DAIRY FARM BUSINESS SUMMARY

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SOUTHEASTERN NEW YORK REGION 1995

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1995 DAIRY FARM BUSINESS SUMMARY
Southeastern New York Region
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SOUTHEASTERN NEW YORK REGION*

INTRODUCTION

Dairy farm managers 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 Southeastern New York Region for 1995.

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. This information can also be used to establish goals that will enable the business to better meet its objectives. In short, DFBS provides business and financial information needed in identifying and evaluating strengths and weaknesses of the farm business.

Format Features

This regional report follows the same general format as in the 1995 DFBS individual farm report 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 statement of owner equity which shows the sources of the change in owner equity during the year;

(4) a cash flow statement and debt repayment ability analysis;

(5) an analysis of crop acreage, yields, and expenses;

(6) an analysis of dairy livestock numbers, production, and expenses; and

(7) a capital and labor efficiency analysis.

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*The Southeastern Region of New York State, with the number of participating farms in parentheses, is comprised of Delaware (21), Columbia (6), Sullivan (11), Orange (9), and Ulster (1) counties. This report was written by Robert A. Milligan, Professor, Agricultural Economics. Linda D. Putnam was in charge of data analysis. Melody Clark prepared the publication. Farm business data were collected by Cooperative Extension Educators Steve Hadcock, Colleen McKeon, Larry Hulle, Paul Cerosaletti and Mariane Kiraly.

SUMMARY AND ANALYSIS OF THE FARM BUSINESS

Business Characteristics

Planning the 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
48 Southeastern New York Region Dairy Farms, 1995

Type of Farm	Number
Dairy	47
Part-time dairy	0
Dairy cash-crop	1
Part-time cash-crop dairy	0

Type of Ownership	Number
Owner	32
Renter	16

Type of Business	Number
Sole Proprietorship	36
Partnership	11
Corporation	1

Type of Barn	Number
Stanchion or Tie-Stall	38
Freestall	10
Combination	0

Milking Frequency	Number
2 times per day	47
3 times per day	1
Other	0

Milking System	Number
Bucket & carry	0
Dumping station	2
Pipeline	34
Herringbone parlor	10
Other parlor	2

Production Records	Number
DHIC	30
Owner-Sampler	5
Other	2
None	11

bST Usage	Number
Used on <25% of herd	6
Used on 25-75% of herd	2
Used on >75% of herd	0
Stopped using in 1995	0
Not used in 1995	40

Business Record System	Number
Account Book	30
Agrifax (mail-in only)	6
On-farm computer	8
Other	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 1995.

Change in inventory: Increases in inventories of supplies and other purchased inputs are subtracted in computing accrual expenses because they represent 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

48 Southeastern New York Region Dairy Farms, 1995

Expense Item	Cash Paid	-	Change in Inventory or Prepaid Expense	+	Change in Accounts Payable	=	Accrual Expenses
Hired Labor	$ 13,173		$ 67	<<	$ 0		$ 13,106
Feed							
Dairy grain & concentrate	55,415		-312		909		56,636
Dairy roughage	2,123		405		50		1,768
Nondairy	252		-2		0		254
Machinery							
Machinery hire, rent & lease	2,015		0	<<	0		2,015
Machinery repairs & farm vehicle exp.	10,253		-18		371		10,642
Fuel, oil & grease	5,062		-8		32		5,102
Livestock							
Replacement livestock	3,689		0	<<	-81		3,608
Breeding	2,722		31		-27		2,664
Veterinary & medicine	4,655		6		-158		4,491
Milk marketing	11,807		0	<<	-2		11,805
Bedding	1,026		-8		0		1,034
Milking supplies	3,965		80		0		3,885
Cattle lease & rent	0		0	<<	0		0
Custom boarding	92		0	<<	0		92
Other livestock expense	4,945		-11		128		5,084
Crops							
Fertilizer & lime	5,944		564		-72		5,308
Seeds & plants	2,274		485		108		1,897
Spray, other crop expense	3,253		57		-8		3,188
Real Estate							
Land, building & fence repair	2,278		202		347		2,423
Taxes	6,353		100	<<	-2,064		4,189
Rent & lease	7,418		0	<<	-173		7,245
Other							
Insurance	3,915		0	<<	0		3,915
Utilities (farm share)	7,460		0	<<	7		7,467
Interest paid	10,646		0	<<	-204		10,442
Miscellaneous	2,559		-45		-21		2,583
Total Operating	$ 173,294		$ 1,593		$ -858		$ 170,843
Expansion livestock	$ 3,858		0	<<	0		3,858
Machinery depreciation							11,034
Building depreciation							4,220
TOTAL ACCRUAL EXPENSES							$ 189,955

Change in prepaid expenses (noted above by <<) is a net change in non-inventory expenses that have been paid in advance of their use. If 1995 funds used to prepay 1996 leases exceed the amount of 1995 leases prepaid in 1994, the amount of this excess is excluded from 1995 accrual lease expenses. The excess prepaid lease is charged against the future year's business operation. A decrease in prepaid lease 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 when calculating accrual expenses because these expenses were incurred (resources used) in 1995 but not paid for. A decrease is subtracted because the resource was used before 1995.

Accrual expenses are an estimate of the costs of inputs actually used in this year's production. They are the cash paid, less changes in inventory and prepaid expenses, plus accounts payable.

CASH AND ACCRUAL FARM RECEIPTS

48 Southeastern New York Region Dairy Farms, 1995

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Receipts
Milk sales	$ 188,343				$ 1,638		$ 189,981
Dairy cattle	10,528		$ 6,111		0		16,639
Dairy calves	2,373				0		2,373
Other livestock	512		96		0		608
Crops	1,721		-3,108		249		-1,138
Government receipts	2,883		0*		168		3,051
Custom machine work	254				-17		237
Gas tax refund	113				0		113
Other	2,838				0		2,838
Less nonfarm noncash capital**		(-)	0**			(-)	0
Total Receipts	$ 209,565		$ 3,099		$ 2,038		$ 214,702

*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 1995 for the 1996 crop year in excess of funds earned for 1995. Likewise, a decrease is added to cash government receipts because it represents funds earned for 1995 but received in 1994.

Changes in accounts receivable are calculated by subtracting beginning year balances from end year balances. Payments in January for milk produced in December 1995 compared to January 1995 payments for milk produced in 1994 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, and the other resources used in the business, determines profitability. 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.

These measures should be considered estimates as they include inventory values that are only estimates and they include an unknown degree of error stemming from cash flow imbalances.

* 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.

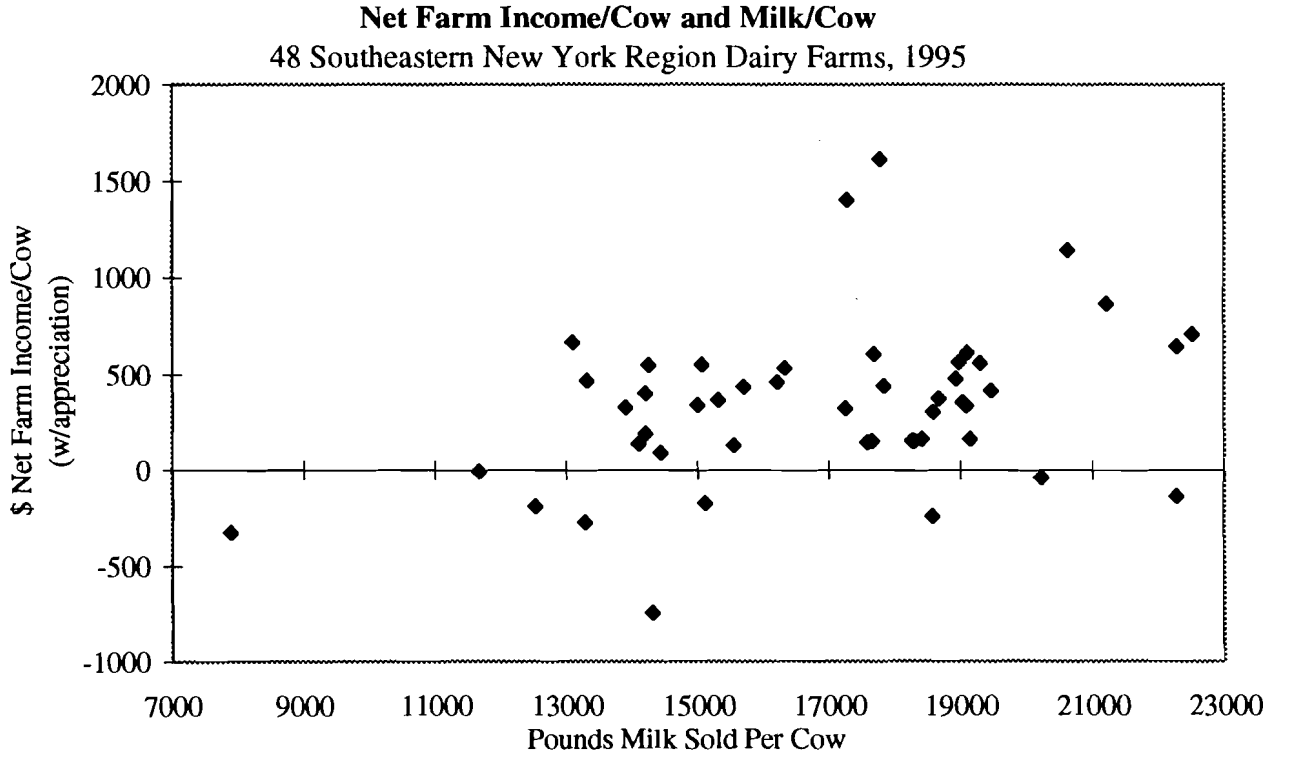
Net farm income is the return to the farm operators and other unpaid family members for their labor, management, and equity capital. It is the farm family's net annual return from working, managing, financing, and owning the farm business. This is not a measure of cash available from the year's business 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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average Total	Average Per Cow	My Farm Total	My Farm Per Cow
Total accrual receipts	$ 214,702		$_____	
Appreciation: Livestock	-987		_____	
Machinery	2,740		_____	
Real Estate	3,197		_____	
Other Stock & Certificates	-81		_____	
Total Including Appreciation	$ 219,571		$_____	
Total accrual expenses	- 189,955		-_____	
Net Farm Income (with appreciation)	$ 29,616	$ 348	$_____	$ _____
Net Farm Income (without appreciation)	$ 24,747	$ 291	$_____	$ _____

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.



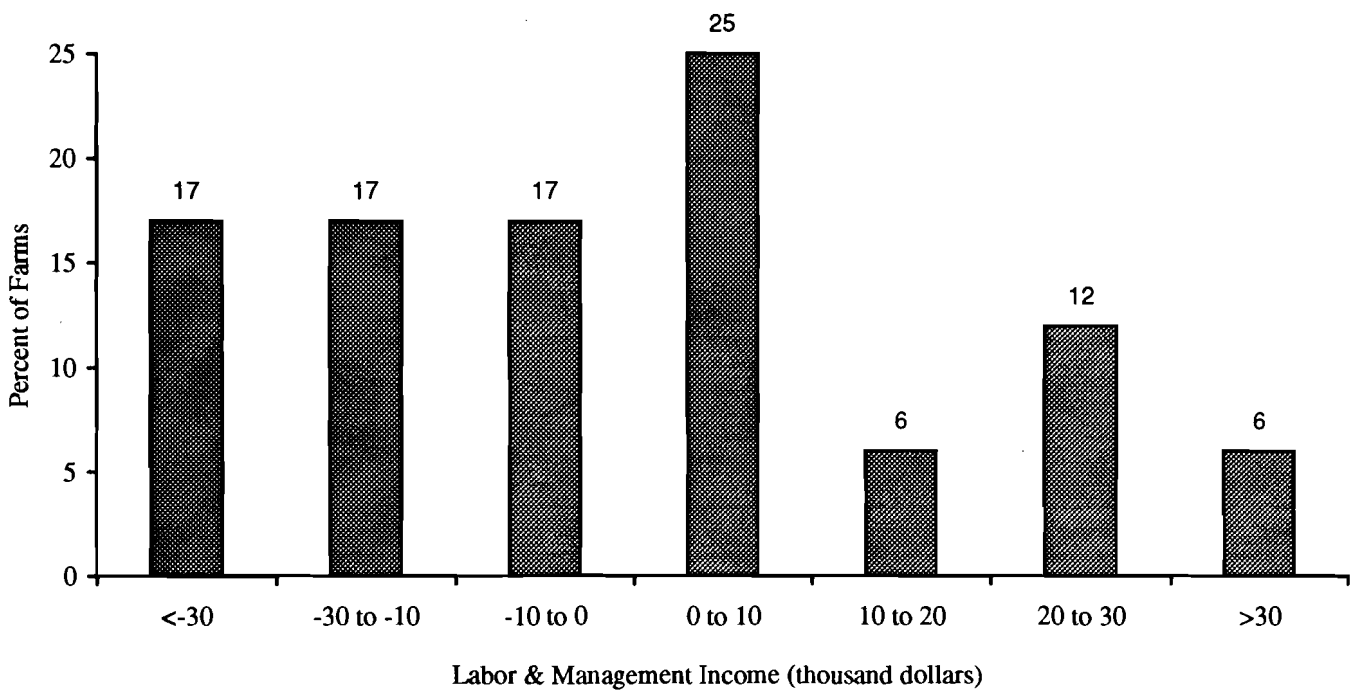
Labor and management income is the return which farm operators receive for their labor and management used in the farm business. Appreciation is not included as part of the return to labor and management because it results from ownership of assets rather than management of the farm business. Labor and management income is calculated by deducting a charge for family labor unpaid and the opportunity cost of using equity capital, at a real interest rate of five percent, from net farm income 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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average	My Farm
Net farm income without appreciation	$24,747	$ _____
Family labor unpaid @ $1,450 per month	- 6,569	- _____
Interest on $355,990 average equity capital @ 5% real rate	-17,800	- _____
Labor & Management Income per farm (1.33 Operators/farm)	$ 378	$ _____
Labor & Management Income per Operator/Manager	$ 284	$ _____

Labor and management income per operator averaged $284 on these 48 farms in 1995. The range in labor and management income per operator was from about $-82,000 to more than $90,000. Returns to labor and management were negative on 51% of the farms. Labor and mangement income per operator was between $0 and $20,000 on 31% of the farms while 18% showed labor and management incomes of $20,000 or more per operator.

Distribution of Labor & Management Incomes per Operator
48 Southeastern New York Dairy Farms, 1995



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 owner-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
48 Southeastern New York Region Dairy Farms, 1995

Item		Average		My Farm
Net farm income with appreciation	$	29,616	$	_____
Family labor unpaid @$1,450 per month	-	6,569	-	_____
Value of operators' labor & management	-	27,513	-	_____
Return on equity capital with appreciation	$	-4,466	$	_____
Interest paid	+	10,442	+	_____
Return on total capital with appreciation	$	5,976	$	_____
Return on equity capital without appreciation	$	-9,335	$	_____
Return on total capital without appreciation	$	1,107	$	_____
Rate of return on average equity capital:				
with appreciation		-1.3%		_____ %
without appreciation		-2.6%		_____ %
Rate of return on average total capital:				
with appreciation		1.2%		_____ %
without appreciation		0.2%		_____ %

Farm and Family Financial Status

The first step in evaluating the financial position of the farm is to construct a balance sheet which identifies and values 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 1995, lease payments were discounted by 9.25 percent to obtain their present value.

Advanced government receipts are included as current liabilities. Government payments received in 1995 that are for participation in the 1996 program are the end year balance and payments received in 1994 for participation in the 1995 program are the beginning year balance.

Current Portion or principal due in the next year for intermediate and long term debt is included as a current liability.

1995 FARM BUSINESS & NONFARM BALANCE SHEET

48 Southeastern New York Region Dairy Farms, 1995

Farm Assets	Jan. 1	Dec. 31	Farm Liabilities & Net Worth	Jan. 1	Dec. 31
Current			Current		
Farm cash, checking & savings	$ 5,020	$ 5,766	Accounts payable	$ 6,651	$ 5,793
Accounts receivable	15,272	17,310	Operating debt	5,164	7,322
Prepaid expenses	1,727	1,894	Short Term	1,712	2,559
Feed & supplies	43,737	42,057	Advanced govt. receipts	0	0
			Current Portion:		
			Intermediate	8,651	9,435
			Long Term	5,095	4,788
Total Current	$ 65,756	$ 67,027	Total Current	$ 27,273	$ 29,897
Intermediate			Intermediate		
Dairy cows:			Structured debt		
owned	$ 84,711	$ 89,266	1-10 years	$ 37,045	$ 34,524
leased	0	0	Financial lease		
Heifers	36,483	37,185	(cattle/machinery)	398	287
Bulls & other livestock	2,322	2,285	Farm Credit stock	2,035	2,250
Mach. & equip. owned	109,730	114,039	Total Intermediate	$ 39,478	$ 37,061
Mach. & equip. leased	398	287			
Farm Credit stock	2,035	2,250			
Other stock/certificate	2,962	2,279			
Total Intermediate	$ 238,641	$ 247,591			
			Long Term		
Long Term			Structured debt		
Land & buildings:			>10 years	$ 65,521	$ 71,632
owned	$ 180,014	$ 183,813	Financial lease		
leased	0	0	(structures)	0	0
Total Long Term	$ 180,014	$ 183,813	Total Long Term	$ 65,521	$ 71,632
			Total Farm Liab.	$ 132,272	$ 138,590
Total Farm Assets	$ 484,411	$ 498,431	FARM NET WORTH	$ 352,139	$ 359,841

Nonfarm Assets, Liabilities & Net Worth (Average of 33 farms reporting)

Assets	Jan. 1	Dec. 31	Liabilities & Net Worth	Jan. 1	Dec. 31
Personal cash, checking & savings	$ 8,989	$ 9,339	Nonfarm Liabilities	$ 8,816	$ 8,212
Cash value life insurance	4,838	4,262			
Nonfarm real estate	96,814	96,430			
Auto (personal share)	3,448	3,021			
Stocks & bonds	7,925	9,579			
Household furnishings	7,985	8,470			
All other nonfarm assets	3,494	4,074			
Total Nonfarm Assets	$ 133,492	$ 135,175	NONFARM NET WORTH	$ 124,676	$ 126,962

Farm & Nonfarm Assets, Liabilities, and Net Worth*	Jan. 1	Dec. 31
Total Assets	$ 617,903	$ 633,606
Total Liabilities	141,088	146,802
TOTAL FARM & NONFARM NET WORTH	$ 476,815	$ 486,804

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

The following condensed balance sheet, including deferred taxes, contains average data from only those farmers who elected to provide the additional information required to compute deferred taxes.

Deferred taxes represent an estimate of the taxes that would be paid if the farm were sold at year end fair market values on the date of the balance sheet. Accuracy is dependent on the accuracy of the market values and the tax basis data provided. Any tax liability for assets other than livestock, machinery, land, buildings and nonfarm assets is excluded. It is assumed that all gain on purchased livestock and machinery is ordinary gain and that listed market values are net of selling costs. The effects of investment tax credit carryover and recapture, carryover of operating losses, alternative minimum taxes and other than average exemptions and deductions are excluded because they have only minor influence on the taxes of most farms. The dramatic impact of including deferred taxes is clear. Total liabilities were increased 42 percent on these 11 farms by including deferred taxes.

CONDENSED BALANCE SHEET INCLUDING DEFERRED TAXES
December 31, 1995
11 New York Dairy Farms, 1995

Assets		Liabilities & Net Worth	
		Current debts & payables	$ 95,207
		Current deferred taxes	76,367
Total Current Assets	$ 128,267	Total Current Liabilities	$ 171,574
		Intermediate debts & leases	$ 132,835
		Intermediate deferred taxes	124,500
Total Inter. Assets	$ 470,523	Total Intermediate Liabilities	$ 257,335
		Long term debts & leases	$ 142,392
		Long term deferred taxes	68,412
Total Long Term Assets	$ 427,795	Total Long Term Liab.	$ 210,804
TOTAL FARM ASSETS	$ 1,026,585	TOTAL FARM LIABILITIES	$ 639,713
		Farm Net Worth	$ 386,872
		Percent Equity (Farm)	38%
		Nonfarm debts	$ 55
		Nonfarm deferred taxes	12,287
Total Nonfarm Assets	$ 49,423	Total Nonfarm Liabilities	$ 12,842
TOTAL ASSETS	$ 1,076,008	TOTAL LIABILITIES	$ 652,555
		Total Net Worth	$ 423,453
		Percent Equity (Total)	39%

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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average	My Farm
Financial Ratios - Farm:		
Percent equity	72%	_____ %
Debt/asset ratio: total	0.28	_____
long-term	0.39	_____
intermediate/current	0.21	_____
Farm Debt Analysis:		
Accounts payable as % of total debt	4%	_____ %
Long-term liabilities as a % of total debt	52%	_____ %
Current & inter. liabilities as a % of total debt	48%	_____ %

Farm Debt Levels:	Per Cow	Per Tillable Acre Owned	Per Cow	Per Tillable Acre Owned
Total farm debt	$ 1,575	$ 1,952	$ _____	$ _____
Long-term debt	814	1,009	_____	_____
Intermediate & long term	1,235	1,531	_____	_____
Intermediate & current debt	761	943	_____	_____

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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average of Region's Farms			
	Real Estate		Machinery & Equipment	
Value beginning of year		$ 180,014		$ 109,730
Purchases	$ 11,115*		$ 12,942	
Gift & inheritance	+ 833		+ 317	
Lost capital	- 5,332			
Sales	- 1,794		- 656	
Depreciation	- 4,220		- 11,034	
Net investment		= 602		= 1,569
Appreciation		+ 3,197		+ 2,740
Value end of year		$ 183,813		$ 114,039

*$0 land and $11,115 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 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), (3) increases or decreases in the value (price) of assets owned by the business (called change in valuation equity), and (4) the error in the business cash flow accounting.

Retained earnings is an excellent indicator of farm generated financial progress.

STATEMENT OF OWNER EQUITY (RECONCILIATION)
48 Southeastern New York Region Dairy Farms, 1995

Item	Average		My Farm	
Beginning of year farm net worth		$ 352,139		$ _____
Net farm income w/o appreciation	$ 24,747		$_____	
+Nonfarm cash income	+ 5,528		+_____	
-Personal withdrawals & family expenditures excluding nonfarm borrowings	- 27,542		- _____	
RETAINED EARNINGS		+ $ 2,733		+$ _____
Nonfarm noncash transfers to farm	$ 1,151		$_____	
+Cash used in business from nonfarm capital	+ 5,855		+_____	
-Note or mortgage from farm real estate sold (nonfarm)	- 1,238		- _____	
CONTRIBUTED/WITHDRAWN CAPITAL		+ $ 5,768		+$ _____
Appreciation	$ 4,869		$_____	
-Lost capital	- 5,332		- _____	
CHANGE IN VALUATION EQUITY		+ $ -463		+$ _____
IMBALANCE/ERROR		- 338		- $ _____
End of year net worth*		= $ 359,841		=$ _____
Change in net worth w/appreciation		$ 7,702		$ _____

Change in Net Worth

Without appreciation	$ 2,833	$ _____
With appreciation	$ 7,702	$ _____

*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. You should be aware that all profitability measures may be affected by this error.

ANNUAL CASH FLOW STATEMENT
48 Southeastern New York Region Dairy Farms, 1995

Item			Average	
Cash Flow from Operating Activities				
Cash farm receipts		$ 209,565		
- Cash farm expenses		173,294		
= Net cash farm income			$ 36,272	
Nonfarm income		$ 5,528		
- Personal withdrawals & family expenses including nonfarm debt payments		27,612		
+ Net cash nonfarm income			$ -22,084	
= Net Provided by Operating Activities				$ 14,188
Cash Flow From Investing Activities				
Sale of assets:	machinery	$ 656		
	+ real estate	556		
	+ other stock & cert.	826		
= Total asset sales			$ 2,038	
Capital purchases:	expansion livestock	$ 3,858		
	+ machinery	12,942		
	+ real estate	11,115		
	+ other stock& cert.	224		
- Total invested in farm assets			$ 28,139	
= Net Provided by Investment Activities				$ -26,101
Cash Flow From Financing Activities				
Money borrowed (intermediate & long term)		$ 24,396		
+ Money borrowed (short term)		2,977		
+ Increase in operating debt		2,158		
+ Cash from nonfarm capital used in business		5,855		
+ Money borrowed - nonfarm		70		
= Cash inflow from financing			$ 35,456	
Principal payments (intermediate & long term)		$ 20,329		
+ Principal payments (short term)		2,130		
+ Decrease in operating debt		0		
- Cash outflow for financing			$ 22,459	
= Net Provided by Financing Activities				$ 12,997
Cash Flow From Reserves				
Beginning farm cash, checking & savings			$ 5,020	
- Ending farm cash, checking & savings			5,766	
= Net Provided from Reserves				$ -746
Imbalance (error)				$ 338

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 (intermediate & long term)	$ _____		
+ Money borrowed (short term)	_____		
+ Increase in operating debt	_____		
+ Cash from nonfarm capital used in business	_____		
+ Money borrowed - nonfarm	_____		
= Cash inflow from financing		$ _____	
Principal payments (intermediate & 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 1996. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 1996 debt payments shown below.

FARM DEBT PAYMENTS PLANNED

Same 37 Southeastern New York Region Dairy Farms, 1994 & 1995

	Average			My Farm		
	1995 Payments		Planned	1995 Payments		Planned
Debt Payments	Planned	Made	1996	Planned	Made	1996
Long term	$ 8,420	$ 9,356	$ 9,078	$ _____	$ _____	$ _____
Intermediate term	12,186	16,090	12,424	_____	_____	_____
Short term	1,836	3,142	1,879	_____	_____	_____
Operating (net reduction)	3,058	0	3,208	_____	_____	_____
Accounts payable (net reduction)	186	940	663	_____	_____	_____
Total	$ 25,687	$ 29,528	$ 27,252	$ _____	$ _____	$ _____
Per cow	$ 334	$ 383		$ _____	$ _____	
Per cwt. 1995 milk	$ 1.94	$ 2.23		$ _____	$ _____	
Percent of total 1995 farm receipts	13%	15%		_____	_____	
Percent of 1995 milk receipts	15%	17%		_____	_____	

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 1995 (as of December 31, 1994) that could have been made with the amount available for debt service in 1995. Farmers who did not participate in DFBS in 1994 have their 1995 cash flow coverage ratio based on planned debt payments for 1996.

CASH FLOW COVERAGE RATIO

Same 37 Southeastern New York Region Dairy Farms, 1994 & 1995

Item	Average	My Farm
Cash farm receipts	$ 195,774	$ _____
- Cash farm expenses	157,251	_____
+ Interest paid	9,430	_____
- Net personal withdrawals from farm*	23,354	_____
(A) = Amount Available for Debt Service	$ 24,599	$ _____
(B) = Debt Payments Planned for 1995 (as of December 31, 1994)	$ 25,687	$ _____
(A/B) = Cash Flow Coverage Ratio for 1995	0.96	_____

*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	Regional Average Per Cwt.	My Farm Per Cow/ Per Cwt.	Expected Change	1996 Projection
Average no. of cows	85				
Total cwt. of milk sold		14,258			
Accrual Oper. Receipts					
Milk	$ 2,235.07	$ 13.32	$		$
Dairy cattle	195.75	1.17			
Dairy calves	27.92	0.17			
Other livestock	7.15	0.04			
Crops	-13.38	-0.08			
Misc. Receipts	73.40	0.44			
Total	$ 2,525.91	$ 15.06	$		$
Accrual Operating Expenses					
Hired labor	$ 154.19	$ 0.92	$		$
Dairy grain & concentrate	666.31	3.97			
Dairy roughage	20.80	0.12			
Nondairy feed	2.99	0.02			
Mach. hire, rent & lease	23.71	0.14			
Mach. repair & vehicle exp.	125.20	0.75			
Fuel, oil & grease	60.02	0.36			
Replacement livestock	42.45	0.25			
Breeding	31.34	0.19			
Vet & medicine	52.84	0.31			
Milk marketing	138.88	0.83			
Bedding	12.16	0.07			
Milking supplies	45.71	0.27			
Cattle lease	0.00	0.00			
Custom boarding	1.08	0.01			
Other livestock exp.	59.81	0.36			
Fertilizer & lime	62.44	0.37			
Seeds & plants	22.33	0.13			
Spray & other crop exp.	37.52	0.22			
Land, bldg., fence repair	28.51	0.17			
Taxes	49.28	0.29			
Real estate rent & lease	85.24	0.51			
Insurance	46.06	0.28			
Utilities	87.85	0.52			
Miscellaneous	30.39	0.18			
Total Less Interest Paid	$ 1,887.05	$ 11.25	$		$
Net Accrual Operating Income (without interest paid)		Total $ 54,303	$		$
- Change in livestock & crop invent.*		3,099			
- Change in accounts receivable		2,038			
- Change in feed & supply inventory**		1,593			
+ Change in accounts payable***		-654			
NET CASH FLOW		$ 46,919	$		$
- Net family withdrawals		$ 22,014			
Available for Farm		$ 24,905	$		
- Farm debt payments		33,451			
Available for Farm Investment		$ -8,546	$		$
- Capital purchases		$ 28,139			
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 productivity and profitability. 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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average			My Farm		
Land	Owned	Rented	Total	Owned	Rented	Total
Tillable	71	170	241			
Nontillable	44	36	80			
Other nontillable	57	27	84			
Total	172	233	405			

Crop Yields	Farms	Acres*	Prod/Acre	Acres	Prod/Acre
Hay crop	47	158	2.23 tn DM		tn DM
Corn silage	40	64	11.54 tn		tn
			4.00 tn DM		tn DM
Other forage	2	21	2.17 tn DM		tn DM
Total forage	47	213	2.65 tn DM		tn DM
Corn grain	9	130	78.36 bu		bu
Oats	4	10	66.25 bu		bu
Wheat	0	0	0.00 bu		bu
Other crops	2	11			
Tillable pasture	9	27			
Idle	4	21			
Total Tillable Acres	48	241			

*This column represents the average acreage for the farms producing that crop. Average acreages including those farms not producing were hay crop 155, corn silage 53, corn grain 24, oats 1, tillable pasture 5, and idle 2.

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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average	My Farm
Total tillable acres per cow	2.84	
Total forage acres per cow	2.46	
Harvested forage dry matter, tons per cow	6.51	

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. Rotational grazing was used on 9 farms in the region.

CROP RELATED ACCRUAL EXPENSES
Southeastern New York Region Dairy Farms Reporting, 1995

Item	Total Per Till. Acre	All Corn Per Acre	Corn Silage Per Ton DM	Corn Grain Per Dry Sh. Bu.	Hay Crop Per Acre	Hay Crop Per Ton DM	Pasture Per Till Acre	Pasture Per Total Acre
No. of farms reporting	48	10			12		4	
Ave. number of acres	241	71			128		5	98
Fert. & lime	$ 22.02	$ 43.00	$ 11.00	$ 0.39	$ 10.39	$ 4.95	$ 159.15	$ 8.14
Seeds & plants	7.88	18.51	4.73	0.17	3.61	1.72	4.70	0.24
Spray & other crop exp.	13.23	24.14	6.18	0.22	3.54	1.69	0.00	0.00
TOTAL	$ 43.13	$ 85.65	$ 21.91	$ 0.78	$ 17.54	$ 8.36	$ 163.85	$ 8.38
My Farm								
Fert. & lime	$ _____	$ _____	$_____	$_____	$_____	$ _____	$ _____	$_____
Seeds & plants	_____	_____	_____	_____	_____	_____	_____	_____
Spray & other crop exp.	_____	_____	_____	_____	_____	_____	_____	_____
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
48 Southeastern New York Region Dairy Farms, 1995

Machinery Expense	Average Total Expenses	Average Per Till. Acre	My Farm Total Expenses	My Farm Per Till. Acre
Fuel, oil & grease	$ 5,102	$ 21.17	$ _____	$ _____
Mach. repair & vehicle exp.	10,642	44.16	_____	_____
Machine hire, rent & lease	2,015	8.36	_____	_____
Interest (5%)	5,594	23.21	_____	_____
Depreciation	11,034	45.78	_____	_____
Total	$ 34,387	$ 142.69	$ _____	$ _____

Dairy Analysis

Analysis of the dairy enterprise can reveal 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
48 Southeastern New York Region Dairy Farms, 1995

	Dairy Cows		Heifer					
			Bred		Open		Calves	
Item	No.	Value	No.	Value	No.	Value	No.	Value
Beg. year (owned)	82	$ 84,711	22	$ 19,038	21	$ 12,284	20	$ 5,160
+ Change w/o apprec.		5,299		-564		580		797
+ Appreciation		-744		143		-227		-26
End year (owned)	88	$ 89,266	22	$ 18,617	23	$ 12,637	23	$ 5,931
End including leased	88							
Average number	85		65	(all age groups)				
My Farm:								
Beg. year (owned)	____	$____	____	$ ____	____	$____	____	$ ____
+ Change w/o apprec.		____		____		____		____
+ Appreciation		____		____		____		____
End 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
48 Southeastern New York Region Dairy Farms, 1995

Item	Average	My Farm
Total milk sold, lbs.	1,425,790	_____
Milk sold per cow, lbs.	16,778	_____
Average milk plant test, percent butterfat	3.67%	_____

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. Purchased inputs cost of producing milk are the operating costs plus depreciation. 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.

ACCRUAL RECEIPTS FROM DAIRY, COSTS OF PRODUCING MILK, AND PROFITABILITY

48 Southeastern New York Region Dairy Farms, 1995

Item	Average			My Farm		
	Total	Per Cow	Per Cwt.	Total	Per Cow	Per Cwt.
Accrual Cost of Producing Milk						
Operating costs	$ 149,980	$ 1,764	$ 10.52	$_____	$_____	$_____
Purchased inputs costs	$ 165,234	$ 1,944	$ 11.59	$_____	$_____	$_____
Total Costs	$ 217,116	$ 2,554	$ 15.23	$_____	$_____	$_____
Accrual Receipts From Milk	$ 189,981	$ 2,235	$ 13.32	$_____	$_____	$_____
Net Farm Income without Apprec.	$ 24,747	$ 291	$ 1.74	$_____	$_____	$_____
Net Farm Income with Apprec.	$ 29,616	$ 348	$ 2.08	$_____	$_____	$_____

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

48 Southeastern New York Region Dairy Farms, 1995

Item	Average		My Farm	
	Per Cow	Per Cwt.	Per Cow	Per Cwt.
Purchased dairy grain & concentrate	$ 666	$ 3.97	$_____	$_____
Purchased dairy roughage	21	0.12	_____	_____
Total Purchased Dairy Feed	$ 687	$ 4.09	$_____	$_____
Purchased grain & conc. as % of milk receipts		30%	_____ %	
Purchased feed & crop exp.	$ 809	$ 4.83	$_____	$_____
Purchased feed & crop exp. as % of milk receipts		36%	_____ %	
Breeding	$ 31	$ 0.19	$_____	$_____
Veterinary & medicine	53	0.31	_____	_____
Milk marketing	139	0.83	_____	_____
Bedding	12	0.07	_____	_____
Milking supplies	46	0.27	_____	_____
Cattle lease	0	0.00	_____	_____
Custom boarding	1	0.01	_____	_____
Other livestock expense	60	0.36	_____	_____

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
48 Southeastern New York Region Dairy Farms, 1995

Item	Per Worker	Per Cow	Per Tillable Acre	Per Tillable Acre Owned
Farm capital	$ 190,784	$ 5,781	$ 2,039	$ 6,921
Real estate		2,140		2,562
Machinery & equipment	43,570	1,320	466	
Asset turnover ratio	0.45			
My Farm				
Farm capital	$ _____	$ _____	$ _____	$ _____
Real estate	_____	_____	_____	_____
Machinery & equipment	_____	_____	_____	_____
Asset turnover ratio	_____			

LABOR FORCE INVENTORY AND ANALYSIS
48 Southeastern New York Region Dairy Farms, 1995

Labor Force	Months	Age	Years of Educ.	Value of Labor & Mgmt.
Operator number 1	13.06	45	13	$ 21,352
Operator number 2	3.21	42	14	5,015
Operator number 3	0.75	30	13	1,146
Family paid	3.74			
Family unpaid	4.53			
Hired	5.62			
Total	30.91	/ 12 = 2.58 Worker Equivalent		
		1.42 Operator/Manager Equivalent		
My Farm: Total	_____	/ 12 = _____ Worker Equivalent		
Operator's	_____	/ 12 = _____ Operator/Manager Equivalent		

Labor Efficiency	Average Total	Average Per Worker	My Farm Total	My Farm Per Worker
Cows, average number	85	33	_____	_____
Milk sold, pounds	1,425,790	553,533	_____	_____
Tillable acres	241	94	_____	_____
Work units	886	344	_____	_____

Labor Costs	Average Total	Average Per Cow	Average Per Cwt.	My Farm Total	My Farm Per Cow	My Farm Per Cwt.
Value of operator(s) labor ($1,450/mo.)	$ 24,679	$ 290	$ 1.73	$_____	$ _____	$ _____
Family unpaid ($1,450/mo.)	6,569	77	0.46	_____	_____	_____
Hired	13,106	154	0.92	_____	_____	_____
Total Labor	$ 44,354	$ 522	$ 3.11	$_____	$ _____	$ _____
Machinery Cost	$ 34,387	$ 405	$ 2.41	$_____	$ _____	$ _____
Total Labor & Mach.	$ 78,741	$ 926	$ 5.52	$_____	$ _____	$ _____

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 can be helpful to establishing your goals for these parameters. It is equally important for you to determine the progress your business has made over the past two or three years, to compare this progress to your goals, and to set goals for the future.

PROGRESS OF THE FARM BUSINESS

Same 37 Southeastern New York Region Dairy Farms, 1994 & 1995

	Average of 37 Farms*		My Farm		
Selected Factors	1994	1995	1994	1995	Goal
Size of Business					
Average number of cows	74	77			
Average number of heifers	55	56			
Milk sold, lbs.	1,305,580	1,322,864			
Worker equivalent	2.30	2.44			
Total tillable acres	202	208			
Rates of Production					
Milk sold per cow, lbs.	17,675	17,150			
Hay DM per acre, tons	2.74	2.21			
Corn silage per acre, tons	17	13			
Labor Efficiency					
Cows per worker	32	32			
Milk sold/worker, lbs.	567,841	542,313			
Cost Control					
Grain & conc. purchased as % of milk sales	30%	30%	____ %	____ %	____ %
Dairy feed & crop exp. per cwt. milk	$ 5.19	$ 4.76	$____	$____	$____
Labor & mach. costs/cow	$ 1,002	$ 962	$____	$____	$____
Operating cost of producing cwt. of milk	$ 9.96	$ 10.52	$____	$____	$____
Capital Efficiency**					
Farm capital per cow	$ 5,987	$ 6,141	$____	$____	$____
Mach. & equip. per cow	$ 1,442	$ 1,452	$____	$____	$____
Asset turnover ratio	0.49	0.42			
Profitability					
Net farm income w/o apprec.	$ 32,574	$ 21,888	$____	$____	$____
Net farm income w/apprec.	$ 38,504	$ 26,249	$____	$____	$____
Labor & mgt. income per operator/manager	$ 6,616	$ -2,605	$____	$____	$____
Rate of return on equity capital w/appreciation	1.54%	-2.40%	____ %	____ %	____ %
Rate of return on all capital w/appreciation	2.96%	0.18%	____ %	____ %	____ %
Financial Summary					
Farm net worth, end year	$ 347,217	$ 359,338	$____	$____	$____
Debt to asset ratio	0.24	0.25			
Farm debt per cow	$ 1,478	$ 1,472	$____	$____	$____

*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. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
48 Southeastern New York Region Dairy Farms, 1995

Size of Business			Rate 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)
4.66	183	3,001,593	20,619	3.69	20.9	55	894,667
2.76	82	1,507,329	18,688	2.52	15.9	35	590,400
2.19	61	1,056,873	17,139	2.07	13.4	30	502,629
1.78	52	835,437	14,810	1.82	10.1	25	408,914
1.29	39	584,558	12,665	1.15	6.8	19	318,546

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)
$479	21%	$217	$692	$555	$3.50
557	27	326	796	665	4.30
625	30	405	942	776	4.74
757	33	466	1,146	893	5.14
898	39	617	1,426	1,057	5.88

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)
$2,718	$7.59	$12.81	$83,775	$78,758	$35,543	$58,674
2,483	9.60	14.48	35,921	32,055	6,168	20,511
2,280	10.65	15.56	23,414	18,284	-807	6,418
1,971	11.29	16.62	11,014	5,019	-16,505	-9,390
1,632	13.30	21.57	-12,063	-16,463	-47,700	-44,639

*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 321 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
321 New York Dairy Farms, 1994

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)
12.0	560	12,116,804	23,770	5.2	23	56	1,112,817
5.9	222	4,628,175	21,769	4.0	20	46	898,663
4.5	159	3,097,796	20,968	3.6	18	41	805,930
3.7	125	2,407,393	20,229	3.2	18	37	717,932
3.2	109	2,051,070	19,422	3.0	16	34	652,910
2.8	93	1,715,708	18,856	2.8	16	32	603,031
2.5	75	1,352,622	18,020	2.5	15	30	552,825
2.2	63	1,137,044	17,044	2.1	14	27	491,227
1.9	51	888,899	15,864	1.9	13	24	433,739
1.4	40	655,673	13,700	1.4	10	20	335,490

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)
$390	16%	$268	$677	$557	$3.27
525	22	326	814	686	3.86
577	24	362	878	747	4.12
646	26	401	938	800	4.35
700	28	436	998	851	4.53
740	29	471	1,062	898	4.72
786	31	508	1,119	955	4.90
846	32	548	1,192	1,016	5.17
918	35	618	1,295	1,092	5.46
1,030	40	762	1,536	1,239	6.35

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

FARM BUSINESS CHART FOR
FARM MANAGEMENT COOPERATORS
321 New York Dairy Farms, 1994

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)
$3,237	$14.37	$1,157	$6.99	$2,036	$11.93
2,932	14.01	1,490	8.63	2,332	12.83
2,800	13.73	1,658	9.22	2,505	13.49
2,709	13.53	1,777	9.68	2,639	13.96
2,612	13.41	1,878	10.00	2,765	14.33
2,514	13.28	1,999	10.47	2,859	14.71
2,408	13.15	2,123	10.82	2,948	15.18
2,285	13.06	2,233	11.28	3,063	15.84
2,101	12.96	2,414	11.86	3,186	16.85
1,823	12.52	2,676	13.34	3,584	19.32

Profitability						
Net Farm Income Without Appreciation			Net Farm Income With Appreciation		Labor & Management Income	
Total	Per Cow	As % of Total Accrual Receipts	Total	Per Cow	Per Farm	Per Operator
(3)	(10)	(3)	(3)	(10)	(3)	(3)
$239,265	$933	30.1%	$279,148	$1,059	$161,912	$117,425
92,824	674	21.6	110,046	776	52,012	32,058
69,505	562	18.6	79,444	649	34,836	21,472
53,962	477	16.2	63,874	566	22,844	15,807
40,913	407	14.0	51,109	486	14,533	10,440
31,093	351	12.0	38,382	428	7,210	5,358
23,412	280	9.4	29,118	349	-687	-562
16,656	198	7.0	21,263	244	-8,059	-6,460
6,546	74	2.6	11,292	143	-19,089	-16,158
-19,060	-207	-9.3	–13,065	-137	-49,541	-43,229

Farm Business Charts for farms with freestall barns and 180 cows or less and more than 180 cows, and farms with conventional barns with 60 cows or less and more than 60 cows are shown on pages 28-31.

Financial Analysis Chart

The farm financial analysis chart on page 25 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, 10, 14 and 20 of this publication. References to DFBS output page numbers for participating dairy farmers are provided in the table headings.

FINANCIAL ANAYLSIS CHART

321 New York Dairy Farms, 1994

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)
$43	$804	4.63	5%	$74
204	615	1.66	9	669
283	538	1.35	12	1,191
332	475	1.15	14	1,727
396	424	1.00	16	2,069
452	387	0.87	18	2,387
507	322	0.74	20	2,694
562	243	0.61	23	3,015
636	189	0.41	26	3,510
796	0	-0.08	35	4,398

Solvency				Profitability	
		Debt/Asset Ratio		Percent Rate of Return with appreciation on:	
Leverge Ratio**	Percent Equity	Current & Intermediate	Long Term	Equity	Total Capital
	(5)	(5)	(5)	(3)	(3)
0.01	99%	0.01	0.00	21%	13%
0.10	91	0.10	0.00	10	9
0.22	82	0.17	0.01	8	7
0.34	74	0.24	0.12	5	6
0.45	69	0.30	0.23	3	4
0.58	64	0.37	0.33	1	3
0.74	57	0.43	0.41	0	2
0.92	53	0.49	0.52	-2	0
1.20	45	0.58	0.64	-6	-1
3.54	31	0.81	0.91	-22	-6

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)	(6)
.75	$1,152	$571	$4,262	$182,925
.60	1,924	751	5,128	63,674
.55	2,232	902	5,569	41,117
.50	2,491	1,040	5,948	29,544
.47	2,764	1,167	6,368	20,624
.43	3,033	1,290	6,842	14,936
.39	3,377	1,443	7,447	8,501
.36	4,026	1,683	8,055	1,168
.32	4,698	1,969	8,891	-10,157
.25	6,692	2,703	11,657	-40,417

*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.

Comparison 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 have used as many of the same physical characteristics as possible as the farm being analyzed. To assist in this endeavor, dairy farms in the summary have been divided into those with freestall and those with conventional housing. Conventional housing includes stanchion and tiestall barns. Within each group, is a further classification by size of the dairy herd.

The table on page 27 includes the average values for the resulting four groups of dairy farms. The average size of farms in the four groups ranges from 48 cows on the small conventional farms to 397 cows on the large freestall farms.

The large freestall farms averaged the highest milk output per cow and per worker, the lowest total costs of production and investment per cow, and the greatest returns to labor, management and capital. The small freestall farms showed average profits somewhat higher than the large conventional farm businesses.

Farm business charts have been computed for each of the four housing and herd size categories and are on pages 28-31. 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.

Herd Size Comparisons

A detailed comparison of profitability, financial situation and business analysis factors across herd sizes is contained on pages 42-51 of the 1994 State Summary*. As herd size increases, the average profitability generally increases (pages 44-45). Net farm income without appreciation was $216,491 per farm for the 300 or more herd size group and $13,630 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 46-49)*, even though percent equity was higher on the smaller farms. The group with less than 40 cows 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 50-51)*. The farms with 300 and more cows per farm averaged 23 percent more milk sold per cow than the smallest farms. All of the groups with 85 or more cows averaged above 19,000 pounds of milk sold per cow while the farms smaller than 85 cows averaged 17,700 pounds of milk sold per cow. 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 335,069 pounds at the lowest herd size category up to 1,023,849 pounds at the largest size category.

*Smith, Stuart F., Wayne A. Knoblauch, and Linda D. Putnam, Dairy Farm Managment Business Summary, New York, 1994, Department of Agricultural, Resource, and Managerial Economics, Cornell University, R.B. 95-03, August 1995.

SELECTED BUSINESS FACTORS BY TYPE OF BARN AND HERD SIZE

299 New York Dairy Farms, 1994

Farms with:	Conventional		Freestall	
Item	<=60 Cows	>60 Cows	<=180 Cows	>180 Cows
Number of farms	69	71	96	63
Cropping Program Analysis				
Total Tillable acres	168	279	368	816
Tillable acres rented*	63	105	149	347
Hay crop acres*	109	156	185	350
Corn silage acres*	26	56	87	309
Hay crop, tons DM/acre	2.3	2.8	2.8	3.5
Corn silage, tons/acre	15.3	15.9	16.2	16.6
Oats, bushels/acre	93	63	44	74
Forage DM per cow, tons	8.1	8.6	8.5	7.3
Tillable acres/cow	3.5	3.2	3.1	2.1
Fert. & lime exp./tillable acre	$17.07	$23.51	$23.47	$29.43
Total machinery costs	$22,500	$40,129	$57,579	$158,497
Machinery cost/tillable acre	$134	$144	$156	$194
Dairy Analysis				
Number of cows	48	87	117	397
Number of heifers	38	69	94	296
Milk sold, lbs.	830,876	1,574,371	2,248,212	8,485,502
Milk sold/cow, lbs.	17,389	18,208	19,173	21,367
Operating cost of prod. milk/cwt.	$9.79	$10.26	$10.40	$10.67
Total cost of prod. milk/cwt.	$15.99	$14.91	$14.58	$13.19
Price/cwt. milk sold	$13.33	$13.39	$13.43	$13.48
Purchased dairy feed/cow	$682	$704	$746	$824
Purchased dairy feed/cwt. milk	$3.92	$3.87	$3.89	$3.86
Purchased grain & conc. as % of milk receipts	28%	28%	28%	28%
Purc. feed & crop exp./cwt. milk	$4.64	$4.69	$4.72	$4.51
Capital Efficiency				
Farm capital/worker	$200,704	$213,506	$246,293	$260,060
Farm capital/cow	$7,801	$6,977	$7,050	$5,774
Farm capital/tillable acre owned	$3,518	$3,449	$3,776	$4,889
Real estate/cow	$3,937	$3,229	$3,144	$2,533
Machinery investment/cow	$1,517	$1,359	$1,411	$916
Asset turnover ratio	0.35	0.41	0.44	0.58
Labor Efficiency				
Worker equivalent	1.86	2.83	3.36	8.82
Operator/manager equivalent	1.19	1.39	1.53	1.74
Milk sold/worker, lbs.	447,198	556,953	669,602	962,391
Cows/worker	26	30	35	45
Labor cost/cow	$663	$553	$536	$556
Labor cost/tillable acre	$189	$171	$171	$271
Profitability & Balance Sheet Analysis				
Net farm income (without appreciation)	$18,839	$31,295	$41,444	$146,748
Labor & mgmt. income/operator	$574	$4,422	$6,083	$46,382
Return on all capital with appreciation	0.4%	2.6%	3.8%	8.3%
Farm debt/cow	$2,025	$1,952	$2,286	$2,502
Percent equity	74%	72%	67%	56%

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

FARM BUSINESS CHART FOR SMALL CONVENTIONAL STALL DAIRY FARMS

69 Conventional Stall Dairy Farms with 60 or Less Cows, New York, 1994

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)
2.87	60	1,207,610	21,897	4.3	23	43	722,584
2.45	57	1,041,959	20,349	3.6	20	35	626,587
2.08	54	956,111	19,576	3.2	18	31	568,551
2.00	51	878,296	18,797	2.8	18	29	494,509
1.97	49	842,902	17,788	2.4	16	27	460,752
1.73	46	786,474	17,019	2.1	15	25	445,006
1.52	44	724,587	16,251	2.0	14	23	416,992
1.43	42	682,846	15,493	1.9	13	22	376,560
1.30	40	629,613	14,166	1.6	11	20	321,752
1.12	33	512,941	11,923	1.2	8	16	250,079

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)
$371	16%	$278	$715	$506	$3.17
472	21	318	853	618	3.74
526	24	366	935	667	3.96
558	25	414	1,025	701	4.14
594	27	443	1,082	747	4.36
649	28	475	1,132	792	4.60
707	30	505	1,200	837	4.94
756	33	539	1,298	900	5.30
840	36	591	1,401	1,021	5.57
977	42	831	1,817	1,214	6.50

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation Total	Net Farm Income Without Appreciation Per Cow	Labor & Mgmt. Inc. Per Oper.	Change in New Worth w/Apprec.
(10)	(10)	(10)	(3)	(10)	(3)	(6)
$2,925	$5.82	$12.53	$48,399	$1,005	$25,239	$43,090
2,714	7.67	13.97	37,980	790	14,750	26,488
2,610	8.60	14.47	28,428	623	10,716	19,929
2,522	9.14	14.89	23,201	480	5,469	16,186
2,390	9.43	15.36	20,798	413	1,841	12,027
2,246	9.84	15.86	16,706	363	-1,561	8,102
2,141	10.65	16.51	13,819	296	-4,656	2,548
2,056	11.13	17.33	8,453	166	-8,365	-93
1,895	11.63	18.26	52	1	-18,289	-7,737
1,594	13.63	23.01	-14,172	-335	-31,199	-13,856

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

FARM BUSINESS CHART FOR LARGE CONVENTIONAL STALL DAIRY FARMS

71 Conventional Stall Dairy Farms with More Than 60 Cows, New York, 1994

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)
4.69	133	2,488,241	22,189	5.1	24	48	916,052
3.57	108	2,024,167	20,323	3.9	20	39	693,816
3.10	97	1,858,587	19,731	3.5	18	36	651,968
2.84	91	1,640,996	19,070	3.1	17	33	615,426
2.65	81	1,514,509	18,843	2.9	16	32	582,121
2.53	77	1,367,445	18,327	2.7	15	30	532,500
2.48	72	1,283,594	17,406	2.4	15	28	500,895
2.28	68	1,234,765	16,563	2.2	13	26	455,380
2.08	66	1,155,076	15,388	2.0	12	24	424,899
1.78	63	1,045,775	13,835	1.5	9	21	375,069

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)
$301	14%	$272	$725	$467	$2.89
462	19	331	831	651	3.66
546	22	367	877	713	4.01
624	26	397	945	762	4.32
672	28	425	978	819	4.55
734	30	459	1,031	876	4.78
760	32	494	1,077	925	4.99
824	33	539	1,142	978	5.20
907	36	624	1,264	1,077	5.52
1,028	41	710	1,386	1,224	6.59

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation Total	Net Farm Income Without Appreciation Per Cow	Labor & Mgmt. Inc. Per Oper.	Change in New Worth w/Apprec.
(10)	(10)	(10)	(3)	(10)	(3)	(6)
$3,018	$6.59	$12.25	$79,785	$963	$28,947	$70,776
2,742	8.57	13.35	56,214	662	20,229	33,799
2,643	8.99	13.79	45,816	538	16,010	21,384
2,563	9.61	14.19	37,113	469	12,516	16,067
2,517	10.09	14.64	31,998	401	7,265	12,983
2,445	10.55	15.00	27,327	341	3,312	7,707
2,350	10.89	15.37	23,653	247	-3,056	3,124
2,210	11.22	15.92	20,396	203	-10,172	-5,502
2,016	11.76	16.80	6,705	91	-16,348	-16,437
1,816	13.36	18.03	-22,986	-271	-40,921	-39,771

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

FARM BUSINESS CHART FOR SMALL FREESTALL DAIRY FARMS

96 Freestall Barn Dairy Farms with 180 or Less Cows, New York, 1994

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)
5.37	174	3,614,047	23,575	5.5	24	55	1,012,453
4.44	157	3,072,976	21,582	3.8	20	49	857,659
4.01	138	2,638,806	20,823	3.5	18	42	803,445
3.58	125	2,446,302	19,939	3.1	17	38	738,212
3.38	119	2,258,914	19,272	2.9	16	35	680,046
3.11	112	2,092,444	18,731	2.8	15	33	624,360
2.90	105	1,936,985	17,842	2.5	15	31	592,821
2.51	96	1,767,311	17,144	2.1	14	29	561,754
2.23	78	1,390,495	16,361	1.8	13	27	513,673
1.63	55	971,149	14,507	1.4	11	22	405,611

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)
$409	16%	$277	$673	$610	$3.25
535	21	335	771	718	3.83
565	23	374	855	762	4.12
633	26	415	908	799	4.35
681	28	456	969	830	4.55
708	29	485	1,052	870	4.73
761	31	528	1,139	933	4.95
828	32	592	1,196	1,011	5.20
931	35	670	1,299	1,090	5.42
1,036	39	799	1,521	1,212	6.21

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation Total	Net Farm Income Without Appreciation Per Cow	Labor & Mgmt. Inc. Per Oper.	Change in New Worth w/Apprec.
(10)	(10)	(10)	(3)	(10)	(3)	(6)
$3,179	$7.55	$11.98	$106,326	$891	$51,358	$82,133
2,893	8.72	12.70	75,881	674	30,690	60,699
2,777	9.29	13.30	67,616	586	22,390	46,520
2,695	9.69	13.69	55,575	512	16,320	37,968
2,589	9.86	14.10	47,285	410	9,432	28,369
2,478	10.21	14.58	34,062	303	2,313	19,485
2,388	10.55	15.18	24,908	228	-3,360	11,255
2,321	11.24	15.91	14,979	134	-11,679	1,005
2,201	11.94	16.77	1,574	15	-19,757	-17,501
1,927	13.53	18.49	-29,062	-226	-55,063	-53,185

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

FARM BUSINESS CHART FOR LARGE FREESTALL DAIRY FARMS

63 Freestall Barn Dairy Farms with More Than 180 Cows, New York, 1994

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)
20.63	1,088	23,351,762	24,801	5.5	22	65	1,306,713
11.96	539	11,657,338	23,472	4.4	20	53	1,093,175
10.13	420	9,575,213	22,655	4.1	19	47	1,011,822
8.52	365	7,921,542	21,928	3.7	18	46	964,401
7.38	311	6,515,416	21,395	3.5	16	44	933,249
6.76	243	5,612,972	20,967	3.2	15	42	901,922
6.03	234	4,922,221	20,780	3.1	15	40	850,753
5.39	225	4,551,060	20,134	2.8	15	37	813,336
4.88	213	4,167,979	18,893	2.4	14	35	717,586
3.79	192	3,391,553	15,710	1.6	12	30	616,668

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)
$535	21%	$233	$606	$706	$3.84
688	24	295	755	871	4.05
728	25	330	858	895	4.24
750	27	357	895	917	4.40
782	27	386	943	954	4.51
804	28	426	982	986	4.65
847	29	468	1,039	1,019	4.74
881	31	514	1,110	1,053	4.85
928	32	547	1,158	1,102	5.12
1,012	35	614	1,324	1,208	5.62

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation		Labor & Mgmt. Inc. Per Oper.	Change in New Worth w/Apprec.
			Total	Per Cow		
(10)	(10)	(10)	(3)	(10)	(3)	(6)
$3,443	$8.83	$11.90	$507,138	$668	$289,802	$432,825
3,188	9.72	12.25	230,200	548	99,946	135,938
3,073	10.00	12.51	159,773	448	68,360	103,969
2,969	10.33	12.91	126,018	405	44,867	73,654
2,889	10.66	13.38	112,980	373	28,779	59,734
2,831	10.84	13.84	98,201	335	19,135	37,055
2,760	11.10	14.02	82,247	312	13,143	23,094
2,676	11.58	14.30	65,473	236	4,724	10,247
2,529	11.96	14.62	21,692	90	-8,715	-13,935
2,109	12.82	15.69	-12,379	-58	-50,954	-49,453

*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 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 desired 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. Goals should be Timed with a designated date by which the goal will be achieved.

Goal setting on a dairy farm should be 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

_____

_____

_____

_____

_____

_____

_____

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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 22-25 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:	Needs 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 12)

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.

bST Usage - An estimate of the percentage of herd, on average, that was injected with bovine somatotropin during the year.

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 14)

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)

Current Portion - (defined on page 7)

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 10)

Deferred Taxes - (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 14.

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 19)

Opportunity Costs - 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; bST, DHIC, 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 the costs including the opportunity costs of the owner/manager's labor, management, and equity capital.

Purchased Inputs Cost of Producing Milk - (defined on page 19)

Renter - Farm business owner/operator owns no tillable land and commonly rents all other farm real estate.

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)

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 19)

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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NOTES

OTHER A.R.M.E. EXTENSION BULLETINS

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No. 96-07	Dairy Farm Business Summary Northern Hudson Region 1995	Stuart F. Smith Linda D. Putnam Cathy S. Wickswat Sandra Buxton David R. Wood
No. 96-08	New York Large Herd Farms, 300 Cows or Larger 1995	Jason Karszes Stuart F. Smith Linda D. Putnam
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No. 96-11	Dairy Farm Business Summary Central Valleys Region 1995	Eddy L. LaDue Stuart F. Smith Karen Livingston James A. Hilson A. Edward Staehr Thomas Weeks Jacqueline M. Hilts Charles Z. Radick Linda D. Putnam