DAIRY FARM BUSINESS SUMMARY

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EASTERN NEW YORK RENTER SUMMARY 1996

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EASTERN NEW YORK RENTERS
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1996 EASTERN NEW YORK DAIRY FARM RENTER BUSINESS SUMMARY

INTRODUCTION

Dairy farmers throughout New York State submit business records for summarization and analysis through Cornell Cooperative Extension's Farm Business Management Program. Averages from a compilation of the individual farm reports are published in six regional summaries and in one statewide summary.[1]

Accrual procedures have been used to provide the most accurate accounting of farm receipts and farm expenses for measuring farm profits. An explanation of these procedures is found on pages 4-6. Three measures of farm profits are calculated on pages 7 and 8. The balance sheet, statement of owner equity, and cash flow statement are featured on pages 9-16. The dairy program analysis includes data on the costs of producing milk (pages 19 and 20).

This Eastern New York Dairy Farm Renter Business Summary is an average of 28 businesses that are renting substantially all of the farm real estate. The farm income, financial summary, and business analysis sections of this report include comparisons with average data on 147 owned dairy farms in the region. This report is prepared in workbook form for farm renters to use in the systematic study of their farm business operations.

Business records for 28 farms in Columbia, Cortland, Delaware, Essex, Lewis, Madison, Oneida, Orange, Rensselaer, Schoharie, Sullivan, and Washington Counties are summarized in this publication. The Eastern New York region consists of these counties plus Albany, Chenango, Dutchess, Fulton, Greene, Herkimer, Montgomery, Otsego, Saratoga, Schenectady, and Ulster Counties which do not have dairy farm business summary participants that classify as renters (see Figure 1 on page 2). The 147 owned dairy farms summarized in this publication include farms from the entire region.

The Eastern New York Renter Summary for 1995 contained an average for 31 farms. On average, the 28 farms in 1996 are smaller than the 31 farms in 1995.

Use Comparative Profitability Data With Caution

The profitability analysis on page 8 where labor and management income is calculated implies that renting a dairy farm is more profitable than owning one. Concessionary rental rates set by some land owners is a major factor. The farm owners are often father and mother and other landlords who are willing to accept a very low return for their investment. Total real estate costs including depreciation and interest on real estate investment averaged $138 per tillable acre on the owned dairy farms compared to only $115 on the rented farms. This accounts for a $23,047 difference in costs between owned and rented farms.

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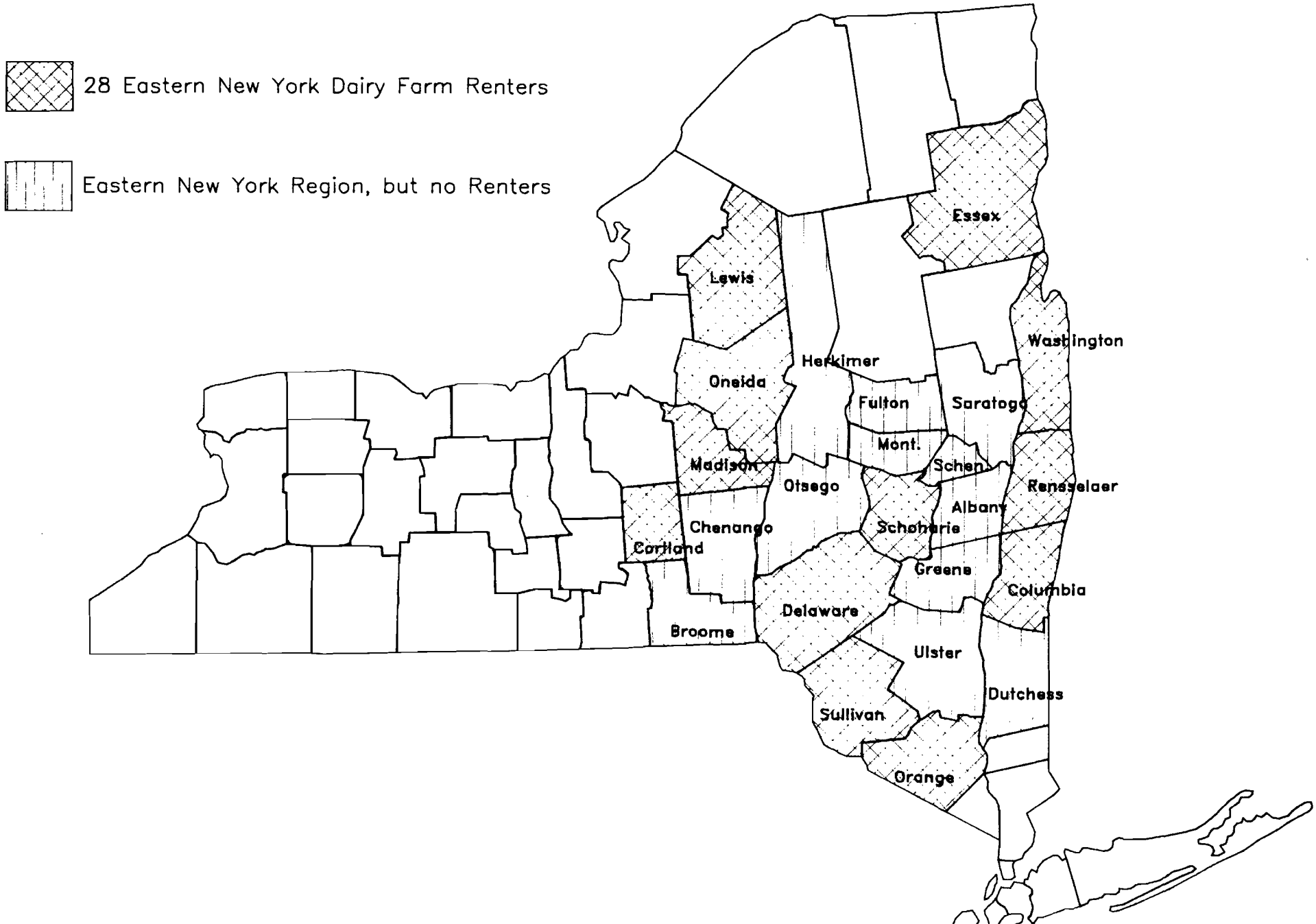
[1]Wayne A. Knoblauch, and Linda D. Putnam, Dairy Farm Management Business Summary, New York, 1996, R.B. 97-14, September 1997.

Figure 1. Location of Eastern New York Dairy Farm Renters, 1996.



SUMMARY AND ANALYSIS OF THE FARM BUSINESS

Business Characteristics and Resources Used

Recognition of important business characteristics and identification of the farm resources used are necessary for evaluating management performance. The combination of resources and management practices is known as farm organization. Important farm business characteristics, the number of farms reporting these characteristics, and a listing of the average labor, land, and dairy cattle resources used are presented in the following table.

BUSINESS CHARACTERISTICS AND RESOURCES USED
28 Eastern New York Dairy Farm Renters, 1996

Type of Business	Number
Single proprietorship	18
Partnership	9
Corporation	1
Milking System	Number
Dumping station	0
Pipeline	21
Herringbone parlor	5
Other parlor	2
Type of Barn	Number
Stanchion	22
Freestall	6
Combination	0
Dairy Records Service	Number
DHIC	20
DHIC Owner-Sampler	4
Other	1
None	3
Business Record System	Number
Account Book	15
Agrifax (mail-in only)	1
Other	3
On-farm computer	9

bST Usage	Number
Used on <25% of herd	3
Used on 25-75% of herd	4
Used on >75% of herd	1
Stopped using in 1996	2
Not used in 1996	18

Labor Force*	My Farm	Average
Operator 1	____mo.	13.5
Operator 2	____mo.	5.3
Operator 3	____mo.	0.4
Family paid	____mo.	3.2
Family unpaid	____mo.	3.5
Hired	____mo.	4.7
Total	____mo.	30.6
Worker equivalent (total ÷ 12)	_____	2.55
Operator/Manager Equiv.	_____	1.53

Land Use	My Farm	Average
Total acres rented	_____	287
Tillable acres rented	_____	201

Number of Cows	My Farm	Average
Beg. year (owned)	_____	80
End year (owned & leased)	_____	85
Average for year (owned & leased)	_____	82

*Based on hours actually worked by owner/operator, instead of standard 12 months per full-time owner/operator. The standard 12 months is used for operator/manager equivalent when calculating labor and management income per operator.

Predominate business characteristics of the 28 rented farms include the single proprietorship, pipeline milking system, stanchion or conventional stall barn, DHIC herd records and an account book record system. Thirty-two percent of the renters were using on-farm computers compared to 37 percent of the owners.

The average size of the labor force on the rented farms was 25 percent less than the 3.42 worker equivalent on owned farms. The rented farms averaged 201 tillable acres and 82 cows compared to 333 tillable acres and 115 cows on the 147 owned dairy farms in the same region. The owned farms averaged 34 cows per worker, compared to 32 cows per worker on the rented farms. In 1996, the rented farms did not use land and labor resources as efficiently as the owned farms.

Income Statement

The accrual income statement begins with an accounting of all farm business expenses.

CASH AND ACCRUAL FARM EXPENSES
28 Eastern New York Dairy Farm Renters, 1996

Expense Item	Cash Paid	-	Inventory or Prepaid Expense	+	Change in Accounts Payable	=	Accrual Expenses	Percent of Total
Hired Labor	$ 12,100		$ 0	<<	$ 0		$ 12,100	6
Feed								
Dairy grain & concentrate	72,019		2,126		-463		69,429	36
Dairy roughage	7,059		-161		620		7,840	4
Other livestock	0		0		0		0	0
Machinery								
Machinery, hire, rent & lease	1,674		0	<<	0		1,674	1
Machinery repair & farm veh. exp.	14,724		123		-41		14,560	7
Fuel, oil & grease	5,382		24		-35		5,323	3
Livestock								
Replacement livestock	2,983		0	<<	-14		2,969	2
Breeding	3,380		6		-26		3,348	2
Vet & medicine	4,957		0		-308		4,649	2
Milk marketing	11,301		0	<<	0		11,301	6
Bedding	1,295		-144		0		1,439	1
Milking supplies	5,232		15		-221		4,996	3
Cattle lease & rent	18		0	<<	0		18	<1
Custom boarding	190		0	<<	0		190	<1
Other livestock expense	4,742		25		0		4,717	2
Crops								
Fertilizer & lime	6,055		611		-81		5,363	3
Seeds & plants	2,682		209		-248		2,225	1
Spray, other crop expense	3,933		28		-127		3,778	2
Real Estate								
Land, building & fence repair	2,969		10		-63		2,895	1
Taxes	929		0	<<	32		961	<1
Rent & lease	15,387		0	<<	89		15,476	8
Other								
Insurance	2,567		0	<<	27		2,593	1
Utilities (farm share)	7,398		0	<<	4		7,402	4
Interest paid	7,194		0	<<	0		7,194	4
Miscellaneous	2,450		0		13		2,463	1
Total Operating	$ 198,620		$ 2,873		$ -844		$ 194,904	100
Expansion livestock	$ 2,972		$ 0	<<	$ 0		$ 2,972	
Machinery depreciation							10,350	
Building depreciation							2,651	
TOTAL ACCRUAL EXPENSES							$ 210,877	

Cash paid is the actual amount of money paid out during the year and does not necessarily represent the cost of goods and services actually used.

Change in inventory: An increase in inventory is subtracted in computing accrual expenses because it represents purchased inputs not actually used during the year. A decrease in inventory is added to expenses because it represents the cost of inputs purchased in a prior year and used this year.

Changes in prepaid expenses apply to non-inventory categories (noted by << in the tables). Include any expenses that have been paid for in advance of their use, for example, 1997 rent paid in 1996. A positive change is the amount the prepayment account increased from beginning to end year, a negative change indicates a decline in the account.

Change in accounts payable: An increase in payables 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.

Worksheets are provided to enable any dairy farmer to compute his or her accrual farm expenses and compare them with the averages on the previous page.

CASH AND ACCRUAL FARM EXPENSES WORKSHEET

Expense Item	Cash Paid	-	Inventory or Prepaid Expense	+	Change in Accounts Payable	=	Accrual Expenses
Hired Labor	$ _____		$ _____	<<	$ _____		$ _____
Feed							
Dairy grain & concentrate	_____		_____		_____		_____
Dairy roughage	_____		_____		_____		_____
Other livestock	_____		_____		_____		_____
Machinery							
Machinery, hire, rent & lease	_____		_____	<<	_____		_____
Machinery repair & farm veh. exp.	_____		_____		_____		_____
Fuel, oil & grease	_____		_____		_____		_____
Livestock							
Replacement livestock	_____		_____	<<	_____		_____
Breeding	_____		_____		_____		_____
Vet & medicine	_____		_____		_____		_____
Milk marketing	_____		_____	<<	_____		_____
Bedding	_____		_____		_____		_____
Milking supplies	_____		_____		_____		_____
Cattle lease & rent	_____		_____	<<	_____		_____
Custom boarding	_____		_____	<<	_____		_____
Other livestock expense	_____		_____		_____		_____
Crops							
Fertilizer & lime	_____		_____		_____		_____
Seeds & plants	_____		_____		_____		_____
Spray, other crop expense	_____		_____		_____		_____
Real Estate							
Land, building & fence repair	_____		_____		_____		_____
Taxes	_____		_____	<<	_____		_____
Rent & lease	_____		_____	<<	_____		_____
Other							
Insurance	_____		_____	<<	_____		_____
Utilities (farm share)	_____		_____	<<	_____		_____
Interest paid	_____		_____	<<	_____		_____
Miscellaneous	_____		_____		_____		_____
Total Operating	$ _____		$ _____		$ _____		$ _____
Expansion livestock	$ _____		$ _____	<<	$ _____		$ _____
Machinery depreciation							_____
Building depreciation							_____
TOTAL ACCRUAL EXPENSES							$ _____

CASH AND ACCRUAL FARM RECEIPTS
28 Eastern New York Dairy Farm Renters, 1996

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Expenses
Milk Sales	$ 220,585				$ 1,039		$ 221,624
Dairy cattle	7,516		$ 7,159		0		14,675
Dairy calves	1,348				0		1,348
Other livestock	80		102		0		182
Crops	2,285		2,428		-65		4,648
Government receipts	3,739		0*		0		3,739
Custom machine work	1,199				-58		1,141
Gas tax refund	83				0		83
Other	2,350				3		2,353
- Nonfarm noncash capital**			(-) 0				(-) 0
Total Accrual Receipts	$ 239,184		$ 9,689		$ 920		$ 249,792

*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 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 for quality are subtracted. Changes in inventories of crops grown are also calculated. Changes in advanced government receipts are calculated by subtracting the end year balance from the beginning year balance (balances are listed with the current liabilities on the Balance Sheet).

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 farmer during the year.

CASH AND ACCRUAL FARM RECEIPT WORKSHEET

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Expenses
Milk Sales	$				$		$
Dairy cattle			$				
Dairy calves							
Other livestock							
Crops							
Government receipts							
Custom machine work							
Gas tax refund							
Other							
- Nonfarm noncash capital**			(-)				(-)
Total Accrual Receipts	$		$		$		$

Profitability Analysis

Farm owners/operators contribute labor, management, and capital to their businesses and the best combination of these resources maximizes income. 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 total combined return to the farm operator(s) 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 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 stock). Appreciation is a major factor contributing to changes in farm net worth and must be included for a complete profitability analysis.

NET FARM INCOME
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Total accrual receipts	$ 249,792	$ 370,686	$ _____
+ Appreciation: Livestock	-723	860	_____
Machinery	3,098	1,970	_____
Real Estate	1,643	5,447	_____
Other Stock & Certificates	301	223	_____
= Total Including Appreciation	$ 254,111	$ 379,186	$ _____
- Total accrual expenses	210,877	326,014	_____
= Net Farm Income (with appreciation)	$ 43,234	$ 53,172	$ _____
Per cow	$ 521	$ 462	$ _____
Net Farm Income (without appreciation)	$ 38,915	$ 44,672	$ _____
Per cow	$ 469	$ 388	$ _____

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 from net farm income excluding appreciation a charge for unpaid family labor and the opportunity cost of using equity capital at a 5 percent interest rate. The interest charge of 5 percent reflects the long-term average rate of return that a farmer might expect to earn in comparable risk investments in a low inflation economy.

LABOR AND MANAGEMENT INCOME
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Net farm income without appreciation	$ 38,915	$ 44,672	$ _____
- Family labor unpaid @ $1,500 per month	- 5,400	- 4,200	- _____
- Interest on average equity capital @ 5% real rate	- 10,352	- 27,003	- _____
= Labor & Management Income	$ 23,163	$ 13,469	$ _____
Labor & Management Income per Operator/Manager	$ 15,139	$ 8,314	$ _____

Return to equity capital measures the net return remaining for the farmer's equity or owned capital after a charge has been made for unpaid family labor and 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 to 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 to all capital is calculated by adding interest paid to the return to equity capital and then dividing by average farm assets to calculate the rate of return on average total capital.

RETURN TO EQUITY CAPITAL AND RETURN TO ALL CAPITAL
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Net farm income with appreciation	$ 43,234	$ 53,172	$ _____
- Family labor unpaid @ 1,500 per month	$ 5,400	$ 4,200	$ _____
- Value of operators' labor & management	31,685	33,020	_____
= Return to equity capital with appreciation	$ 6,149	$ 15,952	$ _____
+ Interest paid	7,194	19,410	_____
= Return to all capital with appreciation	$ 13,343	$ 35,362	$ _____
Return to equity capital without appreciation	$ 1,830	$ 7,452	$ _____
Return to all capital without appreciation	$ 9,024	$ 26,862	$ _____
Rate of return on average equity capital:			
with appreciation	3.0%	3.0%	_____ %
without appreciation	0.9%	1.4%	_____ %
Rate of return on all capital:			
with appreciation	4.5%	4.4%	_____ %
without appreciation	3.0%	3.4%	_____ %

Farm and Family Financial Status

The first step in evaluating the financial status 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.

1996 FARM BUSINESS & NONFARM BALANCE SHEET
28 Eastern New York Dairy Farm Renters

Farm Assets	Jan. 1	Dec. 28
Current		
Farm cash, checking & savings	$ 9,475	$ 9,435
Accounts receivable	16,472	17,392
Prepaid expenses	0	0
Feed & supplies	36,077	41,378
Total Current	$ 62,024	$ 68,205
Intermediate		
Dairy Cows:		
owned	$ 82,749	$ 86,521
leased	45	32
Heifers	33,101	35,835
Bulls & other livestock	759	789
Mach. & equip. owned	82,004	89,372
Mach. & equip. leased	249	167
Farm Credit stock	840	1,062
Other stock & cert.	3,747	4,270
Total Intermediate	$ 203,494	$ 218,048
Long Term		
Land & buildings:		
owned	$ 19,713	$ 23,822
leased	0	0
Total Long Term	$ 19,713	$ 23,822
Total Farm Assets	$ 285,231	$ 310,075

Farm Liabilities & Net Worth	Jan. 1	Dec. 28
Current		
Accounts payable	$ 4,909	$ 4,065
Operating debt	2,990	4,472
Short term	3,688	3,122
Advanced gov't. receipt	0	0
Current portion:		
Intermediate	11,365	14,388
Long term	756	867
Total Current	$ 23,708	$ 26,914
Intermediate		
Structured debt		
1-10 years	$ 48,041	$ 46,856
Financial lease (cattle & machinery)	294	199
Farm Credit stock	840	1,062
Total Intermediate	$ 49,175	$ 48,117
Long Term		
Structured debt		
≥ 10 years	$ 17,165	$ 16,141
Financial lease (structures)	0	0
Total Long Term	$ 17,165	$ 16,141
Total Farm Liabilities	$ 90,048	$ 91,172
FARM NET WORTH	$ 195,183	$ 218,903

(Average for 13 farms reporting)

Nonfarm Assets*	Jan.1	Dec. 28
Personal cash, checking & savings	$ 5,301	$ 8,834
Cash value life ins.	7,900	8,725
Nonfarm real estate	23,846	23,846
Auto (personal share)	5,292	6,785
Stocks & bonds	2,817	4,700
Household furn.	8,538	8,585
All other	8,284	7,789
Total Nonfarm	$ 61,978	$ 69,264

Nonfarm Liabilities* & Net Worth	Jan. 1	Dec. 28
Nonfarm Liabilities	$ 8,033	$ 8,394
NONFARM NET WORTH	$ 53,945	$ 60,870

FARM & NONFARM**	Jan. 1	Dec. 28
Total Assets	$ 347,209	$ 379,339
Total Liabilities	98,081	99,566
TOTAL FARM & NON-FARM NET WORTH	$ 249,128	$ 279,773

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

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.

Advance government receipts are included as current liabilities. Government payments received in 1996 that are for participation in the 1997 program are the end year balance and payments received in 1995 for participation in the 1996 program are the beginning year balance.

Date _____

1996 FARM BUSINESS & NONFARM BALANCE SHEET

Farm Assets	Jan. 1	Dec. 28	Farm Liabilities & Net Worth	Jan. 1	Dec. 28
Current			Current		
Farm cash, checking & savings			Accounts payable		
			Operating debt		
Accounts receivable			Short term		
Prepaid expenses			Advanced gov't. receipt		
Feed & supplies			Current portion:		
Total Current			Intermediate		
			Long term		
			Total Current		
Intermediate			Intermediate		
Dairy Cows:					
owned					
leased			Financial lease		
Heifers			(cattle & machinery)		
Bulls & other livestock			Farm Credit stock		
Mach. & equip. owned			Total Intermediate		
Mach. & equip. leased					
Farm Credit stock			Long Term		
Other stock & cert.					
Total Intermediate					
Long Term			Financial lease		
Land & buildings:			(structures)		
owned			Total Long Term		
leased					
Total Long Term			Total Farm Liabilities		
Total Farm Assets			FARM NET WORTH		

Nonfarm Assets	Jan.1	Dec. 28	Nonfarm Liabilities & Net Worth	Jan. 1	Dec. 28
Personal cash, checking & savings			Nonfarm Liabilities		
Cash value life ins.					
Nonfarm real estate					
Auto (personal share)					
Stocks & bonds			Total Nonfarm Liabilities		
Household furn.					
All other			Nonfarm Net Worth		
Total Nonfarm					

TOTAL FARM & NONFARM	Jan. 1	Dec. 28
Total Farm and Nonfarm Assets		
Less Total Farm & Nonfarm Liabilities		
Farm & Nonfarm Net Worth		

Balance sheet analysis requires an examination of financial and debt ratios measuring levels of debt. Percent equity is calculated by dividing end of year net worth by end of year assets. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect strength in solvency and the potential capacity to borrow. Debt levels per unit of production include some old standards that are still useful if used with measures of cash flow and repayment ability. The change in farm net worth without appreciation is an excellent indicator of financial progress.

BALANCE SHEET ANALYSIS
Easter New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Financial Ratios - Farm:			
Percent equity	71%	68%	_____ %
Debt/asset ratio: total	0.29	0.32	_____
long term	0.68	0.31	_____
intermediate & current	0.26	0.33	_____
Farm Debt Analysis:			
Accounts payable as % of total debt	4%	4%	_____ %
Long term liabilities as a % of total debt	18%	45%	_____ %
Current & intermediate liabilities as a % of total debt	82%	55%	_____ %
Farm Debt Levels Per Cow:			
Total farm debt	$ 1,073	$ 2,204	$ _____
Long term debt	$ 190	$ 998	$ _____
Intermediate & long term debt	$ 756	$ 1,799	$ _____
Intermediate & current debt	$ 883	$ 1,207	$ _____

Farm inventory balance is an accounting of the value of machinery and equipment 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 MACHINERY AND EQUIPMENT INVENTORY BALANCE
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters		147 Dairy Farm Owners		My Farm	
Value beginning of year		$ 82,004		$ 139,851		$ _____
Purchases	$ 15,880		$ 22,338		$ _____	
+ Nonfarm noncash transfer	0		845		_____	
- Net Sales	1,259		1,269		_____	
- Depreciation	10,350		15,714		_____	
= Net investment		4,270		6,202		_____
+ Appreciation		3,098		1,970		_____
= Value end of year		$ 89,372		$ 148,023		$ _____

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 the farmer 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)
28 Eastern New York Dairy Farm Renters, 1996

Item	Average		My Farm	
Beginning of year farm net worth		$ 195,183		$ _____
Net farm income without appreciation	$ 38,915		$ _____	
+ Nonfarm cash income	+ 6,267		+ _____	
- Personal withdrawals & family expenditures excluding nonfarm borrowings	- 26,502		- _____	
RETAINED EARNINGS		+ $ 18,680		+ $ _____
Nonfarm noncash transfers to farm	$ 0		$ _____	
+ Cash used in business from nonfarm capital	+ 1,261		+ _____	
- Note/mortgage from farm real estate sold (nonfarm)	- 0		- _____	
CONTRIBUTED/WITHDRAWN CAPITAL		+ $ 1,261		+ $ _____
Appreciation	$ 4,319		$ _____	
- Lost capital	- 1,123		- _____	
CHANGE IN VALUATION EQUITY		+ $ 3,196		+ $ _____
IMBALANCE/ERROR		- $ -583		- $ _____
End of year farm net worth*		= $ 218,903		= $ _____
Change in net worth with appreciation.		$ 23,720		$ _____

Change in Net Worth		
Without appreciation	$ 19,401	$_____
With appreciation	$ 23,720	$_____

*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
28 Eastern New York Dairy Farm Renters, 1996

Item		Average	
Cash Flow from Operating Activities			
Cash farm receipts	$ 239,184		
- Cash farm expenses	198,620		
= Net cash farm income		$ 40,564	
Personal withdrawals & family expenses including nonfarm debt payments	$ 27,037		
- Nonfarm income	6,267		
- Net cash withdrawals from the farm		$ 20,770	
= Net Provided by Operating Activities			$ 19,794
Cash Flow From Investing Activities			
Sale of assets: Machinery	$ 1,259		
+ real estate	0		
+ other stock & certificates	0		
= Total asset sales		$ 1,259	
Capital purchases: expansion livestock	$ 2,972		
+ machinery	15,880		
+ real estate	6,239		
+ other stock & certificates	222		
- Total invested in farm assets		$ 25,313	
= Net Provided by Investment Activities			$ -24,054
Cash Flow From Financing Activities			
Money borrowed (intermediate & long term)	$ 15,082		
+ Money borrowed (short term)	1,437		
+ Increase in operating debt	1,482		
+ Cash from nonfarm capital used in business	1,261		
+ Money borrowed - nonfarm	535		
= Cash inflow from financing		$ 19,797	
Principal payments (intermediate & long term)	$ 14,157		
+ Principal payments (short term)	2,003		
+ Decrease in operating debt	0		
- Cash outflow for financing		$ 16,160	
= Net Provided by Financing Activities			$ 3,637
Cash Flow From Reserves			
Beginning farm cash, checking & savings		$ 9,475	
- Ending farm cash, checking & savings		9,435	
= Net Provided from Reserves			$ 40
Imbalance (error)			$ -583

ANNUAL CASH FLOW STATEMENT

Item		My Farm	
Cash Flow from Operating Activities			
Cash farm receipts	$_____		
- Cash farm expenses	_____		
= Net cash farm income		$_____	
Personal withdrawals & family expenses including nonfarm debt payments	$_____		
- Nonfarm income	_____		
- Net cash withdrawals from the farm		$_____	
= Net Provided by Operating Activities			$_____
Cash Flow From Investing Activities			
Sale of assets: Machinery	$_____		
+ real estate	_____		
+ other stock & certificates	_____		
= Total asset sales		$_____	
Capital purchases: expansion livestock	$_____		
+ machinery	_____		
+ real estate	_____		
+ other stock & certificates	_____		
- 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

The second step in 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 1997. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 1997 debt payments shown below.

FARM DEBT PAYMENTS PLANNED
Same 21 Eastern New York Dairy Farm Renters, 1996*

	Average			My Farm		
	1996 Payments		Planned	1996 Payments		Planned
Debt Payments	Planned	Made	1997	Planned	Made	1997
Long-term	$ 2,661	$ 2,832	$ 2,661	$ _____	$ _____	$ _____
Intermediate-term	13,037	14,339	14,488	_____	_____	_____
Short-term	2,029	2,450	2,788	_____	_____	_____
Operating (net red.)	420	0	86	_____	_____	_____
Accounts payable (net reduction)	171	871	190	_____	_____	_____
Total	$ 18,318	$ 20,492	$ 20,213	$ _____	$ _____	$ _____
Per cow	$ 197	$ 223		$ _____	$ _____	
Per cwt. 1996 milk	$ 1.12	$ 1.28		$ _____	$ _____	
Percent of total 1996 receipts	7%	8%		_____	_____	
Percent of 1996 milk receipts	7%	8%		_____	_____	

*Farms that completed Dairy Farm Business Summaries for both 1995 and 1996.

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 planned payments that could have been made with last year's available cash flow. Farmers that did not participate in DFBS last year will find in their report a cash flow coverage ratio based on planned debt payments for 1997.

CASH FLOW COVERAGE RATIO
Eastern New York Dairy Farm Renters and Owners, 1996

Item	Same 21 Farm Renters	Same 120 Farm Owners	My Farm
Cash farm receipts	$ 262,745	$ 373,363	$ _____
- Cash farm expenses	216,176	316,077	_____
+ Interest paid	6,568	19,650	_____
- Net personal withdrawals from farm*	24,169	27,316	_____
(A) = Amount Available for Debt Service	$ 28,968	$ 49,620	$ _____
(B) = Debt Payments Planned for 1996 (as of December 28, 1995)	$ 18,318	$ 48,997	$ _____
(A ÷ B) = Cash Flow Coverage Ratio for 1996	1.58	1.01	_____

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

ANNUAL CASH FLOW WORKSHEET

Item	28 Dairy Farm Renters	My Farm Total	My Farm Per Cow	Expected Change	1997 Projection
	(per cow)				
Average number of cows	82				
Accrual Operating Receipts					
Milk	$ 2,703	$	$		$
Dairy cattle	179				
Dairy calves	16				
Other livestock	2				
Crops	57				
Misc. receipts	84				
Total	$ 3,046	$	$		$
Accrual Operating Expenses					
Hired labor	$ 148	$	$		$
Dairy grain & concentrate	847				
Dairy roughage	96				
Other livestock feed	0				
Machinery hire, rent & lease	20				
Machinery repair & vehicle exp.	178				
Fuel, oil & grease	65				
Replacement livestock	36				
Breeding	41				
Vet & medicine	57				
Milk marketing	138				
Bedding	18				
Milking supplies	61				
Cattle lease	0				
Custom boarding	2				
Other livestock expense	58				
Fertilizer & lime	65				
Seeds & plants	27				
Spray & other crop expense	46				
Land, building & fence repair	35				
Taxes	12				
Real estate rent & lease	189				
Insurance	32				
Utilities	90				
Miscellaneous	30				
Total Less Interest Paid	$ 2,289	$	$	$	$
Net Accrual Operating Income	(Total)				
(without appreciation)	$ 62,082	$			$
- Change in livestock & crop inv.	9,689				
- Change in accounts receivable	920				
- Change in feed & supply inv.*	2,873				
+ Change in accounts payable**	-844				
NET CASH FLOW	$ 47,756	$			$
- Net personal withdrawals & family expenditures	20,235				
Available for Farm Debt Payments & Investments	$ 27,521	$			$
- Farm debt payments	23,962				
Available for Farm Investments	$ 3,559	$			$
- Capital purchases: cattle, machinery & improvements	$ 25,313	$		$	$
Additional Capital Needed		$			$

*Includes change in prepaid expenses. **Excludes change in interest account payable.

Cropping Program Analysis

The cropping program is an important part of the dairy farm business and sometimes it is overlooked and neglected. A complete evaluation of available land resources, how they are being used, how well crops are producing and what it costs to produce them, is required to evaluate alternative cropping and feed purchasing choices.

LAND RESOURCES AND CROP PRODUCTION
Eastern New York Dairy Farm Renters Reporting, 1996

Item	Average of Farms Reporting			My Farm	
Crop Yields	Farms	Acres	Prod/Acre*	Acres	Prod/Acre
Hay crop	24	138	2.37 tn DM	_____	_____ tn DM
Corn silage	19	65	13.38 tn	_____	_____ tn
			4.38 tn DM	_____	_____ tn DM
Other forage	0	0	0.00 tn DM	_____	_____ tn DM
Total forage	24	189	2.93 tn DM	_____	_____ tn DM
Corn grain	8	112	86.24 bu	_____	_____ bu
Oats	2	15	41.67 bu	_____	_____ bu
Wheat	0	0	0.00 bu	_____	_____ bu
Other crops	1	9		_____	
Tillable pasture	7	27		_____	
Idle	6	28		_____	
Total Tillable Acres	28	201		_____	

*1996 average yields for 147 dairy farm owners in Eastern New York included: all hay crops, 2.5 tons dry matter per acre; corn silage, 14.9 tons per acre.

Average crop acres and yields compiled for the region are for the number of 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 measures of crop management indicate how efficiently the land resource is being used and how well total forage requirements are being met.

CROP MANAGEMENT FACTORS
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Total tillable acres per cow	2.45	2.90	_____
Total forage acres per cow	1.90	2.38	_____
Harvested forage dry matter, tons per cow	5.57	7.62	_____

Average fertilizer and lime, seeds and plants, and spray and other crop expenses have been computed per tillable acre for all farms in the first column of the table below. Average hay crop and corn crop related expenses are from the limited number of farms allocating crop expenses. Additional expense items such as fuels, labor, and machinery repairs are not included. Rotational grazing was used on 7 rented farms and 22 owned farms in the region.

CROP RELATED ACCRUAL EXPENSES
Eastern New York Dairy Farm Renters and Owners, 1996

Expense	Total/ 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.
28 Dairy Farm Renters:		Average 6 Farms Reporting Individual Crop Costs				
Fertilizer & lime	$25.76	$4.44	$2.65	$75.50	$16.68	$0.85
Seeds & plants	10.69	7.09	4.24	24.97	5.52	0.28
Spray & other crop expense	18.15	6.94	4.15	31.25	6.90	0.35
Total	$54.60	$18.47	$11.04	$131.72	$29.10	$1.48
147 Dairy Farm Owners:		Average 33 Farms Reporting Individual Crop Costs				
Fertilizer & lime	$26.81	$16.77	$7.22	$46.91	$10.01	$0.45
Seeds & plants	14.35	6.96	3.00	21.55	4.60	0.21
Spray & other crop expense	14.56	4.28	1.84	43.75	9.33	0.42
Total	$55.72	$28.01	$12.06	$112.21	$23.94	$1.08
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
Eastern New York Dairy Farm Renters and Owners, 1996

Item	Average Per Tillable Acre: 28 Dairy Farm Renters	Average Per Tillable Acre: 147 Dairy Farm Owners	My Farm: Total Expenses	My Farm: Per Till. Acres
Fuel, oil & grease	$26.48	$25.28	$ _____	$ _____
Machine repair & farm veh. exp.	72.44	62.34	_____	_____
Machine hire, rent & lease	8.33	12.40	_____	_____
Interest (5%)	21.31	21.95	_____	_____
Depreciation	51.49	47.19	_____	_____
Total	$180.05	$169.17	$ _____	$ _____

Dairy Program Analysis

Analysis of the dairy enterprise can tell 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. This increase in inventory is included as an accrual farm receipt when calculating profitability without appreciation impacts.

DAIRY HERD INVENTORY
Eastern New York Dairy Farm Renters and Owners, 1996

	Dairy Cows		Heifers					
			Bred		Open		Calves	
Item	No.	Value	No.	Value	No.	Value	No.	Value
28 Dairy Farm Renters:								
Beginning year (owned)	80	$ 84,447	21	$ 17,820	18	$ 10,334	18	$ 4,911
+ Change w/o apprec.		4,044		1,562		1,183		226
+ Appreciation		-591		-45		0		7
End year (owned)	83	$ 87,900	23	$ 19,337	21	$ 11,517	19	$ 5,144
End including leased	85							
Average number	82		59	(all age groups)				
147 Dairy Farm Owners:								
Beginning year (owned)	114	$ 118,791	31	$ 27,837	30	$ 15,847	27	$ 7,530
+ Change w/o apprec.		4,911		967		1,857		-43
+ Appreciation		647		41		99		70
End year (owned)	119	$ 124,349	32	$ 28,845	33	$ 17,803	28	$ 7,557
End including leased	119							
Average number	115		90	(all age groups)				
My Farm:								
Beginning 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 productivity 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 rolling herd average on the test date nearest December 31.

MILK PRODUCTION
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Dairy Farm Renters	147 Dairy Farm Owners	My Farm
Total milk sold, lbs.	1,447,946	2,165,226	_____
Milk sold per cow, lbs.	17,744	18,845	_____
Average milk plant test, % butterfat	3.71%	3.74%	_____

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 are compared with the accrual costs of producing milk per hundredweight of milk. Using the whole farm method, operating cost of producing milk is estimated by deducting nonmilk accrual receipts from total accrual operating expenses plus expansion livestock purchased. Purchased input cost of producing milk is the operating cost plus depreciation. Total cost of producing milk includes the operating cost plus depreciation on machinery and buildings, the value of unpaid family labor, the value of operator(s') labor and management, and an interest charge for using equity capital.

COST OF PRODUCING MILK AND ACCRUAL RECEIPTS FROM MILK
Eastern New York Dairy Farm Renters and Owners, 1996

Item	28 Renters		147 Owners		My Farm	
	Total	Per Cwt.	Total	Per Cwt.	Total	Per Cwt.
Accrual Cost of Producing Milk						
Operating cost	$169,708	$11.72	$263,142	$12.15	$ _____	$ _____
Purchased input cost	$182,709	$12.62	$287,166	$13.26	$ _____	$ _____
Total cost	$230,146	$15.89	$351,389	$16.23	$ _____	$ _____
Accrual Receipts from Milk	$221,624	$15.31	$331,838	$15.33	$ _____	$ _____

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 the comparison of different size dairy farms for strengths and areas for improvement.

DAIRY RELATED ACCRUAL EXPENSES
Eastern New York Dairy Farm Renters and Owners, 1996

Item	Average Per Cwt. Milk		Per Cwt.
	28 Renters	147 Owners	
Purchased dairy grain & concentrate	$4.80	$4.76	$ _____
Purchased dairy roughage	0.54	0.16	_____
Total Purchased Dairy Feed	$5.34	$4.92	$ _____
Purchased grain & concentrate as % of milk receipts	31%	31%	_____ %
Purchased feed & crop expense	$6.12	$5.78	$ _____
Purchased feed & crop expense as % of milk receipts	40%	38%	_____ %
Breeding	$0.23	$0.19	$ _____
Veterinary & medicine	0.32	0.39	_____
Milk marketing	0.78	0.80	_____
Bedding	0.10	0.10	_____
Milking supplies	0.35	0.40	_____
Cattle lease	0.00	0.00	_____
Custom boarding	0.01	0.05	_____
Other livestock expense	0.33	0.34	_____

Capital and Labor Efficiency Analysis

Capital efficiency factors measure how intensively the capital is being used in the farm business. The asset turnover ratio is the ratio of total farm income to total farm assets. It is calculated by dividing total accrual operating receipts plus appreciation by average total farm assets. Measures of labor efficiency are key indicators of management's success in generating products per unit of labor input.

CAPITAL EFFICIENCY
Eastern New York Dairy Farm Renters and Owners, 1996

Item	Per Worker		Per Cow	Per Tillable Acre
28 Dairy Farm Renters:				
Farm capital	$ 116,727		$ 3,630	$ 1,481
Machinery & equipment	33,685		1,048	427
Asset turnover ratio		0.85		
147 Dairy Farm Owners:				
Farm capital	$ 234,156		$ 6,964	$ 2,405
Machinery & equipment	42,749		1,271	439
Asset turnover ratio		0.47		
My Farm:				
Farm capital	$ _____		$ _____	$ _____
Machinery & equipment	_____		_____	_____
Asset turnover ratio		_____		

LABOR FORCE ANALYSIS
Eastern New York Dairy Farm Renters and Owners, 1996

	28 Renters		147 Owners		My Farm	
Efficiency	Total	Per Worker	Total	Per Worker	Total	Per Worker
Cows, average number	82	32	115	34	_____	_____
Milk sold, pounds	1,447,948	567,823	2,165,226	633,107	_____	_____
Tillable acres	201	79	333	97	_____	_____
Work units	818	321	1,195	349	_____	_____

	28 Renters		147 Owners		My Farm	
Labor Costs	Total	Per Cow	Total	Per Cow	Total	Per Cow
Value of operator(s) labor*	$ 28,800	$ 351	$ 28,350	$ 247	$ _____	$ _____
Family unpaid*	5,400	66	4,200	37	_____	_____
Hired	12,100	148	31,591	275	_____	_____
Total Labor	$ 46,300	$ 565	$ 64,141	$ 559	$ _____	$ _____
Machinery Cost	$ 36,191	$ 441	$ 56,332	$ 490	$ _____	$ _____
Total Labor & Machinery	$ 82,491	$ 1,006	$ 120,473	$ 1,048	$ _____	$ _____

*$1,500 per month.

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 21 Eastern New York Dairy Farm Renters, 1995 & 1996

	Average		My Farm		
Selected Factors	1995	1996	1995	1996	Goal
Size of Business					
Average number of cows	88	93			
Average number of heifers	63	67			
Milk sold, lbs.	1,592,409	1,632,182			
Worker equivalent	2.66	2.72			
Total tillable acres	216	234			
Rates of Production					
Milk sold per cow, lbs.	18,145	17,502			
Hay DM per acre, tons	2.4	2.4			
Corn silage per acre, tons	11.7	13.4			
Labor Efficiency					
Cows per worker	33	34			
Milk sold per worker, lbs.	598,650	600,067			
Cost Control					
Grain & concentrate purchased as % of milk sales	28%	32%	____ %	____ %	____ %
Dairy feed & crop expense per cwt. milk	$4.72	$6.12	$____	$____	$____
Labor & machinery costs/cow	$939	$971	$____	$____	$____
Operating cost of producing cwt. milk	$10.36	$12.20	$____	$____	$____
Capital Efficiency*					
Farm capital per cow	$3,555	$3,675	$____	$____	$____
Machinery & equipment per cow	$1,036	$1,044	$____	$____	$____
Asset turnover ratio	0.77	0.82			
Profitability					
Net farm income without apprec.	$33,171	$43,982	$____	$____	$____
Net farm income with apprec.	$37,662	$49,280	$____	$____	$____
Labor & management income per operator/manager	$10,299	$16,769	$____	$____	$____
Rate of return on equity capital with appreciation	-0.3%	4.1%	____ %	____ %	____ %
Rate of return on all capital with appreciation	1.7%	5.0%	____ %	____ %	____ %
Financial Summary					
Farm net worth	$234,828	$263,891	$____	$____	$____
Debt to asset ratio	0.27	0.25			
Farm debt per cow	$980	$928	$____	$____	$____

*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 5 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
28 Eastern New York Dairy Farm Renters, 1996

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)*	(10)	(10)	(10)	(9)	(9)	(11)	(11)
4.5	188	3,272,457	21,370	3.9	23	55	953,936
2.9	77	1,530,695	19,445	3.1	18	36	659,217
2.3	68	1,253,777	18,158	2.3	15	31	556,467
1.9	58	977,671	16,783	2.1	12	28	450,521
1.2	35	523,008	13,298	1.4	9	19	324,197

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)
$444	18%	$237	$759	$685	$4.35
748	29	368	874	931	5.42
904	33	435	1,025	1,086	6.20
1,005	37	501	1,154	1,183	6.83
1,208	43	708	1,618	1,607	8.22

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 Income w/o Apprec.	Labor & Mgmt. Income Per Oper.
(10)	(10)	(10)	(3)	(3)	(3)
$3,352	$8.81	$13.38	$104,554	$96,450	$45,792
2,970	10.59	14.56	52,060	49,920	30,570
2,703	12.05	16.69	42,035	35,383	13,505
2,573	12.65	17.86	24,803	22,964	4,111
2,034	14.44	20.38	4,408	1,284	-7,148

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

Regional Financial Analysis Chart

The farm financial analysis chart 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 7, 8, 11, and 15 of this publication. References to DFBS output page numbers for participating dairy farmers are provided in the table headings.

FINANCIAL ANALYSIS CHART
28 Eastern New York Dairy Farm Renters, 1996

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)
$0	$510	4.26	0%	$5
74	424	1.39	3	687
247	347	1.02	9	1,113
346	202	0.59	13	1,476
489	98	0.00	20	2,515

Solvency			Profitability	
		Debt/Asset Ratio	Percent Rate of Return with appreciation on:	
Leverage Ratio**	Percent Equity	Current & Intermediate	Equity	Investment***
	(5)	(5)	(3)	(3)
0.00	100%	0.00	36%	19%
0.29	85	0.18	13	11
0.50	70	0.33	2	5
1.04	55	0.48	-13	-4
6.14	33	0.70	-58	-15

Efficiency (Capital)			
Asset Turnover Ratio	Machinery Investment Per Cow	Total Farm Assets Per Cow	Change in Net Worth w/Appreciation
(11)	(11)	(11)	(6)
1.55	$283	$5,573	$65,193
1.08	824	4,016	38,364
0.88	1,133	3,473	23,146
0.77	1,476	2,867	8,403
0.64	2,088	2,305	-7,145

*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.

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 **S**pecific.

2. Goals should be **M**easurable.

3. Goals should be **A**chievable but challenging.

4. Goals should be **R**ewarding.

5. You should designate a **T**ime 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 23 and 24 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 Improvements: _____

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 5)

Accrual Receipts - (defined on page 6)

Annual Cash Flow Statement - (defined on page 13)

Appreciation - (defined on page 7)

Asset Turnover Ratio - (defined on page 21)

Balance Sheet - A "snapshot" of the business financial position at a given point in time, usually December 28. The balance sheet equates the value of assets to liabilities plus net worth.

bST Usage - An estimate of percentage of herd that was injected with bovine somatotropin during 1996.

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 15)

Cash Paid - (defined on page 4)

Cash Receipts - (defined on page 6)

Change in Accounts Payable - (defined on page 5)

Change in Accounts Receivable - (defined on page 6)

Change in Inventory - (defined on page 4)

Current Portion - Principal due in the next year for intermediate and long term debt.

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 11)

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 15.

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-cancelable 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 8)

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 7)

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 20)

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.

Purchased Inputs Cost of Producing Milk - (defined on page 20)

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 8)

Return on Total Capital - (defined on page 8)

Return to Operators' Labor, Management, and Equity Capital - (defined on page 7)

Rotational Grazing - The dairy herd is on pasture at least three months of the year, changing paddock at least every three days.

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 20)

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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OTHER A.R.M.E. EXTENSION BULLETINS

EB No	Title	Author(s)
97-14	Dairy Farm Business Summary, Intensive Grazing Farms, New York, 1996	Conneman, G., C.Crispell, J. Grace, K. Parsons and L. Putnam
97-13	Fruit Farm Business Summary, Lake Ontario Region, New York, 1996	White, G.B., A.M. DeMarree and L.D. Putnam
97-12	Dairy Farm Business Summary, Northern New York Region, 1996	Milligan, R.A., L.D. Putnam, P. Beyer, A. Deming, T. Teegerstrom, C. Trowbridge and G. Yarnall
97-11	Dairy Farm Business Summary, Central Valleys Region, 1996	LaDue, E.L., S.F. Smith, L.D. Putnam, D. Bowne, Z. Kurdich, C. Mentis, T. Wengert and C.Z. Radick
97-10	"Maximizing the Environmental Benefits per Dollar Expended": An Economic Interpretation and Review of Agricultural Environmental Benefits and Costs	Poe, G.
97-09	Dairy Farm Business Summary, Northern Hudson Region, 1996	Smith, S.F., L.D. Putnam, C.S. Wickswat, S. Buxton and D.R. Wood
97-08	Dairy Farm Business Summary, New York Large Herd Farms, 300 Cows or Larger, 1996	Karszes, J., W.A. Knoblauch and L.D. Putnam
97-07	Dairy Farm Business Summary, Southeastern New York Region, 1996	Knoblauch, W.A., L.D. Putnam, S.E. Hadcock, L.R. Hulle, M. Kiraly, C.A. McKeon
97-06	Dairy Farm Business Summary, Western and Central Plateau Region, 1996	Knoblauch, W.A., L.D. Putnam, C.A. Crispell, J.S. Petzen, J.W. Grace, A.N. Dufresne and G. Albrecht
97-05	Dairy Farm Business Summary: Western and Central Plain Region, 1996	Knoblauch, W.A., L.D. Putnam, J. Karszes, M. Stratton, C. Mentis and George Allhusen
97-04	Fruit Farm Business Summary, Lake Ontario Region, New York, 1995	White, G.B., A. DeMarree and L.D. Putnam
97-03	Labor Productivities and Costs in 35 of the Best Fluid Milk Plants in the U.S.	Erba, E.M., R.D. Aplin and M.W. Stephenson
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