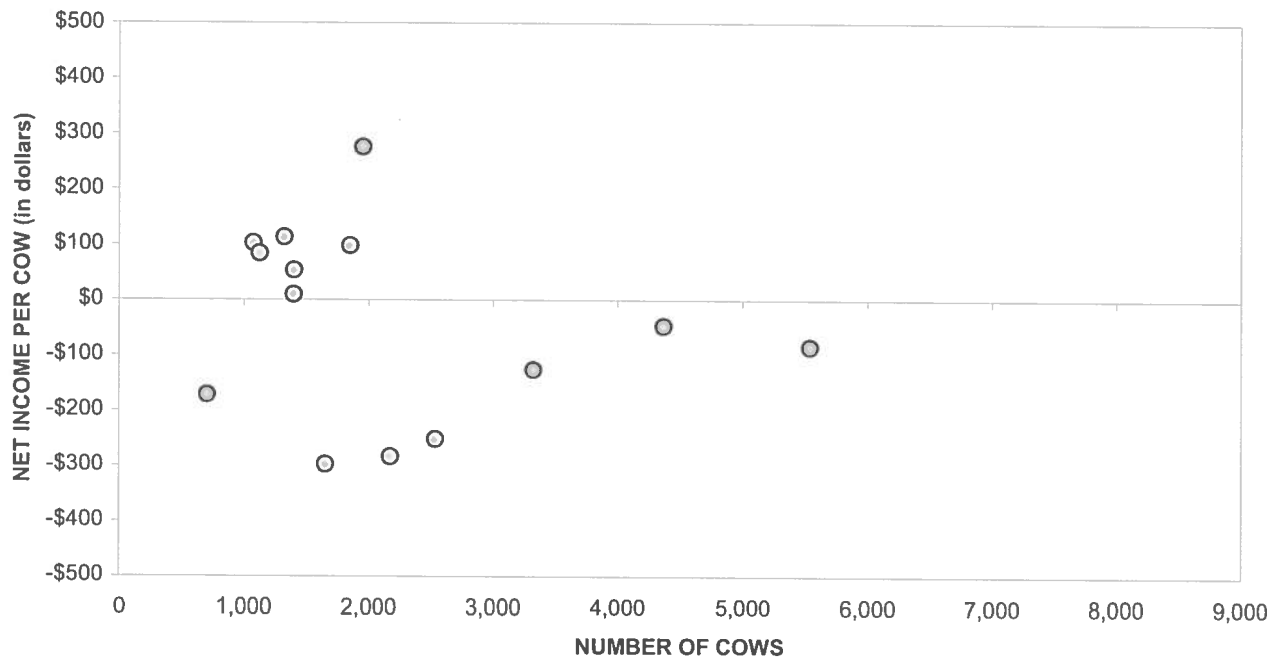
	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
◆ TOTAL INCOME	2,150	2,101	2,253	2,180	2,443	2,577	2,376	2,602	2,542	2,626	2,602	3,003	2,660	2,892	2,840	2,536	2,813	2,491
■ FEED	1,021	912	979	986	1,135	1,155	1,146	1,055	1,140	1,221	1,226	1,373	1,337	1,234	1,208	1,197	1,091	1,165
▲ LABOR	191	197	206	231	201	253	249	262	233	236	225	224	229	237	232	263	249	247
HERD REPLACEMENT	158	161	152	122	116	158	167	167	181	223	219	240	225	228	239	249	238	330
+ INTEREST AND OTHER	687	708	696	676	758	768	741	756	763	763	825	781	776	768	798	798	853	809

## PROFITABILITY BY MILK PRODUCTION PER COW Arizona



Milk production per cow is the actual pounds of milk produced for the year divided by the average total cows in the herd (milking and dry)

## PROFITABILITY BY HERD SIZE Arizona



## SUMMARY OF DAIRY FARM STATISTICAL ANALYSIS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
ARIZONA  
(BASED ON AVERAGE AMOUNTS)

	2002	2001	2000
<b>PRODUCTION AND PRICE INFORMATION:</b>			
Annual pounds of milk, per cow (including dry cows)	20,081	18,993	20,565
Daily pounds of milk, per milking cow	68.5	64.2	67.4
Butterfat test	3.58 %	3.55 %	3.61 %
Blend price per hundredweight	\$ 12.04	\$ 14.61	\$ 12.07
Milk receipts, per milking cow	\$ 3,011	\$ 3,427	\$ 2,969
<b>HERD INFORMATION:</b>			
Herd size - total	2,171	1,928	1,798
Percent of dry cows	19.6 %	19.0 %	16.4 %
Herd turnover rate	34.9 %	29.5 %	34.6 %
Composition of herd:			
Purchased cows	72 %	75 %	50 %
Self-raised cows	28 %	25 %	50 %
Cost of purchased cows	\$ 1,618	\$ 1,558	\$ 1,384
Beef price received	\$ 417	\$ 517	\$ 485
<b>FEED INFORMATION:</b>			
Cost of feed as a percent of milk income:			
Grain	31.3 %	24.4 %	32.9 %
Hay and other	16.8 %	15.0 %	15.4 %
Totals	48.1 %	39.4 %	48.3 %

PER CWT. OF MILK			YOUR 2002 RESULTS	
2002	2001	2000	PER HEAD	PER CWT. OF MILK
\$ 12.04 0.36	\$ 14.61 0.20	\$ 12.07 0.26		
\$ 12.40	\$ 14.81	\$ 12.33		
\$ 3.77 2.03	\$ 3.56 2.19	\$ 3.97 1.85		
\$ 5.80	\$ 5.75	\$ 5.82		
\$ 1.24	\$ 1.32	\$ 1.28		
\$ 1.64	\$ 1.25	\$ 1.21		
\$ 0.49 0.23 0.21 0.53 0.37 0.25 0.57 0.19 0.62 0.56	\$ 0.48 0.19 0.24 0.52 0.41 0.27 0.64 0.20 0.84 0.70	\$ 0.35 0.19 0.21 0.47 0.43 0.26 0.39 0.18 0.86 0.56		
\$ 4.02	\$ 4.49	\$ 3.90		
\$ 12.70	\$ 12.81	\$ 12.21		
\$ (0.30)	\$ 2.00	\$ 0.12		

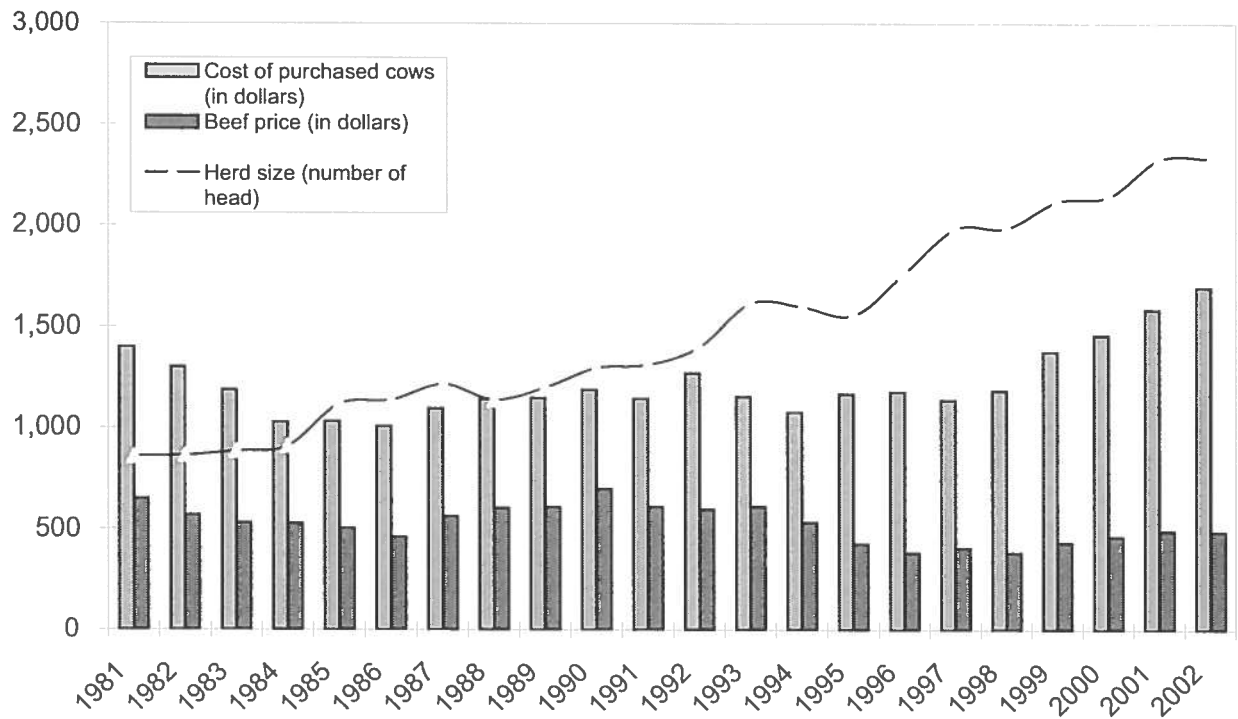
# CONDENSED STATEMENT OF DAIRY FARM INCOME AND COSTS

FOR THE YEARS ENDED  
DECEMBER 31, 2002, 2001, AND 2000  
ARIZONA  
(BASED ON AVERAGE AMOUNTS)

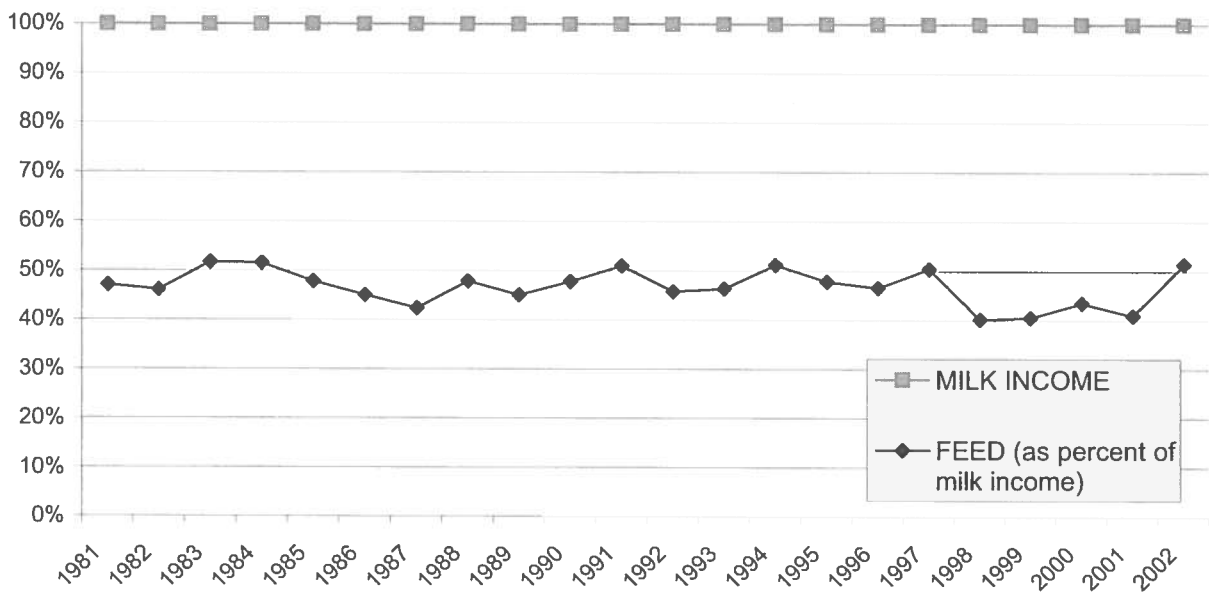
	PER HEAD		
	2002	2001	2000
Income:			
Milk sales	\$ 2,420	\$ 2,776	\$ 2,482
Calves and other	71	37	54
Total income	\$ 2,491	\$ 2,813	\$ 2,536
Cost of operations:			
Feed:			
Grain	\$ 757	\$ 676	\$ 816
Hay and other	408	415	381
Total feed	\$ 1,165	\$ 1,091	\$ 1,197
Labor, (including fringe costs)	\$ 247	\$ 249	\$ 263
Herd replacement costs	\$ 330	\$ 238	\$ 249
Other costs:			
Milk hauling	\$ 98	\$ 91	\$ 72
State and association charges	47	37	40
Veterinary, breeding, testing, etc.	42	45	43
Supplies	107	99	96
Repairs and maintenance	74	77	88
Utilities	51	52	53
Occupancy costs	116	122	79
Depreciation - equipment	38	37	36
Interest	125	159	176
Miscellaneous	111	134	115
Total other costs	\$ 809	\$ 853	\$ 798
Total cost of operations	\$ 2,551	\$ 2,431	\$ 2,507
Net income (loss)	\$ (60)	\$ 382	\$ 29

See accompanying explanation of income and cost factors.

# **LONG TERM TREND - COST OF PURCHASED COWS, BEEF PRICE, AND HERD SIZE SAN JOAQUIN VALLEY**



## **FEED COST vs. MILK INCOME SAN JOAQUIN VALLEY**





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