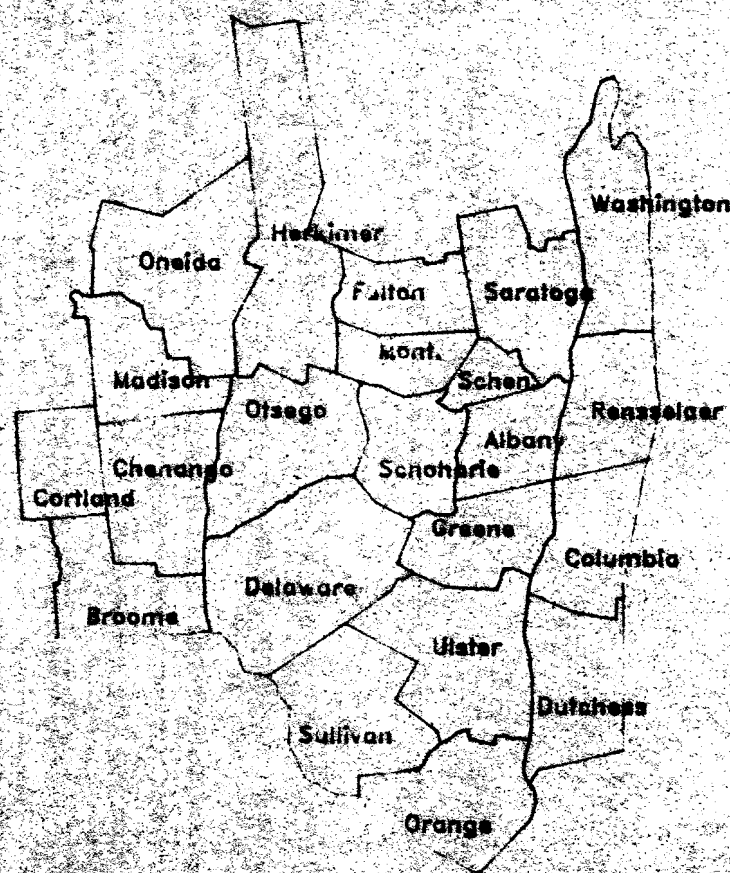


DAIRY FARM BUSINESS SUMMARY

AUGUST 1996

E.B. 96-16

EASTERN NEW YORK RENTER SUMMARY 1995



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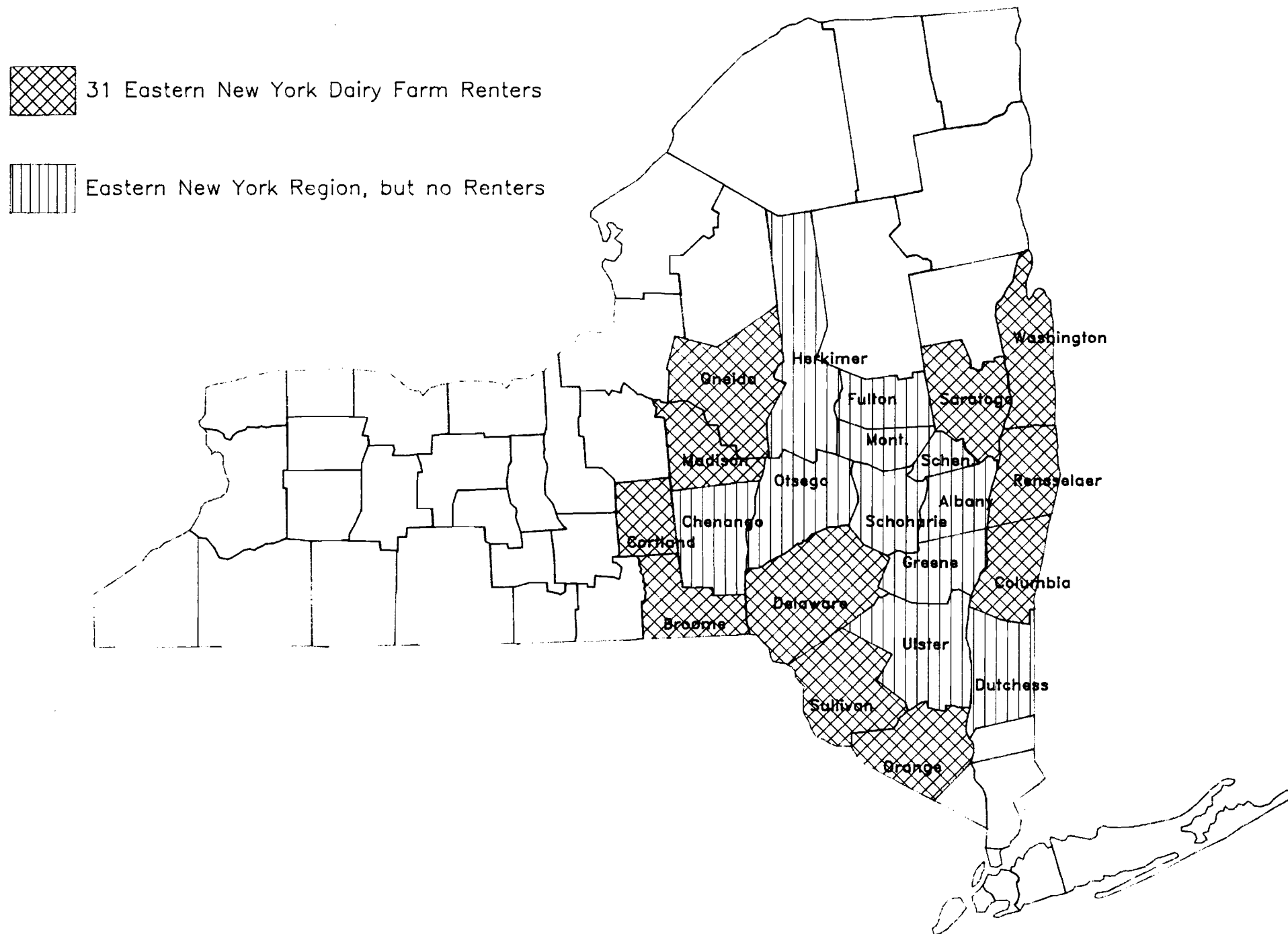
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1995 DAIRY FARM BUSINESS SUMMARY
EASTERN NEW YORK RENTERS
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Figure 1. Location of Eastern New York Dairy Farm Renters, 1995.



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 31 Eastern New York Dairy Farm Renters, 1995

<u>Type of Business</u>	<u>Number</u>	<u>bST Usage</u>	<u>Number</u>	
Single proprietorship	21	Used on <25% of herd	8	
Partnership	9	Used on 25-75% of herd	2	
Corporation	1	Used on >75% of herd	0	
		Stopped using in 1995	1	
<u>Milking System</u>	<u>Number</u>	Not used in 1995	20	
Dumping station	0			
Pipeline	21	<u>Labor Force*</u>	<u>My Farm</u>	<u>Average</u>
Herringbone parlor	9	Operator 1	___mo.	14.16
Other parlor	1	Operator 2	___mo.	4.56
		Operator 3	___mo.	0.39
<u>Type of Barn</u>	<u>Number</u>	Family paid	___mo.	2.73
Stanchion	22	Family unpaid	___mo.	4.05
Freestall	9	Hired	___mo.	6.89
Combination	0	Total	___mo.	32.78
		Worker equivalent		
<u>Dairy Records Service</u>	<u>Number</u>	(total + 12)	___	2.73
DHIC	21	Operator/Manager Equiv.		
DHIC Owner-Sampler	3	(Operator months + 12)	___	1.39
Other	2			
None	5	<u>Land Use</u>	<u>My Farm</u>	<u>Average</u>
		Total acres rented	___	363
<u>Business Record System</u>	<u>Number</u>	Tillable acres rented	___	241
Account Book	17			
Agrifax (mail-in only)	3	<u>Number of Cows</u>	<u>My Farm</u>	<u>Average</u>
Other	4	Beg. year (owned)	___	82
On-farm computer	7	End year (owned & leased)	___	91
		Average for year (owned & leased)	___	88

*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 31 rented farms include the single proprietorship, pipeline milking system, stanchion or conventional stall barn, DHIC herd records and an account book record system. Only 23 percent of the renters were using on-farm computers compared to 31 percent of the owners.

The average size of the labor force on the rented farms was 24 percent less than the 3.61 worker equivalent on owned farms. The rented farms averaged 241 tillable acres and 88 cows compared to 329 tillable acres and 115 cows on the 138 owned dairy farms in the same region. The owned farms averaged 32 cows per worker, the same as the rented farms. In 1995, 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
31 Eastern New York Dairy Farm Renters, 1995

Expense Item	Cash Paid	-	Inventory or Prepaid Expense	+	Change in Accounts Payable	=	Accrual Expenses	Percent of Total
<u>Hired Labor</u>	\$ 12,253		\$ 0	<<	\$ 0		\$ 12,253	7
<u>Feed</u>								
Dairy grain & concentrate	56,936		1,498		1,239		56,677	31
Dairy roughage	5,185		821		102		4,466	2
Other livestock	171		0		0		171	<1
<u>Machinery</u>								
Machinery, hire, rent & lease	1,699		0	<<	0		1,699	1
Machinery repair & farm veh. exp.	12,032		-2		704		12,738	7
Fuel, oil & grease	5,310		11		30		5,329	3
<u>Livestock</u>								
Replacement livestock	5,440		0	<<	0		5,440	3
Breeding	3,338		102		-55		3,181	2
Vet & medicine	4,994		29		16		4,981	3
Milk marketing	11,564		0	<<	-17		11,547	6
Bedding	1,213		45		10		1,178	1
Milking supplies	4,897		31		0		4,866	3
Cattle lease & rent	29		0	<<	0		29	<1
Custom boarding	189		0	<<	0		189	<1
Other livestock expense	4,766		6		392		5,152	3
<u>Crops</u>								
Fertilizer & lime	6,809		733		49		6,125	3
Seeds & plants	2,718		593		94		2,219	1
Spray, other crop expense	4,053		86		104		4,071	2
<u>Real Estate</u>								
Land, building & fence repair	2,729		-12		301		3,042	2
Taxes	750		0	<<	-152		598	1
Rent & lease	16,294		0	<<	-17		16,277	9
<u>Other</u>								
Insurance	3,111		0	<<	0		3,111	2
Utilities (farm share)	7,099		0	<<	43		7,142	4
Interest paid	7,904		0	<<	0		7,904	4
Miscellaneous	2,088		-48		2		2,138	1
Total Operating	\$ 183,571		\$ 3,893		\$ 2,845		\$ 182,523	100
Expansion livestock	\$ 4,965		\$ 0	<<	\$ 0		\$ 4,965	
Machinery depreciation							9,243	
Building depreciation							1,469	
TOTAL ACCRUAL EXPENSES							\$ 198,200	

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.

CASH AND ACCRUAL FARM RECEIPTS
31 Eastern New York Dairy Farm Renters, 1995

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Expenses
Milk Sales	\$ 202,047				\$ 1,760		\$ 203,807
Dairy cattle	8,932		\$ 9,064		-65		17,931
Dairy calves	2,439				2		2,441
Other livestock	90		769		0		859
Crops	1,788		-411		-288		1,089
Government receipts	3,717		0*		186		3,903
Custom machine work	427				6		433
Gas tax refund	84				0		84
Other	1,652				0		1,652
- Nonfarm noncash capital**	_____		(-) 0		_____		(-) 0
Total Accrual Receipts	\$ 221,176		\$ 9,422		\$ 1,601		\$ 232,199

*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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Total accrual receipts	\$ 232,199	\$ 335,437	\$ _____
+ Appreciation: Livestock	-1,800	-5,295	_____
Machinery	2,510	2,541	_____
Real Estate	960	8,348	_____
Other Stock & Certificates	<u>-16</u>	<u>179</u>	_____
= Total Including Appreciation	\$ 233,853	\$ 341,210	\$ _____
- Total accrual expenses	<u>198,200</u>	<u>302,015</u>	_____
= Net Farm Income (with appreciation)	\$ 35,653	\$ 39,195	\$ _____
Per cow	\$ 405	\$ 340	\$ _____
Net Farm Income (without appreciation)	\$ 33,999	\$ 33,422	\$ _____
Per cow	\$ 386	\$ 290	\$ _____

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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Net farm income without appreciation	\$ 33,999	\$ 33,422	\$ _____
- Family labor unpaid @ \$1,450 per month	- 5,873	- 4,046	- _____
- Interest on average equity capital @ 5% real rate	- 9,804	- 27,167	- _____
= Labor & Management Income	\$ 18,322	\$ 2,209	\$ _____
Labor & Management Income per Operator/Manager	\$ 13,181	\$ 1,463	\$ _____

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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Net farm income with appreciation	\$ 35,653	\$ 39,195	\$ _____
- Family labor unpaid @ 1,450 per month	\$ 5,873	\$ 4,046	\$ _____
- Value of operators' labor & management	28,226	32,927	_____
= Return to equity capital with appreciation	\$ 1,554	\$ 2,222	\$ _____
+ Interest paid	7,904	19,878	_____
= Return to all capital with appreciation	\$ 9,458	\$ 22,100	\$ _____
Return to equity capital without appreciation	\$ -100	\$ -3,511	\$ _____
Return to all capital without appreciation	\$ 7,804	\$ 16,327	\$ _____
Rate of return on average equity capital:			
with appreciation	0.8%	0.4%	_____ %
without appreciation	-0.1%	-0.7%	_____ %
Rate of return on all capital:			
with appreciation	3.1%	2.8%	_____ %
without appreciation	2.6%	2.0%	_____ %

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.

1995 FARM BUSINESS & NONFARM BALANCE SHEET 31 Eastern New York Dairy Farm Renters

Farm Assets			Farm Liabilities & Net Worth		
	Jan. 1	Dec. 31		Jan. 1	Dec. 31
<u>Current</u>			<u>Current</u>		
Farm cash, checking & savings	\$ 4,894	\$ 5,462	Accounts payable	\$ 6,195	\$ 8,999
Accounts receivable	15,787	17,389	Operating debt	5,881	7,112
Prepaid expenses	0	0	Short term	3,077	3,081
Feed & supplies	39,536	43,020	Advanced gov't. receipt	0	0
Total Current	\$ 60,217	\$ 65,871	Current portion:		
			Intermediate	8,369	10,042
			Long term	3,850	3,465
			Total Current	\$ 27,372	\$ 32,699
<u>Intermediate</u>			<u>Intermediate</u>		
Dairy Cows:			Structured debt		
owned	\$ 84,787	\$ 90,862	1-10 years	\$ 46,267	\$ 45,114
leased	0	0	Financial lease		
Heifers	37,208	38,470	(cattle & machinery)	1,351	1,229
Bulls & other livestock	1,019	1,726	Farm Credit stock	1,346	1,552
Mach. & equip. owned	87,121	94,332	Total Intermediate	\$ 48,964	\$ 47,895
Mach. & equip. leased	1,351	1,229			
Farm Credit stock	1,346	1,552	<u>Long Term</u>		
Other stock & cert.	1,759	1,908	Structured debt		
Total Intermediate	\$ 214,601	\$ 230,079	≥ 10 years	\$ 25,795	\$ 34,501
<u>Long Term</u>			Financial lease		
Land & buildings:			(structures)	397	311
owned	\$ 16,640	\$ 21,990	Total Long Term	\$ 26,192	\$ 34,812
leased	397	311			
Total Long Term	\$ 17,037	\$ 22,301	Total Farm Liabilities	\$ 102,528	\$ 115,406
Total Farm Assets	\$ 291,855	\$ 318,251	FARM NET WORTH	\$ 189,327	\$ 202,845
(Average for 13 farms reporting)			Nonfarm Liabilities*		
Nonfarm Assets*	Jan. 1	Dec. 31		Jan. 1	Dec. 31
Personal cash, checking & savings	\$ 3,612	\$ 5,158	Nonfarm Liabilities	\$ 5,218	\$ 4,993
Cash value life ins.	13,120	11,474	NONFARM NET WORTH	\$ 53,777	\$ 52,265
Nonfarm real estate	23,846	23,846			
Auto (personal share)	4,692	4,077	FARM & NONFARM**	Jan. 1	Dec. 31
Stocks & bonds	5,172	4,210	Total Assets	\$ 350,850	\$ 375,509
Household furn.	7,077	6,685	Total Liabilities	107,746	120,399
All other	1,475	1,808			
Total Nonfarm	\$ 58,995	\$ 57,258	TOTAL FARM & NON-FARM NET WORTH	\$ 243,104	\$ 255,110

*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 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.

Date _____

1995 FARM BUSINESS & NONFARM BALANCE SHEET

Farm Assets	Jan. 1	Dec. 31	Farm Liabilities & Net Worth	Jan. 1	Dec. 31
<u>Current</u>			<u>Current</u>		
Farm cash, checking & savings	_____	_____	Accounts payable	_____	_____
			Operating debt	_____	_____
Accounts receivable	_____	_____			
			Short term	_____	_____
Prepaid expenses	_____	_____			
Feed & supplies	_____	_____	Advanced gov't. receipt	_____	_____
Total Current	_____	_____	Current portion:		
			Intermediate	_____	_____
			Long term	_____	_____
			Total Current	_____	_____
<u>Intermediate</u>			<u>Intermediate</u>		
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	_____	_____	<u>Long Term</u>		
Other stock & cert.	_____	_____			
Total Intermediate	_____	_____			
<u>Long Term</u>			Financial lease	_____	_____
Land & buildings:			(structures)	_____	_____
owned	_____	_____	Total Long Term	_____	_____
leased	_____	_____			
Total Long Term	_____	_____	Total Farm Liabilities	_____	_____
Total Farm Assets	_____	_____	FARM NET WORTH		
<u>Nonfarm Assets</u>	<u>Jan. 1</u>	<u>Dec. 31</u>	<u>Nonfarm Liabilities & Net Worth</u>	<u>Jan. 1</u>	<u>Dec. 31</u>
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. 31			
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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
<u>Financial Ratios - Farm:</u>			
Percent equity	64%	67%	_____ %
Debt/asset ratio: total	0.36	0.33	_____
long term	1.56	0.30	_____
intermediate & current	0.27	0.35	_____
<u>Farm Debt Analysis:</u>			
Accounts payable as % of total debt	8%	4%	_____ %
Long term liabilities as a % of total debt	30%	43%	_____ %
Current & intermediate liabilities as a % of total debt	70%	57%	_____ %
<u>Farm Debt Levels Per Cow:</u>			
Total farm debt	\$ 1,268	\$ 2,224	\$ _____
Long term debt	\$ 383	\$ 951	\$ _____
Intermediate & long term debt	\$ 909	\$ 1,809	\$ _____
Intermediate & current debt	\$ 886	\$ 1,272	\$ _____

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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Value beginning of year	\$ 87,121	\$ 140,034	\$ _____
Purchases	\$ 14,735	\$ 16,647	\$ _____
+ Nonfarm noncash transfer	0	110	_____
- Net Sales	791	941	_____
- Depreciation	<u>9,243</u>	<u>14,966</u>	_____
= Net investment	4,701	850	_____
+ Appreciation	<u>2,510</u>	<u>2,541</u>	_____
= Value end of year	\$ 94,332	\$143,425	\$ _____

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)

31 Eastern New York Dairy Farm Renters, 1995

Item	Average	My Farm
Beginning of year farm net worth	\$ 189,327	\$ _____
Net farm income without appreciation	\$ 33,999	\$ _____
+ Nonfarm cash income	+ 3,614	+ _____
- Personal withdrawals & family expenditures excluding nonfarm borrowings	- 25,976	- _____
RETAINED EARNINGS	+ \$ 11,637	+ \$ _____
Nonfarm noncash transfers to farm	\$ 0	\$ _____
+ Cash used in business from nonfarm capital	+ 4,073	+ _____
- Note/mortgage from farm real estate sold (nonfarm)	- 0	- _____
CONTRIBUTED/WITHDRAWN CAPITAL	+ \$ 4,073	+ \$ _____
Appreciation	\$ 1,654	\$ _____
- Lost capital	- 4,203	- _____
CHANGE IN VALUATION EQUITY	+ \$ -2,549	+ \$ _____
IMBALANCE/ERROR	- \$ -311	- \$ _____
End of year farm net worth*	= \$ 202,845	= \$ _____
Change in net worth with appreciation.	\$ 13,518	\$ _____

Change in Net Worth

Without appreciation	\$ 11,864	\$ _____
With appreciation	\$ 13,518	\$ _____

*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
31 Eastern New York Dairy Farm Renters, 1995

Item		Average	
<u>Cash Flow from Operating Activities</u>			
Cash farm receipts	\$ 221,176		
- Cash farm expenses	<u>183,571</u>		
= Net cash farm income		\$ 37,607	
Nonfarm income	\$ 3,614		
- Personal withdrawals & family expenses including nonfarm debt payments	<u>25,976</u>		
+ Net cash nonfarm income		\$ -22,362	
= Net Provided by Operating Activities			\$ 15,245
<u>Cash Flow From Investing Activities</u>			
Sale of assets: Machinery	\$ 791		
+ real estate	0		
+ other stock & certificates	<u>0</u>		
= Total asset sales		\$ 791	
Capital purchases: expansion livestock	\$ 4,965		
+ machinery	14,735		
+ real estate	10,063		
+ other stock & certificates	<u>165</u>		
- Total invested in farm assets		\$ 29,928	
= Net Provided by Investment Activities			\$ -29,137
<u>Cash Flow From Financing Activities</u>			
Money borrowed (intermediate & long term)	\$ 24,281		
+ Money borrowed (short term)	3,274		
+ Increase in operating debt	1,231		
+ Cash from nonfarm capital used in business	4,073		
+ Money borrowed - nonfarm	<u>0</u>		
= Cash inflow from financing		\$ 32,859	
Principal payments (intermediate & long term)	\$ 15,440		
+ Principal payments (short term)	3,270		
+ Decrease in operating debt	<u>0</u>		
- Cash outflow for financing		\$ 18,710	
= Net Provided by Financing Activities			\$ 14,149
<u>Cash Flow From Reserves</u>			
Beginning farm cash, checking & savings		\$ 4,894	
- Ending farm cash, checking & savings		<u>5,462</u>	
= Net Provided from Reserves			\$ -568
<u>Imbalance (error)</u>			\$ -311

ANNUAL CASH FLOW STATEMENT

Item		My Farm
<u>Cash Flow from Operating Activities</u>		
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		\$ _____
<u>Cash Flow From Investing Activities</u>		
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		\$ _____
<u>Cash Flow From Financing Activities</u>		
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		\$ _____
<u>Cash Flow From Reserves</u>		
Beginning farm cash, checking & savings	\$ _____	
- Ending farm cash, checking & savings	_____	
= Net Provided from Reserves		\$ _____
<u>Imbalance (error)</u>		\$ _____

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 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 24 Eastern New York Dairy Farm Renters, 1995*

Debt Payments	Average			My Farm		
	1995 Payments		Planned 1996	1995 Payments		Planned 1996
	Planned	Made		Planned	Made	
Long-term	\$ 2,600	\$ 2,640	\$ 3,125	\$ _____	\$ _____	\$ _____
Intermediate-term	11,923	13,085	12,695	_____	_____	_____
Short-term	1,610	4,554	1,917	_____	_____	_____
Operating (net red.)	1,366	437	1,326	_____	_____	_____
Accounts payable (net reduction)	250	0	83	_____	_____	_____
Total	\$ 17,749	\$ 20,716	\$ 19,147	\$ _____	\$ _____	\$ _____
Per cow	\$ 247	\$ 288		\$ _____	\$ _____	
Per cwt. 1995 milk	\$ 1.38	\$ 1.61		\$ _____	\$ _____	
Percent of total 1995 receipts	9%	11%		_____	_____	
Percent of 1995 milk receipts	11%	12%		_____	_____	

*Farms that completed Dairy Farm Business Summaries for both 1994 and 1995.

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 1996.

CASH FLOW COVERAGE RATIO Eastern New York Dairy Farm Renters and Owners, 1995

Item	Same 24 Farm Renters	Same 111 Farm Owners	My Farm
Cash farm receipts	\$ 184,576	\$ 341,299	\$ _____
- Cash farm expenses	149,446	288,979	_____
+ Interest paid	6,314	20,295	_____
- Net personal withdrawals from farm*	21,661	29,020	_____
(A) = Amount Available for Debt Service	\$ 19,783	\$ 43,595	\$ _____
(B) = Debt Payments Planned for 1995 (as of December 31, 1994)	\$ 17,749	\$ 48,141	\$ _____
(A ÷ B) = Cash Flow Coverage Ratio for 1995	1.11	0.91	_____

*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	31 Dairy	My Farm		Expected Change	1996 Projection
	Farm Renters (per cow)	Total	Per Cow		
Average number of cows	88				
Accrual Operating Receipts					
Milk	\$ 2,313	\$	\$		\$
Dairy cattle	204				
Dairy calves	28				
Other livestock	10				
Crops	12				
Misc. receipts	69				
Total	\$ 2,636	\$	\$		\$
Accrual Operating Expenses					
Hired labor	\$ 139	\$	\$		\$
Dairy grain & concentrate	643				
Dairy roughage	51				
Other livestock feed	2				
Machinery hire, rent & lease	19				
Machinery repair & vehicle exp.	145				
Fuel, oil & grease	60				
Replacement livestock	62				
Breeding	36				
Vet & medicine	57				
Milk marketing	131				
Bedding	13				
Milking supplies	55				
Cattle lease	1				
Custom boarding	2				
Other livestock expense	58				
Fertilizer & lime	70				
Seeds & plants	25				
Spray & other crop expense	46				
Land, building & fence repair	35				
Taxes	7				
Real estate rent & lease	185				
Insurance	35				
Utilities	81				
Miscellaneous	24				
Total Less Interest Paid	\$ 1,982	\$	\$	\$	\$
Net Accrual Operating Income	(Total)				
(without appreciation)	\$ 57,586	\$			\$
- Change in livestock & crop inv.	9,422				
- Change in accounts receivable	1,601				
- Change in feed & supply inv.*	3,893				
+ Change in accounts payable**	2,845				
NET CASH FLOW	\$ 45,515	\$			\$
- Net personal withdrawals & family expenditures	22,362				
Available for Farm Debt Payments & Investments	\$ 23,153	\$			\$
- Farm debt payments	26,193				
Available for Farm Investments	\$ -3,040	\$			\$
- Capital purchases: cattle, machinery & improvements	\$ 29,928	\$		\$	\$
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 31 Eastern New York Dairy Farm Renters, 1995

Item	Average of Farms Reporting			My Farm	
	<u>Farms</u>	<u>Acres</u>	<u>Prod/Acre*</u>	<u>Acres</u>	<u>Prod/Acre</u>
Crop Yields					
Hay crop	27	154	2.55 tn DM	_____	_____ tn DM
Corn silage	22	80	10.91 tn	_____	_____ tn
			3.75 tn DM	_____	_____ tn DM
Other forage	1	8	1.50 tn DM	_____	_____ tn DM
Total forage	27	220	2.67 tn DM	_____	_____ tn DM
Corn grain	12	100	84.48 bu	_____	_____ bu
Oats	4	8	69.84 bu	_____	_____ bu
Wheat	0	0	0.00 bu	_____	_____ bu
Other crops	0	0		_____	
Tillable pasture	9	27		_____	
Idle	4	14		_____	
Total Tillable Acres	31	241		_____	

*1995 average yields for 138 dairy farm owners in Eastern New York included: all hay crops, 2.4 tons dry matter per acre; corn silage, 13.1 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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Total tillable acres per cow	2.74	2.84	_____
Total forage acres per cow	2.14	2.42	_____
Harvested forage dry matter, tons per cow	5.80	7.38	_____

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 10 rented farms and 19 owned farms in the region.

CROP RELATED ACCRUAL EXPENSES
Eastern New York Dairy Farm Renters and Owners, 1995

Expense	Total/ Till. Acre	Hay Crop		All Corn Per Acre	Corn Silage Per Ton DM	Corn Grain Per Dry Shell Bu.
		Per Acre	Per Ton DM			
31 Dairy Farm Renters:						
		Average 4 Farms Reporting Individual Crop Costs				
Fertilizer & lime	\$25.41	\$16.83	\$6.60	\$39.05	\$9.19	\$0.36
Seeds & plants	9.21	4.90	1.92	20.92	4.92	0.20
Spray & other crop expense	<u>16.89</u>	<u>6.06</u>	<u>2.38</u>	<u>27.70</u>	<u>6.52</u>	<u>0.26</u>
Total	\$51.51	\$27.79	\$10.90	\$87.67	\$20.63	\$0.82
138 Dairy Farm Owners:						
		Average 40 Farms Reporting Individual Crop Costs				
Fertilizer & lime	\$26.98	\$17.53	\$7.17	\$48.02	\$10.45	\$0.46
Seeds & plants	12.91	8.24	3.37	23.61	5.14	0.22
Spray & other crop expense	<u>14.13</u>	<u>3.93</u>	<u>1.61</u>	<u>36.70</u>	<u>7.98</u>	<u>0.35</u>
Total	\$54.02	\$29.70	\$12.15	\$108.33	\$23.57	\$1.03
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, 1995

Item	Average Per Tillable Acre		My Farm	
	31 Dairy Farm Renters	138 Dairy Farm Owners	Total Expenses	Per Till. Acres
Fuel, oil & grease	\$22.11	\$22.77	\$ _____	\$ _____
Machine repair & farm veh. exp.	52.85	52.32	_____	_____
Machine hire, rent & lease	7.05	10.12	_____	_____
Interest (5%)	18.82	21.61	_____	_____
Depreciation	<u>38.35</u>	<u>45.63</u>	_____	_____
Total	\$139.19	\$152.45	\$ _____	\$ _____

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, 1995

Item	Dairy Cows		Heifers		Calves	
	No.	Value	Bred No.	Open Value	No.	Value
31 Dairy Farm Renters:						
Beginning year (owned)	82	\$ 84,797	23	\$ 20,410	21	\$ 11,619
+ Change w/o apprec.		7,753		-384		412
+ Appreciation		-1,688		3		-87
End year (owned)	91	\$ 90,862	23	\$ 20,029	22	\$ 11,944
End including leased	91				24	\$ 6,498
Average number	88		66	(all age groups)		
138 Dairy Farm Owners:						
Beginning year (owned)	113	\$ 121,809	32	\$ 29,829	30	\$ 17,143
+ Change w/o apprec.		8,038		461		255
+ Appreciation		-3,444		-979		-582
End year (owned)	120	\$ 126,403	33	\$ 29,311	31	\$ 16,816
End including leased	120				28	\$ 7,832
Average number	115		91	(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, 1995

Item	31 Dairy Farm Renters	138 Dairy Farm Owners	My Farm
Total milk sold, lbs.	1,542,276	2,241,833	_____
Milk sold per cow, lbs.	17,500	19,422	_____
Average milk plant test, % butterfat	3.67%	3.69%	_____

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, 1995

Item	31 Renters		138 Owners		My Farm	
	Total	Per Cwt.	Total	Per Cwt.	Total	Per Cwt.
<u>Accrual Cost of Producing Milk</u>						
Operating cost	\$159,096	\$10.32	\$243,548	\$10.86	\$ _____	\$ _____
Purchased input cost	\$169,808	\$11.01	\$266,578	\$11.89	\$ _____	\$ _____
Total cost	\$213,711	\$13.86	\$330,718	\$14.75	\$ _____	\$ _____
<u>Accrual Receipts from Milk</u>	\$203,807	\$13.21	\$300,000	\$13.38	\$ _____	\$ _____

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, 1995

Item	Average Per Cwt. Milk		Per Cwt.
	31 Renters	138 Owners	
Purchased dairy grain & concentrate	\$3.67	\$3.70	\$ _____
Purchased dairy roughage	0.29	0.10	_____
Total Purchased Dairy Feed	\$3.96	\$3.80	\$ _____
Purchased grain & concentrate as % of milk receipts	28%	28%	_____ %
Purchased feed & crop expense	\$4.77	\$4.59	\$ _____
Purchased feed & crop expense as % of milk receipts	36%	34%	_____ %
Breeding	\$0.21	\$0.19	\$ _____
Veterinary & medicine	0.32	0.40	_____
Milk marketing	0.75	0.95	_____
Bedding	0.08	0.12	_____
Milking supplies	0.32	0.37	_____
Cattle lease	0.00	0.01	_____
Custom boarding	0.01	0.03	_____
Other livestock expense	0.33	0.29	_____

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, 1995

Item	Per Worker	Per Cow	Per Tillable Acre
<u>31 Dairy Farm Renters:</u>			
Farm capital	\$ 111,665	\$ 3,463	\$ 1,266
Machinery & equipment	33,683	1,044	382
Asset turnover ratio		0.77	
<u>138 Dairy Farm Owners:</u>			
Farm capital	\$ 222,708	\$ 6,966	\$ 2,451
Machinery & equipment	39,702	1,242	437
Asset turnover ratio		0.42	
<u>My Farm:</u>			
Farm capital	\$ _____	\$ _____	\$ _____
Machinery & equipment	_____	_____	_____
Asset turnover ratio		_____	

LABOR FORCE ANALYSIS
 Eastern New York Dairy Farm Renters and Owners, 1995

Efficiency	31 Renters		138 Owners		My Farm	
	Total	Per Worker	Total	Per Worker	Total	Per Worker
Cows, average number	88	32	115	32	_____	_____
Milk sold, pounds	1,542,276	564,552	2,241,833	621,084	_____	_____
Tillable acres	241	88	328	91	_____	_____
Work units	909	333	1,203	333	_____	_____
Labor Costs	31 Renters		138 Owners		My Farm	
	Total	Per Cow	Total	Per Cow	Total	Per Cow
Value of operator(s) labor*	\$ 27,710	\$ 315	\$ 28,565	\$ 248	\$ _____	\$ _____
Family unpaid*	5,873	67	4,046	35	_____	_____
Hired	12,253	139	34,046	295	_____	_____
Total Labor	\$ 45,835	\$ 520	\$ 66,657	\$ 578	\$ _____	\$ _____
Machinery Cost	\$ 33,545	\$ 381	\$ 50,004	\$ 433	\$ _____	\$ _____
Total Labor & Machinery	\$ 79,380	\$ 901	\$ 116,661	\$ 1,011	\$ _____	\$ _____

*\$1,450 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 24 Eastern New York Dairy Farm Renters, 1994 & 1995

Selected Factors	Average		My Farm		Goal
	1994	1995	1994	1995	
<u>Size of Business</u>					
Average number of cows	68	72	_____	_____	_____
Average number of heifers	51	51	_____	_____	_____
Milk sold, lbs.	1,225,173	1,285,749	_____	_____	_____
Worker equivalent	2.26	2.48	_____	_____	_____
Total tillable acres	181	200	_____	_____	_____
<u>Rates of Production</u>					
Milk sold per cow, lbs.	18,151	17,868	_____	_____	_____
Hay DM per acre, tons	2.8	2.3	_____	_____	_____
Corn silage per acre, tons	15	13	_____	_____	_____
<u>Labor Efficiency</u>					
Cows per worker	30	29	_____	_____	_____
Milk sold per worker, lbs.	541,752	518,719	_____	_____	_____
<u>Cost Control</u>					
Grain & concentrate purchased as % of milk sales	29%	28%	_____ %	_____ %	_____ %
Dairy feed & crop expense per cwt. milk	\$4.96	\$4.52	\$ _____	\$ _____	\$ _____
Labor & machinery costs/cow	\$1,017	\$992	\$ _____	\$ _____	\$ _____
Operating cost of producing cwt. milk	\$10.23	\$10.20	\$ _____	\$ _____	\$ _____
<u>Capital Efficiency*</u>					
Farm capital per cow	\$3,864	\$3,735	\$ _____	\$ _____	\$ _____
Machinery & equipment per cow	\$1,141	\$1,149	\$ _____	\$ _____	\$ _____
Asset turnover ratio	0.76	0.71	_____	_____	_____
<u>Profitability</u>					
Net farm income without apprec.	\$31,432	\$27,100	\$ _____	\$ _____	\$ _____
Net farm income with apprec.	\$34,588	\$28,627	\$ _____	\$ _____	\$ _____
Labor & management income per operator/manager	\$10,690	\$6,777	\$ _____	\$ _____	\$ _____
Rate of return on equity capital with appreciation	0.8%	-3.1%	_____ %	_____ %	_____ %
Rate of return on all capital with appreciation	2.6%	0.2%	_____ %	_____ %	_____ %
<u>Financial Summary</u>					
Farm net worth	\$193,265	\$191,008	\$ _____	\$ _____	\$ _____
Debt to asset ratio	0.29	0.31	_____	_____	_____
Farm debt per cow	\$1,126	\$1,141	\$ _____	\$ _____	\$ _____

*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

31 Eastern New York Dairy Farm Renters, 1995

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)*	(10)	(10)	(10)	(9)	(9)	(11)	(11)
4.9	187	3,240,398	21,877	3.9	18	48	853,684
2.7	77	1,445,775	19,163	2.6	15	34	605,858
2.3	63	1,169,597	18,195	2.2	12	29	510,617
2.0	55	948,743	16,389	2.0	10	25	446,451
1.4	42	623,846	12,408	1.4	7	20	316,134

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)
\$364	19%	\$199	\$642	\$442	\$2.92
547	24	280	796	697	4.24
647	28	386	928	869	4.69
757	31	438	1,096	975	5.14
849	34	535	1,333	1,066	5.83

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)
\$2,881	\$8.00	\$12.30	\$92,878	\$84,524	\$40,996
2,523	9.55	13.46	35,453	36,747	16,334
2,411	10.23	13.96	28,300	25,473	7,975
2,188	10.81	15.11	16,527	15,244	1,158
1,622	12.40	17.05	-4,396	-380	-7,102

*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 31 Eastern New York Dairy Farm Renters, 1995

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	\$474	3.51	0.0%	\$15
75	355	1.13	0.3	481
216	283	0.76	5.0	1,156
342	160	0.28	13.2	1,530
509	37	-0.01	21.8	2,430

Solvency			Profitability	
Leverage Ratio**	Percent Equity	Debt/Asset Ratio	Percent Rate of Return with appreciation on:	
		Current & Intermediate	Equity	Investment***
	(5)	(5)	(3)	(3)
0.00	99%	0.00	17%	12%
0.18	82	0.11	2	3
0.55	61	0.27	-2	1
1.03	48	0.46	-14	-5
3.12	28	0.65	-71	-17

Efficiency (Capital)				
Asset Turnover Ratio	Machinery Investment Per Cow	Total Farm Assets Per Cow	Change in Net Worth w/Appreciation	
(11)	(11)	(11)	(6)	
1.01	\$256	\$4,917	\$60,428	
0.86	785	3,944	14,718	
0.73	1,133	3,310	7,446	
0.65	1,521	2,871	-874	
0.54	1,863	2,357	-21,950	

*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 Specific.
2. Goals should be Measurable.
3. Goals should be Achievable but challenging.
4. Goals should be Rewarding.
5. You should designate a Time when each goal will be achieved.

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

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

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

- a. Begin with a mission statement which describes why the business exists based on the preferences and values of the owners.
- b. Identify 4-6 objectives.
- c. Identify SMART goals.

Worksheet for Setting Goals

I. Mission and Objectives

Worksheet for Setting Goals (continued)

II. Goals

[illegible]

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 31. 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 1995.

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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