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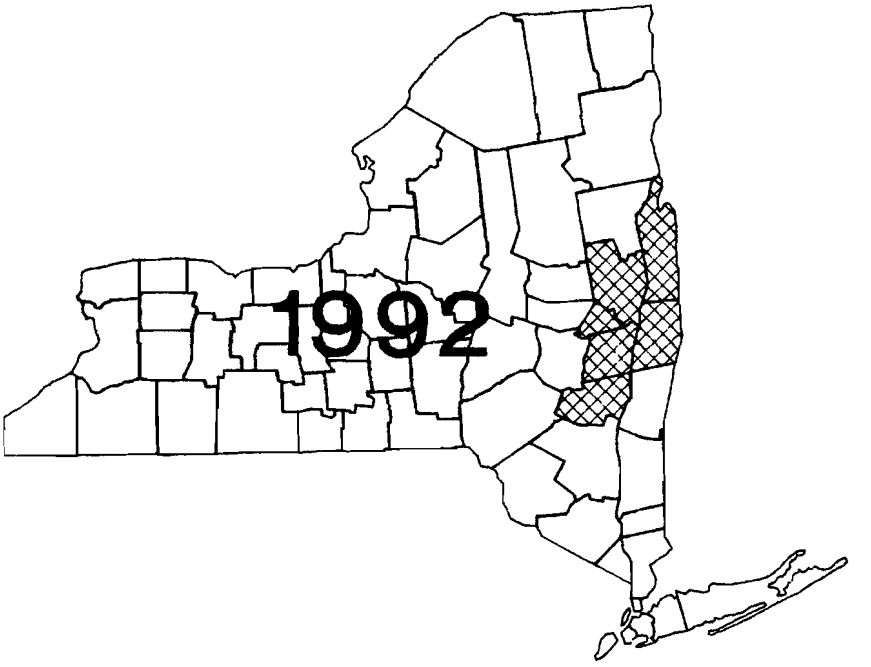
DAIRY FARM BUSINESS SUMMARY

NORTHERN HUDSON REGION



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1992 DAIRY FARM BUSINESS SUMMARY

NORTHERN HUDSON REGION

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1992 DAIRY FARM BUSINESS SUMMARY
NORTHERN HUDSON REGION*

INTRODUCTION

Dairy farmers throughout New York State have been participating in Cornell Cooperative Extension's farm business summary and analysis program since the early 1950's. Managers of each participating farm business receive a comprehensive summary and analysis of the farm business. The information in this report represents an average of the data submitted from dairy farms in the Northern Hudson Region for 1992.

Program Objective

The primary objective of the dairy farm business summary, DFBS, is to help farm managers improve the business and financial management of their business through appropriate use of historical farm data and the application of modern farm business analysis techniques. In short, DFBS identifies business and financial information farmers need and demonstrates how it should be used in identifying and evaluating strengths and weaknesses of the farm business.

Format Features

This regional report follows the same general format as in the 1992 DFBS printout received by all participating dairy farmers. The analysis tables have an open column or section labeled My Farm. It may be used by any dairy farm manager who wants to compare his or her business with the average data of this region. A DFBS Data Check-in Form can be used by non-DFBS participants to summarize their businesses.

This report features:

(1) an income statement including accrual adjustments for farm business expenses and receipts, as well as measures of profitability with and without appreciation,
(2) a complete balance sheet with analytical ratios;
(3) a cash flow summary including debt repayment ability;
(4) an analysis of crop acreage, yields, and expenses;
(5) an analysis of dairy livestock numbers, production, and expenses; and
(6) a capital and labor efficiency analysis.

Micro DFBS, a computer program which enables Cooperative Extension agents and specialists to calculate and print individual farm business reports in their offices, is now being used by the dairy farm management field staff for nearly 100 percent of the farms cooperating. This innovative approach provides faster processing of farm record data and increased use of the DFBS in farm management programs.

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*The Northern Hudson Region of New York State, with the number of participating farms in parentheses, is comprised of Albany (4), Saratoga (6), Schenectady (2), Rensselaer (18), and Washington (20) Counties. This report was written by Stuart F. Smith, Senior Extension Associate, Farm Management. Linda Putnam was in charge of data preparation. Maria Cilveti-Reynolds and Beverly Carcelli prepared the publication. Farm business data were collected by Cooperative Extension agents Cathy Wickswat and John Thurgood.

SUMMARY AND ANALYSIS OF THE FARM BUSINESS

Business Characteristics

Planning optimal management strategies is a crucial component of operating a successful farm. Various combinations of farm resources, enterprises, business arrangements, and management techniques are used by the dairy farmers in this region. The following table shows important farm business characteristics and the number of farms with each characteristic.

BUSINESS CHARACTERISTICS
50 Northern Hudson Region Dairy Farms, 1992

Type of Farm	Number
Dairy	50
Part-time dairy	0
Dairy cash-crop	0
Part-time cash-crop dairy	0

Type of Ownership	Number
Owner	45
Renter	5

Type of Business	Number
Single proprietorship	29
Partnership	18
Corporation	3

Business Record System	Number
ELFAC II	2
Account Book	11
Agrifax (mail-in only)	13
On-Farm Computer	13
Other	11

Type of Barn	Number
Stanchion/Tie-Stall	17
Freestall	27
Combination	6

Milking System	Number
Bucket & carry	0
Dumping station	0
Pipeline	23
Herringbone parlor	25
Other parlor	2

Milking Frequency	Number
2x/day	40
3x/day	8
Other	2

Production Records	Number
DHIC	41
Owner-Sampler	4
Other	1
None	4

The averages used in this report were compiled using data from all the participating dairy farms in this region unless noted otherwise. There are full-time dairy farms, part-time farms, dairy cash-crop farms, farm renters, partnerships, and corporations included in the average. Average data for these specific types of farms are presented in the State Business Summary.

Income Statement

In order for an income statement to accurately measure farm income, it must include cash transactions and accrual adjustments (changes in accounts payable, accounts receivable, inventories, and prepaid expenses).

Cash paid is the actual cash outlay during the year and does not necessarily represent the cost of goods and services actually used in 1992.

Change in inventory: Increases in inventories of supplies and other purchased inputs are subtracted in computing accrual expenses because they represent an increase in purchased inputs not actually used during the year. Decreases in purchased inventories are added to expenses because they represent inputs purchased in a prior year and used this year.

CASH AND ACCRUAL FARM EXPENSES
50 Northern Hudson Region Dairy Farms, 1992

Expense Item	Cash Paid +	Change in Inventory or Prepaid Expense* +	Change in Accounts Payable =	Accrual Expenses
Hired Labor	$29,789	$0 <<	$51	$29,840
Feed				
Dairy grain & conc.	76,029	-229	1,220	77,020
Dairy roughage	1,122	62	126	1,310
Nondairy	40	0	0	40
Machinery				
Mach. hire, rent/lease	4,994	0 <<	4	4,998
Machinery repairs/parts	15,961	-88	-283	15,590
Auto exp. (farm share)	868	0 <<	0	868
Fuel, oil & grease	8,756	136	-16	8,876
Livestock				
Replacement livestock	6,738	0 <<	23	6,761
Breeding	4,576	-79	-26	4,471
Vet & medicine	8,071	13	55	8,139
Milk marketing	23,030	0 <<	42	23,072
Cattle lease/rent	588	0 <<	0	588
Other livestock expense	14,949	-1	107	15,055
Crops				
Fertilizer & lime	9,407	127	754	10,288
Seeds & plants	5,017	-116	-35	4,866
Spray, other crop exp.	4,186	-11	86	4,261
Real Estate				
Land/bldg./fence repair	4,871	69	-193	4,747
Taxes	7,374	0 <<	82	7,456
Rent & lease	6,132	0 <<	108	6,240
Other				
Insurance	4,392	-72 <<	0	4,320
Telephone (farm share)	1,021	0 <<	4	1,025
Electricity (farm share)	7,590	0 <<	102	7,692
Interest paid	17,223	0 <<	1,249	18,472
Miscellaneous	3,694	0	-10	3,684
Total Operating	$266,418	$-189	$3,450	$269,679
Expansion livestock	5,317	0 <<	77	5,395
Machinery depreciation				14,268
Building depreciation				8,143
TOTAL ACCRUAL EXPENSES				$297,485

Change in prepaid expenses (noted above by <<) is a net change in non-inventory expenses that have been paid in advance of their use, for example, 1993 rent paid in 1992. If 1992 funds used to prepay 1993 rent exceeded the amount of 1992 rent prepaid in 1991, the amount of this excess is entered as a negative number to exclude it from 1992 accrual rental expenses. The excess prepaid rent should be charged against the future year's business operation. A decrease in prepaid rent is added to accrual expenses because it represents use of resources during this year that were paid for in past years.

Change in accounts payable: An increase in accounts payable from beginning to end of year is added and a decrease is subtracted when calculating accrual expenses.

Accrual expenses are the costs of inputs actually used in this year's production. They are the total of cash paid, as well as changes in inventory, prepaid expenses, and accounts payable.

CASH AND ACCRUAL FARM RECEIPTS
50 Northern Hudson Region Dairy Farms, 1992

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Receipts
Milk sales	$283,048				$-528		$282,520
Dairy cattle	16,983		$8,350		3		25,336
Dairy calves	4,453				3		4,456
Other livestock	42		-63		0		-21
Crops	3,705		10,333		-2		14,036
Government receipts	3,240		0*		360		3,600
Custom machine work	864				0		864
Gas tax refund	155				0		155
Other	4,849				108		4,957
Less nonfarm noncash cap.**		(-)	0			(-)	0
Total Receipts	$317,339		$18,620		$-56		$335,903

*Change in advanced government receipts.
**Gifts or inheritances of cattle or crops included in inventory.

Cash receipts include the gross value of milk checks received during the year plus all other payments received from the sale of farm products, services, and government programs. Nonfarm income is not included in calculating farm profitability.

Changes in inventory of assets produced by the business are calculated by subtracting beginning of year values from end of year values excluding appreciation. Increases in livestock inventory caused by herd growth and/or quality are added, and decreases caused by herd reduction and/or quality are subtracted. Changes in inventories of crops grown are also included. An annual increase in advanced government receipts is subtracted from cash income because it represents income received in 1992 for the 1993 crop year in excess of funds earned for 1992. Likewise, a decrease is added to cash government receipts because it represents funds earned for 1992 but received in 1991.

Changes in accounts receivable are calculated by subtracting beginning year balances from end year balances. The January milk check for this December's marketings compared with the previous January's check is included as a change in accounts receivable.

Accrual receipts represent the value of all farm commodities produced and services actually generated by the farm business during the year.

Profitability Analysis

Farm operators contribute labor, management, and equity capital to their businesses and the combination of these resources selected determines profitability. Operators are the individuals who are integrally involved in the operation and management of the farm business. They are not limited to those who are the owner of a sole proprietorship or are formally a member of the partnership or corporation. Farm profitability can be measured as the return to all family resources or as the return to one or more individual resources such as labor and management.

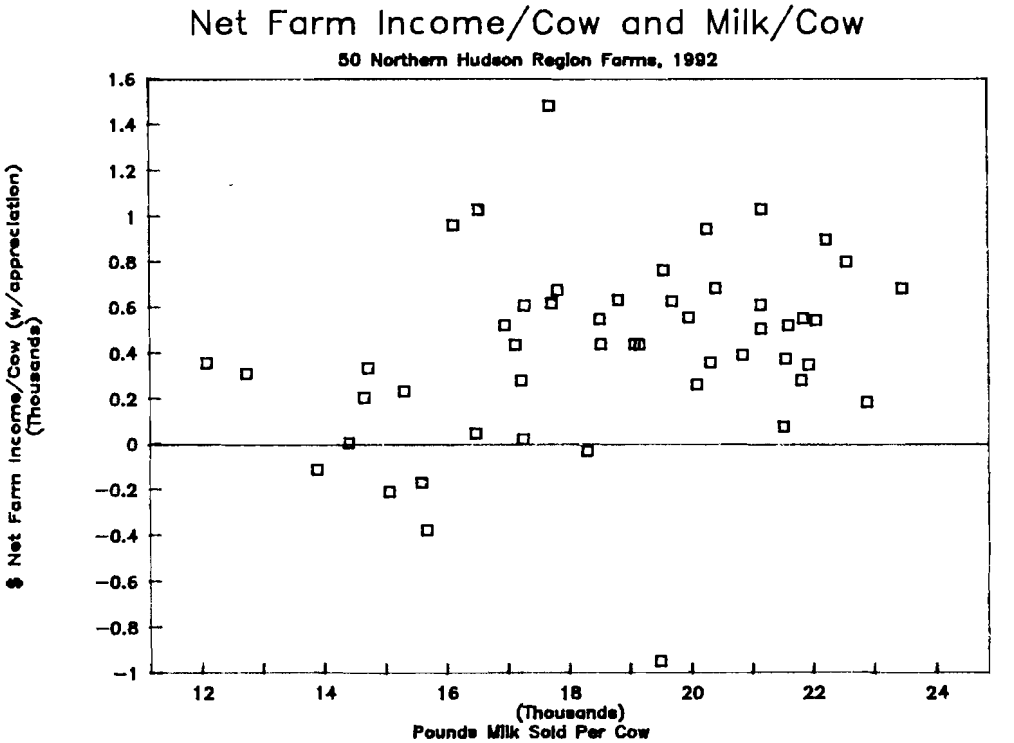
Net farm income is the return to the farm operators and other unpaid family members for their labor, management, and equity capital. It is the farm family's net annual return from working, managing, financing, and owning the farm business. This is not a measure of cash available from the year's business operation. Cash flow is evaluated later in this report.

Net farm income is computed both with and without appreciation. Appreciation represents the change in values caused by annual changes in prices of livestock, machinery, real estate inventory, and stocks and certificates (other than Farm Credit). Appreciation is a major factor contributing to changes in farm net worth and must be included for a complete profitability analysis.

NET FARM INCOME
50 Northern Hudson Region Dairy Farms, 1992

Item	Average	My Farm
Total accrual receipts	$335,903	$_____
Appreciation: Livestock	1,551	_____
Machinery	1,345	_____
Real Estate	5,157	_____
Other Stock/Certificates	-212	_____
Total Including Appreciation	$343,744	$_____
Total accrual expenses	- 297,485	-_____
Net Farm Income (with appreciation)	$46,259	$_____
Net Farm Income (without appreciation)	$38,418	$_____

The chart below shows the relationship between net farm income per cow (with appreciation) and pounds of milk sold per cow. Generally, farms with a higher production per cow have higher profitability per cow.



Return to operators' labor, management, and equity capital measures the total net farm income for the farm operator(s). It is calculated by deducting a charge for unpaid family labor from net farm income. Operators' labor is not included in unpaid family labor. Return to operators' labor, management, and equity capital has been calculated both with and without appreciation. Appreciation is an important part of the return to ownership of farm assets.

RETURN TO OPERATORS' LABOR, MANAGEMENT, AND EQUITY
50 Northern Hudson Region Dairy Farms, 1992

Item	Average		My Farm	
	With Apprec.	Without Apprec.	With Apprec.	Without Apprec.
Net farm income	$ 46,259	$38,418	$	$
Family labor unpaid @ $1,350 per month	- 3,780	- 3,780	-	-
Return to operators' labor, management, & equity	$ 42,479	$ 34,638		$

Labor and management income is the return which farm operators receive for their labor and management used in operating the farm business. Appreciation is not included as part of the return to labor and management because it results from ownership of assets rather than management of the farm business. Labor and management income is calculated by deducting the opportunity cost of using equity capital, at a real interest rate of five percent, from the return to operators' labor, management, and equity capital excluding appreciation. The interest charge of five percent reflects the long-term average rate of return above inflation that a farmer might expect to earn in comparable risk investments.

LABOR AND MANAGEMENT INCOME
50 Northern Hudson Region Dairy Farms, 1992

Item	Average	My Farm
Return to operators' labor, management, & equity without appreciation	$ 34,638	$
Real interest @ 5% on $545,403 average equity capital	- 27,270	-
Labor & Management Income	$ 7,368	$
Labor & Management Income per 1.47 Operator	$ 5,012	$

Return on equity capital measures the net return remaining for the farmer's equity or owned capital after a charge has been made for the operator's labor and management. The earnings or amount of net farm income allocated to labor and management is the opportunity cost of operators' labor and management estimated by the cooperators. Return on equity capital is calculated with and without appreciation. The rate of return on equity capital is determined by dividing the amount returned by the average farm net worth or equity capital. Return on total capital is calculated by adding interest paid to the return on equity capital and then dividing by average farm assets to calculate the rate of return on total capital.

RETURN ON EQUITY CAPITAL AND RETURN ON TOTAL CAPITAL
50 Northern Hudson Region Dairy Farms, 1992

Item	Average	My Farm
Return to operators' labor, management, & equity capital with appreciation	$ 42,479	$
Value of operators' labor & management	- 32,275	-
Return on equity capital with appreciation	$ 10,204	$
Interest paid	$ 18,472	$
Return on total capital with appreciation	$ 28,676	$
Return on equity capital without appreciation	$ 2,363	$
Return on total capital without appreciation	$ 20,835	$
Rate of return on average equity capital:		
with appreciation	1.87%	%
without appreciation	0.43%	%
Rate of return on average total capital:		
with appreciation	3.49%	%
without appreciation	2.53%	%

Farm and Family Financial Status

The first step in evaluating the financial position of the farm is to construct a balance sheet which identifies all the assets and liabilities of the business. The second step is to evaluate the relationship between assets, liabilities, and net worth and changes that occurred during the year.

Financial lease obligations are included in the balance sheet. The present value of all future payments is listed as a liability since the farmer is committed to make the payments by signing the lease. The present value is also listed as an asset, representing the future value the item has to the business. For 1992, leases were discounted by 8.5 percent.

Advanced government receipts are included as current liabilities. Government payments received in 1992 that are for participation in the 1993 program are the end year balance and payments received in 1991 for participation in the 1992 program are the beginning year balance.

1992 FARM BUSINESS & NONFARM BALANCE SHEET

50 Northern Hudson Region Dairy Farms, 1992

Farm Assets	Jan. 1	Dec. 31	Farm Liabilities & Net Worth	Jan. 1	Dec. 31
Current			Current		
Farm cash, checking & savings	$3,908	$3,475	Accounts payable	$13,498	$17,025
Accounts rec.	23,222	23,167	Operating debt	6,751	7,009
Prepaid exp.	0	72	Short-term	1,187	1,105
Feed & supplies	56,913	67,363	Advanced govt. rec.	0	0
Total	$84,043	$94,077	Total	$21,436	$25,139
Intermediate			Intermediate		
Dairy cows:			Structured debt		
owned	$112,991	$120,702	1-10 years	$119,770	$126,171
leased	0	0	Financial lease		
Heifers	47,616	49,806	(cattle/mach.)	4,047	2,752
Bulls/other lvstk.	1,165	1,102	Farm Credit stock	7,263	7,923
Mach./eq. owned	130,973	136,205			
Mach./eq. leased	4,047	2,752	Total	$131,080	$136,846
Farm Credit stock	7,263	7,923			
Other stock/cert.	13,174	13,523			
Total	$317,229	$332,013			
			Long Term		
Long-Term			Structured debt		
Land/buildings:			>10 yrs	$116,198	$122,531
owned	$404,596	$412,077	Financial lease		
leased	134	91	(structures)	134	91
Total	$404,730	$412,168	Total	$116,332	$122,622
Total Farm Assets	$806,002	$838,258	Total Farm Liab.	$268,848	$284,607
			FARM NET WORTH	$537,154	$553,651

Nonfarm Assets, Liabilities & Net Worth (Average of 22 farms reporting)

Assets	Jan. 1	Dec. 31	Liabilities & Net Worth	Jan. 1	Dec. 31
Personal cash, chkg. & savings	$9,217	$6,870	Nonfarm Liab.	$5,950	$5,055
Cash value life ins.	8,417	9,637			
Nonfarm real estate	22,568	22,568			
Auto (personal sh.)	2,845	2,409			
Stocks & bonds	6,407	11,022			
Household furn.	12,381	11,909			
All other	10,086	9,860			
Total Nonfarm	$71,922	$74,275	NONFARM NET WORTH	$65,972	$69,220

Farm & Nonfarm Assets, Liabilities, & Net Worth*	Jan. 1	Dec. 31
Total Assets	$877,924	$912,533
Total Liabilities	274,798	289,662
TOTAL FARM & NONFARM NET WORTH	$603,126	$622,871

*Assumes that average nonfarm assets and liabilities for the nonreporting farms were the same as for those reporting.

Balance sheet analysis involves examination of relative asset and debt levels for the business. Percent equity is calculated by dividing end of year net worth by end of year assets and multiplying by 100. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect business solvency and the potential capacity to borrow. Debt levels per productive unit represent old standards that are still useful if used with measures of cash flow and repayment ability.

BALANCE SHEET ANALYSIS
50 Northern Hudson Region Dairy Farms, 1992

Item	Average	My Farm
Financial Ratios - Farm:		
Percent equity	66%	_____%
Debt/asset ratio: total	.34	_____
long-term	.30	_____
intermediate/current	.38	_____
Farm Debt Analysis:		
Accounts payable as % of total debt	6%	_____%
Long-term liabilities as a % of total debt	43%	_____%
Current & inter. liab. as a % of total debt	57%	_____%

Farm Debt Levels:	Per Cow	Per Tillable Acre Owned	Per Cow	Per Tillable Acre Owned
Total farm debt	$2,564	$1,813	$_____	$_____
Long-term debt	1,105	781	_____	_____
Intermediate & current debt	1,459	1,032	_____	_____

Farm inventory balance is an accounting of the value of assets used on the balance sheet and the changes that occur from the beginning to end of year. Changes in the livestock inventory are included in the dairy analysis. Net investment indicates whether the capital stock is being expanded (positive) or depleted (negative).

FARM INVENTORY BALANCE
50 Northern Hudson Region Dairy Farms, 1992

Item	Average of Region's Farms			
	Real Estate		Machinery & Equipment	
Value beg. of year		$404,596		$130,973
Purchases	$17,070*		$18,713	
Gift/inheritance	+ 0		+ 0	
Lost capital	- 5,510		- --	
Net sales	- 1,093		- 558	
Depreciation	- 8,143		- 14,268	
Net investment		= 2,324		= 3,887
Appreciation		+ 5,157		+ 1,345
Value end of year		$412,077		$136,205

*$760 land and $16,310 buildings and/or depreciable improvements.

The Statement of Owner Equity has two purposes. It allows (1) verification that the accrual income statement and market value balance sheet are interrelated and consistent (in accountants' terms, they reconcile) and (2) identification of the causes of change in equity that occurred on the farm during the year. The Statement of Owner Equity allows you to determine to what degree the change in equity was caused by (1) earnings from the business, and nonfarm income, in excess of withdrawals being retained in the business (called retained earnings), (2) outside capital being invested in the business or farm capital being removed from the business (called contributed/withdrawn capital) and (3) increases or decreases in the value (price) of assets owned by the business (called change in valuation equity).

The change in farm net worth without appreciation is an excellent indicator of farm generated financial progress.

STATEMENT OF OWNER EQUITY (RECONCILIATION)
50 Northern Hudson Region Dairy Farms, 1992

Item	Average		My Farm	
Beginning of year farm net worth		$537,154		$_____
Net farm income w/o apprec.	$ 38,418		$_____	
+Nonfarm cash income	+ 4,973		+_____	
-Personal withdrawals & family expenditures excluding non-farm borrowings	- 32,696		-_____	
RETAINED EARNINGS		+$ 10,695		+$_____
Nonfarm noncash transfers to farm	$ 0		$_____	
+Cash used in business from nonfarm capital	+ 3,528		+_____	
-Note/mortgage from farm real estate sold (nonfarm)	- 0		-_____	
CONTRIBUTED/WITHDRAWN CAPITAL		+$ 3,528		+$_____
Appreciation	$ 7,841		$_____	
-Lost capital	- 5,510		-_____	
CHANGE IN VALUATION EQUITY		+$ 2,331		+$_____
IMBALANCE/ERROR		-$ 57		-$_____
End of year farm net worth*		=$553,651		=$_____
Change in net worth with apprec.		$ 16,497		$_____

Change in Net Worth		
Without appreciation	$ 8,656	$_____
With appreciation	$ 16,497	$_____

*May not add due to rounding.

Cash Flow Statement

Completing an annual cash flow statement is an important step in understanding the sources and uses of funds for the business. Understanding last year's cash flow is the first step toward planning and managing cash flow for the current and future years.

The annual cash flow statement is structured to show net cash provided by operating activities, investing activities, financing activities and from reserves. All cash inflows and outflows including beginning and end balances are included. Therefore the sum of net cash provided from all four activities should be zero. Any imbalance is the error from incorrect accounting of cash inflows/outflows.

ANNUAL CASH FLOW STATEMENT
50 Northern Hudson Region Dairy Farms, 1992

Item		Average	
Cash Flow from Operating Activities			
Cash farm receipts	$ 317,339		
- Cash farm expenses	266,418		
= Net cash farm income		$ 50,919	
Nonfarm income	$ 4,973		
- Personal withdrawals/family expenses including nonfarm debt payments	32,801		
+ Net cash nonfarm income		$ -27,828	
= Net Provided by Operating Activities			$ 23,091
Cash Flow From Investing Activities			
Sale of assets: Machinery	$ 558		
+ real estate	1,093		
+ other stock/cert.	143		
= Total asset sales		$ 1,794	
Capital purchases: expansion livestock	$ 5,317		
+ machinery	18,713		
+ real estate	17,070		
+ other stock/cert.	704		
- Total invested in farm assets		$ 41,804	
= Net Provided by Investment Activities			$-40,010
Cash Flow From Financing Activities			
Money borrowed (inter. & long-term)	$ 46,049		
+ Money borrowed (short-term)	563		
+ Increase in operating debt	258		
+ Cash from nonfarm cap. used in business	3,528		
+ Money borrowed - nonfarm	105		
= Cash inflow from financing		$ 50,503	
Principal payments (inter. & long-term)	$ 33,315		
+ Principal payments (short-term)	645		
+ Decrease in operating debt	0		
- Cash outflow for financing		$ 33,960	
= Net Provided by Financing Activities			$ 16,543
Cash Flow From Reserves			
Beginning farm cash, checking & savings		$ 3,908	
- Ending farm cash, checking & savings		3,475	
= Net Provided from Reserves			$ 433
Imbalance (error)			$ 57

ANNUAL CASH FLOW STATEMENT

Item		My Farm	
Cash Flow from Operating Activities			
Cash farm receipts	$_____		
- Cash farm expenses	_____		
= Net cash farm income		$_____	
Nonfarm income	$_____		
- Personal withdrawals/family expenses including nonfarm debt payments	_____		
+ Net cash nonfarm income		$_____	
= Net Provided by Operating Activities			$_____
Cash Flow From Investing Activities			
Sale of assets: Machinery	$_____		
+ real estate	_____		
+ other stock/cert.	_____		
= Total asset sales		$_____	
Capital purchases: expansion livestock	$_____		
+ machinery	_____		
+ real estate	_____		
+ other stock/cert.	_____		
- Total invested in farm assets		$_____	
= Net Provided by Investment Activities			$_____
Cash Flow From Financing Activities			
Money borrowed (inter. & long-term)	$_____		
+ Money borrowed (short-term)	_____		
+ Increase in operating debt	_____		
+ Cash from nonfarm cap. used in business	_____		
+ Money borrowed - nonfarm	_____		
= Cash inflow from financing		$_____	
Principal payments (inter. & long-term)	$_____		
+ Principal payments (short-term)	_____		
+ Decrease in operating debt	_____		
- Cash outflow for financing		$_____	
= Net Provided by Financing Activities			$_____
Cash Flow From Reserves			
Beginning farm cash, checking & savings		$_____	
- Ending farm cash, checking & savings		_____	
= Net Provided from Reserves			$_____
Imbalance (error)			$_____

Repayment Analysis

A valuable use of cash flow analysis is to compare the debt payments planned for the last year with the amount actually paid. The measures listed below provide a number of different perspectives on the repayment performance of the business. However, the critical question to many farmers and lenders is whether planned payments can be made in 1993. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 1993 debt payments shown below.

FARM DEBT PAYMENTS PLANNED
Same 45 Northern Hudson Region Dairy Farms, 1991 and 1992

	Average			My Farm		
	1992 Payments		Planned	1992 Payments		Planned
Debt Payments	Planned	Made	1993	Planned	Made	1993
Long-term	$14,523	$16,905	$15,168	$_____	$_____	$_____
Intermediate-term	29,289	31,136	32,969	_____	_____	_____
Short-term	769	847	477	_____	_____	_____
Operating (net reduction)	133	0	216	_____	_____	_____
Accounts payable (net reduction)	442	0	133	_____	_____	_____
Total	$45,155	$48,888	$48,962	$_____	$_____	$_____
Per cow	$430	$466		$_____	$_____	
Per cwt. 1992 milk	$2.26	$2.45		$_____	$_____	
Percent of total 1992 receipts	14%	15%		_____	_____	
Percent of 1992 milk receipts	16%	18%		_____	_____	

The cash flow coverage ratio measures the ability of the farm business to meet its planned debt payment schedule. The ratio shows the percentage of payments planned for 1992 (as of December 31, 1991) that could have been made with the amount available for debt service in 1992. Farmers who did not participate in DFBS in 1991 have their 1992 cash flow coverage ratio based on planned debt payments for 1993.

CASH FLOW COVERAGE RATIO
Same 45 Northern Hudson Region Dairy Farms, 1991 and 1992

Item	Average	My Farm
Cash farm receipts	$314,673	$_____
- Cash farm expenses	263,535	_____
+ Interest paid	17,233	_____
- Net personal withdrawals from farm**	27,050	_____
(A) = Amount Available for Debt Service	$41,321	$_____
(B) = Debt Payments Planned for 1992 (as of December 31, 1991)	$45,155	$_____
(A ÷ B) = Cash Flow Coverage Ratio for 1992	.92	_____

**Personal withdrawals and family expenditures less nonfarm income and nonfarm money borrowed. If family withdrawals are excluded, or inaccurately included, the cash flow coverage ratio will be incorrect.

ANNUAL CASH FLOW WORKSHEET

Item	Regional Average (per cow)	My Farm Total	My Farm Per Cow	Expected Change	1993 Projection
Average number of cows	105.8				
Accrual Oper. Receipts					
Milk	$2,670.32	$	$		$
Dairy cattle	239.47				
Dairy calves	42.12				
Other livestock	-.20				
Crops	132.66				
Misc. receipts	90.51				
Total	$3,174.88	$	$		$
Accrual Oper. Expenses					
Hired labor	$282.04	$	$		$
Dairy grain & conc.	727.98				
Dairy roughage	12.38				
Nondairy feed	.38				
Mach. hire/rent/lease	47.24				
Mach. rpr./parts & auto	155.55				
Fuel, oil & grease	83.90				
Replacement lvstk.	63.90				
Breeding	42.26				
Vet & medicine	76.93				
Milk marketing	218.07				
Cattle lease	5.56				
Other livestock exp.	142.30				
Fertilizer & lime	97.24				
Seeds & plants	45.99				
Spray/other crop exp.	40.27				
Land, bldg.,fence repair	44.86				
Taxes	70.47				
Real estate rent/lease	58.98				
Insurance	40.83				
Utilities	82.39				
Miscellaneous	34.82				
Total Less Int. Paid	$2,374.34				$
Net Accrual Operating Income (without interest paid)	(total) $84,695	$			$
- Change in lvstk./crop inv.*	18,620				
- Change in accts. rec.	-56				
+ Change in feed/supply inv.**	-189				
+ Change in accts. payable***	2,201				
NET CASH FLOW	$68,143	$			$
- Net personal withdrawals from farm (see footnote on pg. 13)	27,723				
Available for Farm Debt Payments & Investments	$40,420	$			$
- Farm debt payments	50,413				
Available for Farm Investment	$-9,993	$			$
- Capital purchases: cattle, machinery & improvements	$41,804				
Additional Capital Needed		$			$

*Includes change in advance government receipts.
**Includes change in prepaid expenses.
***Excludes change in interest account payable.

Cropping Analysis

The cropping program is an important part of the dairy farm business and often represents opportunities for improved management. A complete evaluation of what the available land resources are, how they are being used, how well crops are producing, and what it costs to produce them is important to evaluating alternative cropping and feed purchasing alternatives.

LAND RESOURCES AND CROP PRODUCTION
50 Northern Hudson Region Dairy Farms, 1992

Item	Average			My Farm		
Land	Owned	Rented	Total	Owned	Rented	Total
Tillable	157	156	313			
Nontillable	47	17	64			
Other nontillable	97	18	116			
Total	302	191	492			

Crop Yields	Farms	Acres*	Prod/Acre		Acres	Prod/Acre	
Hay crop	49	163	2.64	tn DM			tn DM
Corn silage	49	94	15.67	tn			tn
			4.99	tn DM			tn DM
Other forage	0	0	0.00	tn DM			tn DM
Total forage	50	252	3.46	tn DM			tn DM
Corn grain	31	69	108.23	bu			bu
Oats	0	0	0.00	bu			bu
Wheat	0	0	0.00	bu			bu
Other crops	8	22					
Tillable pasture	8	22					
Idle	17	31					
Total Tillable Acres	50	313					

*This column represents the average acreage for the farms producing that crop. Average acreages including those farms not producing were hay crop 160, corn silage 92, corn grain 43, oats 0, tillable pasture 3, and idle 11.

Average crop acres and yields compiled for the region are for the farms reporting each crop. Yields of forage crops have been converted to tons of dry matter using dry matter coefficients reported by the farmers. Grain production has been converted to bushels of dry grain equivalent based on dry matter information provided.

The following crop/dairy ratios indicate the relationship between forage production, forage production resources, and the dairy herd.

CROP/DAIRY RATIOS
50 Northern Hudson Region Dairy Farms, 1992

Item	Average	My Farm
Total tillable acres per cow	2.96	
Total forage acres per cow	2.38	
Harvested forage dry matter, tons per cow	8.25	

Cropping Analysis (continued)

A number of cooperators have allocated crop expenses among the hay crop, corn, and other crops produced. Fertilizer and lime, seeds and plants, and spray and other crop expenses have been computed per acre and per production unit for hay and corn. Additional expense items such as fuels, labor, and machinery repairs are not included.

CROP RELATED ACCRUAL EXPENSES
50 Northern Hudson Region Dairy Farms Reporting, 1992

Item	Total Per Till. Acre	Hay Crop Per Acre	Hay Crop Per Ton DM	All Corn Per Acre	Corn Silage Per Ton DM	Corn Grain Per Dry Shell Bu.
Number of farms reporting	50	11		11		
Average number of acres	313	128		98		
Fertilizer & lime	$32.87	$20.89	$7.46	$56.14	$10.26	$.46
Seeds & plants	15.55	12.57	4.49	23.30	4.26	.19
Spray & other crop expense	13.61	7.52	2.69	38.58	7.06	.32
Total	$62.03	$40.98	$14.64	$118.02	$21.58	$.97
My Farm:						
Fertilizer & lime	$_____	$_____	$_____	$_____	$_____	$_____
Seeds & plants	_____	_____	_____	_____	_____	_____
Spray & other crop expense	_____	_____	_____	_____	_____	_____
Total	$_____	$_____	$_____	$_____	$_____	$_____

Most machinery costs are associated with crop production and should be analyzed with the crop enterprise. Total machinery expenses include the major fixed costs (interest and depreciation), as well as the accrual operating costs. Although machinery costs have not been allocated to individual crops, they are shown below per total tillable acre.

ACCRUAL MACHINERY EXPENSES
50 Northern Hudson Region Dairy Farms, 1992

Machinery Expense Item	Average Total Expenses	Average Per Til. Acre	My Farm Total Expenses	My Farm Per Til. Acre
Fuel, oil & grease	$8,877	$28.36	$_____	$_____
Machinery repairs & parts	15,589	49.81	_____	_____
Machine hire, rent & lease	4,998	15.97	_____	_____
Auto expense (farm share)	868	2.77	_____	_____
Interest (5%)	6,679	21.34	_____	_____
Depreciation	14,268	45.58	_____	_____
Total	$51,279	$163.83	$_____	$_____

Dairy Analysis

Analysis of the dairy enterprise can reveal a great deal about the strengths and weaknesses of the dairy farm business. Information on this page should be used in conjunction with DHI and other dairy production information. Changes in dairy herd size and market values that occur during the year are identified in the table below. The change in inventory value without appreciation is attributed to physical changes in herd size and quality. Any change in inventory is included as an accrual farm receipt when calculating all of the profitability measures on pages 6 and 7.

DAIRY HERD INVENTORY
50 Northern Hudson Region Dairy Farms, 1992

	Dairy Cows		Heifers					
			Bred		Open		Calves	
Item	No.	Value	No.	Value	No.	Value	No.	Value
Beg. year (owned)	105	$112,991	30	$26,488	27	$13,951	25	$7,177
+ Change w/o apprec.		7,139		942		-585		854
+ Appreciation		572		721		165		93
End year (owned)	111	$120,702	30	$28,151	25	$13,531	27	$8,124
End incl. leased	111							
Average number	106		81 (all age groups)					
My Farm:								
Beg. of year (owned)	___	$_____	___	$_____	___	$_____	___	$_____
+ Change w/o apprec.		_____		_____		_____		_____
+ Appreciation		_____		_____		_____		_____
End of year (owned)	___	$_____	___	$_____	___	$_____	___	$_____
End including leased	___							
Average number	___		___ (all age groups)					

Total milk sold and milk sold per cow are extremely valuable measures of size and productivity, respectively, on the dairy farm. These measures of milk output are based on pounds of milk marketed during the year. Farm managers on DHI should compare milk sold per cow with their rolling herd average on the test date nearest December 31 to see how close the DHI estimate of milk produced is to actual milk sales.

MILK PRODUCTION
50 Northern Hudson Region Farms, 1992

Item	Average	My Farm
Total milk sold, lbs.	2,026,807	_____
Milk sold per cow, lbs.	19,153	_____
Average milk plant test, percent butterfat	3.61	_____

The cost of producing milk has been compiled using the whole farm method and is featured in the following table. Accrual receipts from milk sales can be compared with the accrual costs of producing milk per cow and per hundredweight of milk. Using the whole farm method, operating costs of producing milk are estimated by deducting nonmilk accrual receipts from total accrual operating expenses including expansion livestock purchased. Total costs of producing milk include the operating costs of producing milk plus depreciation on machinery and buildings, the value of unpaid family labor, the value of operators' labor and management, and the interest charge for using equity capital. Total costs without operator's labor, management, and capital are the operating costs plus depreciation and unpaid family labor.

ACCRUAL RECEIPTS FROM DAIRY AND COST OF PRODUCING MILK
50 Northern Hudson Region Dairy Farms, 1992

	Average			My Farm		
Item	Total	Per Cow	Per Cwt.	Total	Per Cow	Per Cwt.
Accrual Costs of Producing Milk						
Operating costs	$221,690	$2,095	$10.94	$_____	$_____	$_____
Total costs w/o opers' labor, mgmt. & capital	$247,881	$2,343	$12.23	$_____	$_____	$_____
Total Costs	$307,426	$2,906	$15.17	$_____	$_____	$_____
Accrual Receipts From Milk	$282,520	$2,670	$13.94	$_____	$_____	$_____

The accrual operating expenses most commonly associated with the dairy enterprise are listed in the table below. Evaluating these costs per unit of production enables an evaluation of the dairy enterprise.

DAIRY RELATED ACCRUAL EXPENSES
50 Northern Hudson Region Dairy Farms, 1992

	Average		My Farm	
Item	Per Cow	Per Cwt.	Per Cow	Per Cwt.
Purchased dairy grain & concentrates	$728	$3.80	$_____	$_____
Purchased dairy roughage	12	.06	_____	_____
Total Purchased Dairy Feed	$740	$3.86	$_____	$_____
Purchased grain & conc. as % of milk receipts	27%		____%	
Purchased feed & crop exp.	$924	$4.82	$_____	$_____
Purchased feed & crop exp. as % of milk receipts	35%		____%	
Breeding	$42	$.22	$_____	$_____
Veterinary & medicine	77	.40	_____	_____
Milk marketing	218	1.14	_____	_____
Cattle lease	6	.03	_____	_____
Other livestock expense	142	.74	_____	_____

Capital and Labor Efficiency Analysis

Capital efficiency factors measure how intensively the capital is being used in the farm business. Measures of labor efficiency are key indicators of management's success in generating products per unit of labor input.

CAPITAL EFFICIENCY
50 Northern Hudson Region Dairy Farms, 1992

Item	Per Worker	Per Cow	Per Tillable Acre	Per Tillable Acre Owned
Farm capital	$251,801	$7,771	$2,627	$5,236
Real estate		3,861		2,602
Machinery & equipment	41,957	1,295	438	
Asset turnover ratio		.42		
My Farm:				
Farm capital	$_____	$_____	$_____	$_____
Real estate	_____	_____	_____	_____
Machinery & equipment	_____	_____	_____	_____
Asset turnover ratio		_____		

LABOR FORCE INVENTORY AND ANALYSIS
50 Northern Hudson Region Dairy Farms, 1992

Labor Force	Months	Age	Years of Educ.	Value of Labor & Mgmt.
Operator number 1	10.86	47	13	$20,000
Operator number 2	4.82	36	13	8,150
Operator number 3	1.96	30	13	4,125
Family paid	5.94			
Family unpaid	2.80			
Hired	12.80			
Total	39.18	÷ 12 = 3.27 Worker Equivalent		
		1.47 Operator/Manager Equiv.		
My Farm: Total	____	÷ 12 = _____ Worker Equivalent		
Operator's	____	÷ 12 = _____ Operator/Manager Equiv.		

Labor Efficiency	Average Total	Average Per Worker	My Farm Total	My Farm Per Worker
Cows, average number	106	32	_____	_____
Milk sold, pounds	2,026,807	620,768	_____	_____
Tillable acres	313	96	_____	_____
Work units	1,108	339	_____	_____

Labor Costs	Average Total	Average Per Cow	Average Per Til. Acre	My Farm Total	My Farm Per Cow	My Farm Per Til. Acre
Value of operator(s) labor ($1,350/mo.)	$23,814	$225	$76.08	$_____	$_____	$_____
Family unpaid ($1,350/mo.)	3,780	36	12.08	_____	_____	_____
Hired	29,840	282	95.34	_____	_____	_____
Total Labor	$57,434	$543	$183.50	$_____	$_____	$_____
Machinery Cost	$51,279	$485	$163.83	$_____	$_____	$_____
Total Labor & Mach.	$108,713	$1,028	$347.33	$_____	$_____	$_____

Capital and Labor Efficiency Analysis

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Real estate		3,861		2,602
Machinery & equipment	41,957	1,295	438	
Asset turnover ratio		.42		
My Farm:				
Farm capital	$_____	$_____	$_____	$_____
Real estate	_____	_____	_____	_____
Machinery & equipment	_____	_____	_____	_____
Asset turnover ratio		_____		

LABOR FORCE INVENTORY AND ANALYSIS
50 Northern Hudson Region Dairy Farms, 1992

Labor Force	Months	Age	Years of Educ.	Value of Labor & Mgmt.
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Value of operator(s) labor ($1,350/mo.)	$23,814	$225	$76.08	$_____	$_____	$_____
Family unpaid ($1,350/mo.)	3,780	36	12.08	_____	_____	_____
Hired	29,840	282	95.34	_____	_____	_____
Total Labor	$57,434	$543	$183.50	$_____	$_____	$_____
Machinery Cost	$51,279	$485	$163.83	$_____	$_____	$_____
Total Labor & Mach.	$108,713	$1,028	$347.33	$_____	$_____	$_____

COMPARATIVE ANALYSIS OF THE FARM BUSINESS

Progress of the Farm Business

Comparing your business with average data from regional DFBS cooperators that participated in both of the last two years is one part of a business checkup. It is equally important for you to determine the progress your business has made over the past two or three years and to set targets or goals for the future.

PROGRESS OF THE FARM BUSINESS

Same 45 Northern Hudson Region Dairy Farms, 1991 and 1992

	Average of 45 Farms*		My Farm		
Selected Factors	1991	1992	1991	1992	Goal
Size of Business					
Average number of cows	104	105			
Average number of heifers	79	82			
Milk sold, lbs.	1,929,090	1,996,881			
Worker equivalent	3.14	3.20			
Total tillable acres	311	307			
Rates of Production					
Milk sold per cow, lbs.	18,581	18,970			
Hay DM per acre, tons	2.40	2.50			
Corn silage per acre, tons	14	16			
Labor Efficiency					
Cows per worker	33	33			
Milk sold/worker, lbs.	614,184	622,838			
Cost Control					
Grain & conc. purchased as % of milk sales	29%	28%	%	%	%
Dairy feed & crop exp. per cwt. milk	$4.74	$4.87	$	$	$
Labor & mach. costs/cow	$970	$1,022	$	$	$
Operating cost of producing cwt of milk	$ 11.01	$ 11.02			
Capital Efficiency**					
Farm capital per cow	$7,706	$7,754	$	$	$
Mach. & equip. per cow	$1,267	$1,290	$	$	$
Asset turnover ratio	.38	.42			
Profitability					
Net farm inc w/o apprec	$18,192	$36,216	$	$	$
Net farm inc. w/apprec.	$28,683	$44,717	$	$	$
Labor & mgt. income per operator	$-8,238	$3,847	$	$	$
Rate of return on eq. capital w/apprec.	-1%	2%	%	%	%
Rate of return on all capital w/apprec.	2%	3%	%	%	%
Financial Summary					
Farm net worth, end year	$530,371	$543,816	$	$	$
Debt to asset ratio	.34	.35			
Farm debt per cow	$2,579	$2,621	$	$	$

*Farms participating both years. **Average for the year.

Regional Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column which represents your current level of performance. The five figures in each column represent the average of each 20 percent or quintile of farms included in the regional summary.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
50 Northern Hudson Region Dairy Farms, 1992

Size of Business			Rates of Production			Labor Efficiency	
Worker Equiv-alent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
5.9	211	4,328,736	22,181	4.0	21	50	870,542
3.6	122	2,353,763	20,683	3.2	17	36	711,032
2.9	88	1,513,936	18,893	2.8	15	31	567,174
2.3	63	1,156,861	17,039	2.1	13	25	457,700
1.7	46	780,742	14,412	1.3	9	21	368,723

Cost Control

Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$ 471	19%	$ 358	$ 749	$ 692	$ 3.97
617	24	423	932	811	4.36
702	27	469	1,060	908	4.86
811	31	543	1,156	1,014	5.24
952	37	759	1,500	1,170	6.46

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income w/Apprec.	Net Farm Inc. w/o Apprec.	Labor & Mgt. Inc. Per Oper.	Change in Net Worth w/Apprec.
(10)	(10)	(10)	(3)	(3)	(3)	(6)
$ 3,092	$ 8.42	$ 12.94	$ 112,503	$ 101,881	$ 36,348	$ 66,791
2,871	10.07	14.49	64,250	56,275	12,816	34,271
2,638	10.85	15.72	41,045	31,044	459	14,914
2,347	11.83	16.91	22,948	17,233	-8,677	-1,072
2,039	13.52	19.64	-9,440	-14,341	-39,239	-32,415

*Page number of the participant's DFBS where the factor is located.

New York State Farm Business Charts

The Farm Business Chart is a tool which can be used in analyzing a business by drawing a line through the figure in each column which represents the current level of management performance. The figure at the top of each column is the average of the top 10 percent of the 407 farms for that factor. The other figures in each column are the average for the second 10 percent, third 10 percent, etc. Each column of the chart is independent of the others. The farms which are in the top 10 percent for one factor would not necessarily be the same farms which make up the top 10 percent for any other factor.

The cost control factors are ranked from low to high, but the lowest cost is not necessarily the most profitable. In some cases, the "best" management position is somewhere near the middle or average. Many things affect the level of costs, and must be taken into account when analyzing the factors.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
407 New York Dairy Farms, 1991

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
8.8	360	6,870,298	22,184	4.4	21	50	900,171
4.8	167	3,036,923	20,340	3.4	18	41	733,337
3.8	122	2,195,234	19,365	2.9	16	37	649,588
3.2	100	1,826,683	18,651	2.6	15	33	593,922
2.9	84	1,498,642	17,985	2.3	14	31	550,266
2.6	73	1,259,510	17,277	2.1	14	29	504,178
2.3	62	1,039,997	16,617	1.9	13	27	465,990
2.0	55	918,621	15,757	1.7	11	25	417,823
1.8	47	765,395	14,697	1.4	10	23	367,451
1.3	37	556,444	12,063	1.0	7	18	272,888

Cost Control					
Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$ 340	16%	$234	$ 649	$ 468	$2.95
459	21	318	781	599	3.62
527	24	360	839	673	4.01
577	26	389	902	732	4.26
624	28	417	961	784	4.48
674	31	454	1,018	829	4.76
726	33	488	1,070	885	5.02
787	35	534	1,129	951	5.27
850	37	596	1,222	1,029	5.68
996	43	763	1,489	1,180	6.67

*Page number of the participant's DFBS where the factor is located.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
407 New York Dairy Farms, 1991

Milk Receipts Per Cow	Milk Receipts Per Cwt.	Oper. Cost Milk Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cow	Total Cost Production Per Cwt.
(10)	(10)	(10)	(10)	(10)	(10)
$2,878	$14.17	$1,044	$ 6.81	$1,903	$11.87
2,630	13.40	1,368	8.33	2,197	12.92
2,497	13.21	1,541	8.98	2,360	13.60
2,395	13.02	1,642	9.62	2,489	14.14
2,298	12.84	1,738	10.05	2,589	14.61
2,206	12.69	1,840	10.46	2,680	15.24
2,111	12.57	1,945	10.88	2,810	15.88
1,992	12.43	2,055	11.34	2,945	16.77
1,852	12.25	2,183	12.03	3,149	17.94
1,552	11.60	2,480	13.88	3,578	21.49

Profitability

Net Farm Income		Return to Operator's Labor, Management, & Equity Capital		Labor & Management Income	
With Appreciation	Without Appreciation	With Appreciation	Without Appreciation	Per Farm	Per Operator
(3)	(3)	(3)	(3)	(3)	(3)
$176,029	$133,540	$174,444	$131,468	$83,710	$52,031
75,394	54,218	72,052	52,232	25,627	18,117
52,358	38,884	49,622	35,612	14,522	11,194
40,222	28,608	37,513	26,402	6,953	5,181
32,278	22,880	29,348	19,817	292	205
25,325	16,746	21,423	12,846	-5,953	-4,644
18,399	9,151	13,682	5,173	-12,873	-11,042
9,333	1,400	5,351	-3,002	-20,114	-17,922
383	-6,922	-4,921	-12,177	-32,052	-28,881
-22,307	-37,575	-28,088	-44,465	-76,192	-65,860

Farm Business Charts for farms with freestall barns and 120 cows or less and more than 120 cows, and farms with conventional barns with 60 cows or less and more than 60 cows are shown on pages 27-30.

Financial Analysis Chart

The farm financial analysis chart on page 24 is designed just like the Farm Business Chart and may be used to assess the financial health of the farm business. Most of the financial measures used in the chart are defined on pages 6, 9, 13, and 19 of this publication. References to DBFS output page numbers for participating dairy farmers are provided in the table headings.

FINANCIAL ANALYSIS CHART
407 New York Dairy Farms, 1991

Liquidity (repayment)				
Planned Debt Payments Per Cow	Available for Debt Service Per Cow	Cash Flow Coverage Ratio	Debt Payments as Percent of Milk Sales	Debt Per Cow
(8)*	(12)	(8)	(8)	(5)
$ 50	$786	2.97	6%	$ 106
205	608	1.39	11	692
295	513	1.14	15	1,259
372	452	0.97	18	1,665
446	397	0.85	20	2,094
502	351	0.74	22	2,457
551	292	0.63	25	2,820
607	227	0.48	28	3,267
678	122	0.28	32	3,698
866	-96	-0.29	41	4,687

Solvency				Profitability	
		Debt/Asset Ratio		Percent Rate of Return with appreciation on:	
Leverage Ratio**	Percent Equity	Current & Intermediate	Long Term	Equity	Investment***
	(5)	(5)	(5)	(3)	(3)
0.02	98%	0.01	0.00	15%	12%
0.11	90	0.06	0.00	7	8
0.23	81	0.12	0.06	5	6
0.33	75	0.20	0.19	2	4
0.44	68	0.27	0.30	1	3
0.57	63	0.32	0.41	-1	2
0.73	57	0.38	0.49	-4	0
0.98	50	0.45	0.59	-7	-2
1.26	45	0.54	0.72	-12	-4
2.62	30	0.76	1.02	-28	-9

Efficiency (Capital)				
Asset Turnover Ratio	Real Estate Investment Per Cow	Machinery Investment Per Cow	Total Farm Assets Per Cow	Change in Net Worth w/Appreciation
(11)	(11)	(11)	(11)	(11)
0.63	$1,408	$ 564	$ 4,354	$105,575
0.52	2,046	818	5,293	38,311
0.47	2,342	962	5,847	24,223
0.43	2,677	1,095	6,269	16,153
0.41	3,002	1,243	6,646	10,535
0.38	3,342	1,355	7,016	5,620
0.35	3,694	1,551	7,527	-436
0.32	4,087	1,768	8,210	-7,282
0.29	4,760	2,058	9,140	-16,030
0.22	6,672	2,735	11,260	-57,840

*Page number of the participant's DFBS where the factor is located.

**Dollars of debt per dollar of equity, computed by dividing total liabilities by total equity.

***Return on all farm capital (no deduction for interest paid) divided by total farm assets.

Comparisons by Type of Barn and Herd Size

When analyzing a dairy farm business by comparing it to a group of farms, it is important that the group of farms used has as many of the same physical characteristics as possible as the farm being analyzed. To assist in this endeavor, dairy farms in the 1991 State Summary* have been divided into those with freestall and those with conventional housing. Within each group is a further classification by size of the dairy herd.

The table on page 26 shows the average values for the resulting four groups of dairy farms. Within each housing type, the larger herd size had the higher rate of milk sold per cow but the greatest difference was between the conventional and freestall farms. The total cost of producing milk was lower on the larger farms while labor efficiency was greater. Profitability was higher on the larger farms as well as the freestall farms. Note the similarity of resource use and management performance between the large conventional and small freestall farms.

Farm business charts have been computed for each of the four housing and herd size categories. References to DFBS output page numbers of participating dairy farmers are provided in the table headings. From these charts on pages 27-30, the range in size of business, rates of production, labor efficiency, value and cost of producing milk, and profitability can be observed. The range in every category of business performance is tremendous.

By comparing the farm's performance on the most appropriate business chart, a farm manager will be better able to evaluate his or her business performance. Farm managers should remember, however, that their competition is not limited to the other farms in their own barn type and herd size category. They should observe how their management performance compares with farms in other categories as well.

Herd Size Comparisons

A detailed comparison of profitability, financial situation, and business analysis factors across herd sizes is contained on pages 42-49 of the 1991 State Summary.* As herd size increases, the average profitability generally increases (pages 42-43). Net farm income without appreciation was $136,656 per farm for the 300 or more herd size group and $2,303 per farm for those with less than 40 cows. This relationship generally holds for all measures of profitability including rate of return on capital.

Farm net worth increases rapidly as herd size increases (pages 44-47), even though percent equity was higher on the smaller farms. The moderate size herd groups demonstrated the strongest ability to make debt payments.

Crop yields showed little relationship to herd size, but fertilizer and lime expenses, and machinery cost per tillable acre generally increased as herd size increased (pages 48-49). Milk sold per cow increased as herd size increased, ranging from 16,211 pounds on the farms with less than 40 cows to 19,134 pounds on farms with 300 or more cows. Farm capital per worker increased, and farm capital per cow decreased as herd size increased. Milk sold per worker increased dramatically as herd size increased, ranging from 328,553 pounds at the lowest herd size category up to 864,343 pounds at the largest size category.

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*Smith, Stuart F., Wayne A. Knoblauch, and Linda D. Putnam, Dairy Farm Management Business Summary, New York, 1991, Department of Agricultural Economics, Cornell University, A.E. Res. 92-6, August 1992.

SELECTED BUSINESS FACTORS BY TYPE OF BARN AND HERD SIZE
373 New York Dairy Farms, 1991

Farms with:	Conventional		Freestall	
Item	<60 Cows	>60 Cows	<120 Cows	>120 Cows
Number of farms	122	101	66	84
Cropping Program Analysis				
Total Tillable acres	162	277	288	658
Tillable acres rented*	52	97	103	269
Hay crop acres*	106	168	150	273
Corn silage acres*	28	53	71	229
Hay crop, tons DM/acre	2.0	2.3	2.4	2.6
Corn silage, tons/acre	13.1	13.6	13.9	13.6
Oats, bushels/acre	48.7	47.0	55.4	52.4
Forage DM per cow, tons	7.2	7.4	8.3	7.2
Tillable acres/cow	3.4	3.2	3.3	2.6
Fert. & lime exp./til. acre	$18.38	$22.77	$27.18	$26.03
Total machinery costs	$21,629	$36,112	$43,948	$106,964
Machinery cost/tillable acre	$134	$130	$153	$163
Dairy Analysis				
Number of cows	47	87	87	250
Number of heifers	37	70	76	206
Milk sold, lbs.	797,052	1,481,199	1,562,487	4,707,816
Milk sold/cow, lbs.	16,824	17,082	18,022	18,812
Operating cost of prod. milk/cwt.	$9.86	$10.42	$10.05	$10.55
Total cost of prod. milk/cwt.	$16.36	$14.96	$14.98	$13.89
Price/cwt. milk sold	$12.58	$12.85	$12.93	$13.10
Purchased dairy feed/cow	$652	$668	$687	$726
Purchased dairy feed/cwt. milk	$3.88	$3.91	$3.81	$3.86
Purc. grain & conc. as % milk rec.	30%	30%	29%	29%
Purc. feed & crop exp./cwt. milk	$4.56	$4.67	$4.75	$4.65
Capital Efficiency				
Farm capital/worker	$181,301	$208,892	$226,807	$246,252
Farm capital/cow	$7,585	$6,903	$7,325	$6,296
Farm capital/til. acre owned	$3,269	$3,307	$3,433	$4,049
Real estate/cow	$3,883	$3,187	$3,370	$2,808
Machinery investment/cow	$1,491	$1,383	$1,523	$1,083
Asset turnover ratio	.39	.43	.44	.55
Labor Efficiency				
Worker equivalent	1.98	2.87	2.80	6.40
Operator/manager equivalent	1.19	1.34	1.36	1.63
Milk sold/worker, lbs.	401,914	516,996	558,026	736,003
Cows/worker	24	30	31	39
Labor cost/cow	$609	$508	$519	$541
Labor cost/tillable acre	$178	$159	$156	$206
Profitability & Balance Sheet Analysis				
Net farm income (w/o apprec.)	$10,935	$19,495	$22,444	$58,491
Labor & mgmt. income/operator	$-5,520	$-2,907	$-1,172	$4,891
Return on all capital w/apprec.	-0.7%	2.6%	2.6%	6.1%
Farm debt/cow	$2,159	$2,239	$2,524	$2,437
Percent equity	71%	67%	65%	60%

*Average of all farms, not only those reporting data.

FARM BUSINESS CHART FOR SMALL CONVENTIONAL STALL DAIRY FARMS

122 Conventional Stall Dairy Farms with 60 or Less Cows, New York, 1991

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
3.1	60	1,161,296	21,471	3.4	20	40	661,204
2.6	57	1,006,402	19,284	2.8	18	32	550,224
2.3	55	947,762	18,742	2.6	16	28	494,803
2.1	53	890,831	17,979	2.4	15	27	462,890
2.0	50	822,459	17,196	2.1	14	25	433,585
1.9	46	760,538	16,335	1.8	13	24	401,914
1.7	43	702,257	15,668	1.7	12	22	369,641
1.5	41	646,896	15,116	1.5	11	21	328,322
1.4	37	564,752	14,129	1.3	9	18	283,503
1.1	31	419,523	11,178	1.0	7	14	214,463

Cost Control					
Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$341	17%	$212	$ 632	$ 438	$2.93
455	22	297	819	573	3.57
520	25	355	920	632	4.00
546	28	390	971	690	4.20
595	29	412	1,023	735	4.41
644	32	451	1,080	779	4.57
686	34	484	1,136	822	4.98
752	35	530	1,209	894	5.16
816	38	614	1,326	957	5.61
926	43	808	1,615	1,134	6.56

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income With Apprec.	Net Farm Income Without Apprec.	Labor &. Mgmt. Inc. Per Oper.	Change in Net Worth w/Apprec.
(10)	(10)	(10)	(3)	(3)	(3)	(6)
$2,740	$ 6.42	$12.23	$53,078	$42,465	$19,889	$30,248
2,489	7.90	13.68	36,007	27,726	9,709	17,867
2,353	8.56	14.61	29,496	22,409	4,709	13,846
2,277	9.26	15.21	23,712	17,446	625	9,309
2,166	9.72	15.81	19,116	12,439	-3,791	6,461
2,040	10.04	16.45	13,857	8,394	-7,738	3,784
1,948	10.44	17.16	7,625	4,234	-12,141	-351
1,852	11.06	17.80	3,156	-1,971	-16,055	-4,980
1,714	11.92	19.22	-1,875	-6,070	-22,626	-10,842
1,383	13.99	25.01	-16,933	-21,744	-38,727	-25,962

*Page number of the participant's DFBS where the factor is located.

FARM BUSINESS CHART FOR LARGE CONVENTIONAL STALL DAIRY FARMS
101 Conventional Stall Dairy Farms with More Than 60 Cows, New York, 1991

Size of Business			Rates of Production			Labor Efficiency	
Worker Equiv-alent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
4.6	142	2,453,279	21,818	4.5	20	49	873,548
3.6	109	2,007,656	19,722	3.5	18	40	684,468
3.2	97	1,739,966	18,796	2.9	16	34	598,951
3.0	87	1,562,748	18,310	2.6	15	32	560,716
2.9	82	1,436,342	17,780	2.4	15	31	523,504
2.7	77	1,346,317	17,148	2.1	14	29	493,477
2.5	73	1,246,501	16,384	1.9	12	28	455,675
2.4	68	1,105,390	15,123	1.7	10	26	416,880
2.1	64	993,013	13,510	1.5	9	24	377,657
1.6	62	823,566	11,607	1.1	6	21	327,086

Cost Control

Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$ 309	15%	$222	$ 636	$ 434	$2.91
422	21	296	740	547	3.53
491	24	351	799	640	3.90
543	25	370	837	694	4.19
606	28	390	886	767	4.44
650	31	426	928	821	4.70
707	33	456	993	850	4.97
782	35	490	1,062	915	5.27
861	38	554	1,136	1,005	5.62
1,026	45	645	1,306	1,178	6.68

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income With Apprec.	Net Farm Income Without Apprec.	Labor &. Mgmt. Inc. Per Oper.	Change in Net Worth w/Apprec.
(10)	(10)	(10)	(3)	(3)	(3)	(6)
$2,867	$ 7.21	$12.27	$95,623	$66,317	$24,217	$79,568
2,510	8.54	13.22	59,028	47,527	15,711	36,142
2,442	9.14	13.71	45,692	34,267	10,979	24,998
2,344	9.75	14.12	37,975	27,772	6,367	17,567
2,242	10.15	14.49	31,274	22,916	1,175	12,531
2,148	10.60	14.84	24,354	17,174	-3,736	6,901
2,051	11.00	15.31	18,295	9,265	-10,773	-1,326
1,938	11.37	16.14	8,667	1,122	-19,843	-9,415
1,761	12.22	17.71	-2,600	-9,656	-33,574	-18,321
1,523	13.87	19.66	-19,012	-26,407	-50,112	-36,366

*Page number of the participant's DFBS where the factor is located.

FARM BUSINESS CHART FOR SMALL FREESTALL DAIRY FARMS
66 Freestall Barn Dairy Farms with 120 or Less Cows, New York, 1991

Size of Business			Rates of Production			Labor Efficiency	
Worker Equiv-alent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
4.0	114	2,208,962	22,859	4.4	20	48	828,128
3.6	108	1,993,141	20,423	3.6	18	38	700,061
3.4	102	1,890,636	19,598	3.1	16	36	639,501
3.1	95	1,801,092	18,714	2.7	15	34	595,425
2.8	89	1,671,062	18,040	2.3	15	32	574,105
2.6	82	1,458,043	17,311	2.1	14	31	537,744
2.4	78	1,290,108	16,780	2.0	14	29	508,421
2.2	73	1,173,974	16,382	1.9	13	26	490,526
2.0	63	1,012,572	15,235	1.6	11	25	423,955
1.6	52	850,607	12,679	1.1	8	20	341,458

Cost Control					
Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$ 304	14%	$257	$ 689	$ 511	$2.96
454	20	341	809	628	3.57
535	23	380	848	705	4.03
576	25	407	887	744	4.28
611	27	441	921	781	4.57
682	30	492	1,001	858	4.95
743	33	520	1,064	938	5.23
812	36	567	1,114	1,022	5.49
882	38	649	1,238	1,075	5.81
1,003	40	876	1,565	1,235	6.80

Value and Cost of Production			Profitability			
			Net Farm Income			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	With Apprec.	Without Apprec.	Labor &. Mgmt. Inc. Per Oper.	Change in Net Worth w/Apprec.
(10)	(10)	(10)	(3)	(3)	(3)	(6)
$2,927	$ 7.48	$12.08	$82,214	$66,646	$29,929	$69,398
2,667	8.47	12.94	57,671	46,073	15,194	36,752
2,527	9.22	13.56	45,031	37,230	9,298	24,657
2,425	9.66	14.17	39,035	29,014	4,126	15,276
2,296	9.99	14.75	34,718	23,021	-567	9,326
2,231	10.31	15.53	28,021	17,945	-4,155	3,405
2,158	10.64	15.96	20,709	9,787	-10,866	-2,955
2,085	11.16	16.57	11,223	1,964	-18,096	-8,018
1,993	11.61	17.45	4,475	-4,068	-26,046	-14,391
1,755	12.67	19.25	-10,343	-17,325	-41,780	-38,262

*Page number of the participant's DFBS where the factor is located.

FARM BUSINESS CHART FOR LARGE FREESTALL DAIRY FARMS
84 Freestall Barn Dairy Farms with More Than 120 Cows, New York, 1991

Size of Business			Rates of Production			Labor Efficiency	
Worker Equivalent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(11)*	(11)	(11)	(10)	(9)	(9)	(11)	(11)
15.3	687	13,384,842	22,407	4.2	18	56	1,003,143
7.9	328	6,283,512	21,089	3.4	17	46	872,694
6.8	253	4,743,201	20,463	3.1	15	44	809,299
6.1	211	4,020,615	19,950	2.8	15	40	754,498
5.5	195	3,591,100	18,918	2.6	14	38	706,657
5.1	183	3,322,631	18,193	2.3	13	36	663,402
4.6	171	3,100,997	17,466	2.1	12	34	640,597
4.3	153	2,875,093	16,810	1.9	12	32	603,479
3.9	138	2,514,339	16,123	1.8	10	30	547,129
3.1	125	2,041,714	14,028	1.1	7	27	474,745

Cost Control					
Grain Bought Per Cow	% Grain is of Milk Receipts	Machinery Costs Per Cow	Labor & Machinery Costs Per Cow	Feed & Crop Expenses Per Cow	Feed & Crop Expenses Per Cwt. Milk
(10)	(10)	(11)	(11)	(10)	(10)
$ 401	16%	$258	$ 642	$ 545	$2.91
502	22	333	781	677	3.75
592	25	359	840	758	4.08
635	27	391	915	809	4.40
679	28	420	965	838	4.59
712	29	456	1,010	892	4.78
747	31	481	1,057	933	4.90
800	33	528	1,093	976	5.16
853	35	592	1,166	1,033	5.59
997	42	700	1,328	1,159	6.57

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income With Apprec.	Net Farm Income Without Apprec.	Labor & Mgmt. Inc. Per Oper.	Change in Net Worth w/Apprec.
(10)	(10)	(10)	(3)	(3)	(3)	(6)
$2,921	$ 6.81	$11.43	$331,877	$255,187	$115,674	$192,536
2,754	8.41	12.12	175,987	127,746	42,826	90,274
2,667	9.13	12.77	114,944	90,074	22,567	51,012
2,578	9.99	13.20	89,770	58,939	13,025	35,705
2,459	10.47	13.57	69,743	45,653	3,039	21,327
2,376	10.74	14.04	56,700	34,538	-3,324	11,395
2,276	11.00	14.38	45,465	25,844	-12,124	2,802
2,185	11.53	15.09	29,906	13,628	-23,811	-9,084
2,118	12.21	15.95	16,185	-18,515	-44,840	-27,592
1,850	14.16	18.92	-40,501	-85,430	-137,414	-147,251

*Page number of the participant's DFBS where the factor is located.

IDENTIFY AND SET GOALS

If businesses are to be successful, they must have direction. Written goals help provide businesses with an identifiable direction over both the long and the short term. Goal setting is as important on a dairy farm as it is in other businesses. Written goals are a tool which farm operators can use to ensure that the business continues to move in the proper direction. Goals should be **SMART**:

1. Goals should be Specific.

2. Goals should be Measurable.

3. Goals should be Achievable but challenging.

4. Goals should be Rewarding.

5. You should designate a Time when each goal will be achieved.

Goal setting on a dairy farm does not have to be a complex process. In many cases it provides a process for writing down and agreeing on goals that you have already given some thought to. It is also important to remember that once you write out your goals they are not cast in concrete. If a change takes place which has a major impact on the farm business, the goals should be reworked to accommodate that change. Refer to your goals as often as necessary to keep the farm business progressing.

It is important to identify both objectives (long-range) and goals (short-range) when looking at the future of your farm business.

A suggested format for writing out your goals is as follows:

a. Begin with a mission statement which describes why the business exists based on the preferences and values of the owners.

b. Identify 4-6 objectives.

c. Identify SMART goals.

Worksheet for Setting Goals

I. Mission and Objectives

_____

_____

_____

_____

_____

_____

_____

Worksheet for Setting Goals (continued)

II. Goals

What	How	When	Who is Responsible

Summarize Your Business Performance

The Farm Business and Financial Analysis Charts on pages 21-24 and 27-30 can be used to help identify strengths and weaknesses of your farm business. Identify three major strengths and three areas of your farm business that need improvement.

Strengths:	Need Improvement:

GLOSSARY AND LOCATION OF COMMON TERMS

Accounts Payable - Open accounts or bills owed to feed and supply firms, cattle dealers, veterinarians and other providers of farm services and supplies.

Accounts Receivable - Outstanding receipts from items sold or sales proceeds not yet received such as the payment for December milk sales received in January.

Accrual Expenses - (defined on page 3)

Accrual Receipts - (defined on page 4)

Annual Cash Flow Statement - (defined on page 11)

Appreciation - (defined on page 5)

Asset Turnover Ratio - The ratio of total farm income to total farm assets, calculated by dividing total accrual operating receipts plus appreciation by average total farm assets.

Balance Sheet - A "snapshot" of the business financial position at a given point in time, usually December 31. The balance sheet equates the value of assets to liabilities plus net worth.

Capital Efficiency - The amount of capital invested per production unit. Relatively high investments per worker with low to moderate investments per cow imply efficient use of capital.

Cash From Nonfarm Capital Used in the Business - Transfers of money from nonfarm savings or investments to the farm business where it is used to pay operating expenses, make debt payments and/or capital purchases.

Cash Flow Coverage Ratio - (defined on page 13)

Cash Paid - (defined on page 2)

Cash Receipts - (defined on page 4)

Change in Accounts Payable - (defined on page 3)

Change in Accounts Receivable - (defined on page 4)

Change in Inventory - (defined on page 2)

Dairy (farm) - A farm business where dairy farming is the primary enterprise, operating and managing this farm is a full-time occupation for one or more people and cropland is owned.

Dairy Cash-Crop (farm) - Operating and managing this farm is the full-time occupation of one or more people, cropland is owned but crop sales exceed 10 percent of accrual milk receipts.

Debt Per Cow - Total end-of-year debt divided by end-of-year number of cows.

Debt to Asset Ratios - (defined on page 9)

Dry Matter - The amount or proportion of dry material that remains after all water is removed. Commonly used to measure dry matter percent and tons of dry matter in feed.

Equity Capital - The farm operator/manager's owned capital or farm net worth.

Expansion Livestock - Purchased dairy cattle and other livestock that cause an increase in herd size from the beginning to the end of the year.

Farm Debt Payments as Percent of Milk Sales - Amount of milk income committed to debt repayment, calculated by dividing planned debt payments by total milk receipts. A reliable measure of repayment ability, see page 13.

Farm Debt Payments Per Cow - Planned or scheduled debt payments per cow represent the repayment plan scheduled at the beginning of the year divided by the average number of cows for the year. This measure of repayment ability is used in the Financial Analysis Chart.

Financial Lease - A long-term non-cancellable contract giving the lessee use of an asset in exchange for a series of lease payments. The term of a financial lease usually covers a major portion of the economic life of the asset. The lease is a substitute for purchase. The lessor retains ownership of the asset.

Income Statement - A complete and accurate account of farm business receipts and expenses used to measure profitability over a period of time such as one year or one month.

Labor and Management Income - (defined on page 6)

Labor and Management Income Per Operator - The return to the owner/manager's labor and management per full-time operator.

Labor Efficiency - Production capacity and output per worker.

Liquidity - Ability of business to generate cash to make debt payments or to convert assets to cash.

Net Farm Income - (defined on page 5)

Net Worth - The value of assets less liabilities equal net worth. It is the equity the owner has in owned assets.

Operating Costs of Producing Milk - (defined on page 18)

Opportunity Cost - The cost or charge made for using a resource based on its value in its most likely alternative use. The opportunity cost of a farmer's labor and management is the value he/she would receive if employed in his/her most qualified alternative position.

Other Livestock Expenses - All other dairy herd and livestock expenses not included in more specific categories. Other livestock expenses include; bedding, DHIC, milk house and parlor supplies, livestock board, registration fees and transfers.

Part-Time Cash-Crop Dairy (farm) - Operating and managing this farm is not a full-time occupation, crop sales exceed 10 percent of accrual milk receipts and cropland is owned.

Part-Time Dairy (farm) - Dairy farming is the primary enterprise, cropland is owned but operating and managing this farm is not a full-time occupation for one or more people.

Personal Withdrawals and Family Expenditures Including Nonfarm Debt Payments - All the money removed from the farm business for personal or nonfarm use including family living expenses, health and life insurance, income taxes, nonfarm debt payments, and investments.

Profitability - The return or net income the owner/manager receives for using one or more of his or her resources in the farm business. True "economic profit" is what remains after deducting all costs including the opportunity costs of the owner/manager's labor, management, and equity capital.

Repayment Analysis - An evaluation of the business' ability to make planned debt payments.

Replacement Livestock - Dairy cattle and other livestock purchased to replace those that were culled or sold from the herd during the year.

Return on Equity Capital - (defined on page 7)

Return on Total Capital - (defined on page 7)

Return to Operators' Labor, Management, and Equity Capital - (defined on page 6)

Solvency - The extent or ability of assets to cover or pay liabilities. Debt/asset and leverage ratios are common measures of solvency.

Total Costs of Producing Milk - (defined on page 18)

Whole Farm Method - A procedure used to calculate costs of producing milk on dairy farms without using enterprise cost accounts. All non-milk receipts are assigned a cost equal to their sale value and deducted from total farm expenses to determine the costs of producing milk.

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