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DAIRY FARM BUSINESS SUMMARY

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NEW YORK ORGANIC DAIRY FARMS 2011



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**2011 DAIRY FARM BUSINESS SUMMARY
NEW YORK ORGANIC DAIRY FARMS**

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2011 NEW YORK ORGANIC DAIRY FARM BUSINESS SUMMARY

INTRODUCTION

Dairy farm operators 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 three 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 3-5. Three measures of farm profits are calculated on pages 6 and 7. The balance sheet, statement of owner equity, and cash flow statement are featured on pages 8-15. The dairy program analysis includes data on the costs of producing milk (pages 18 and 19).

This New York Organic Dairy Farm Business Summary is an average of 16 businesses that are certified organic dairy farms. The farm income, financial summary, and business analysis sections of this report include comparisons with average data for 64 non-organic dairy farms in New York that are similar in size and location to the organic farms. This report is prepared in workbook form for organic dairy farm operators to use in the systematic study of their farm business operations.

Use Comparative Data With Caution

Care should be exercised when using average data from the 16 organic farms. Management styles and length of time producing and selling organic products varies between individual producers. We are presenting this data as an average of the farms that have a wide range of herd size and therefore have a significant variance in some of the management factors employed. If you are planning to use this data for benchmarking purposes, please use caution and factor in your particular management style for your herd size. The comparisons of averages between organic and non-organic producers is meant for information only and should not be used as the only factor to determine if your farm operation would benefit from the production of organic milk.

¹Wayne A. Knoblauch, Linda D. Putnam, Jason Karszes, Richard Overton, Cathryn Dymond, Dairy Farm Management Business Summary, New York State, 2011, Research Bulletin, forthcoming.

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 16 New York Organic Dairy Farms, 2011

<u>Type of Business</u>	<u>Number</u>	<u>Milking Frequency</u>	<u>Number</u>
Single proprietorship	11	2 times a day	15
Partnership	0	3 times a day	0
Limited liability corporation	3	Other	1
Subchapter S or C corporation	2		
		<u>Breed of Herd</u>	<u>My Farm</u> <u>Percent</u>
		Holstein	60
<u>Milking System</u>	<u>Number</u>	Jersey	14
Dumping station	0	Other	26
Pipeline	5		
Herringbone parlor	4	<u>Labor Force*</u>	<u>My Farm</u> <u>Average</u>
Other parlor	7	Operator 1	___mo. 12.5
		Operator 2	___mo. 10.0
<u>Type of Barn</u>	<u>Number</u>	Family paid	___mo. 3.1
Stanchion	4	Family unpaid	___mo. 1.8
Freestall	11	Hired	___mo. 26.3
Combination	1	Total	___mo. 53.7
		Worker equivalent	
<u>Dairy Records Service</u>	<u>Number</u>	(total ÷ 12)	___ 4.47
Testing service	10		
On-farm system	1	Operator/Manager Equivalent	___ 1.73
Other	0		
None	5	<u>Land Use</u>	<u>My Farm</u> <u>Average</u>
		Total owned acres	___ 541
<u>Business Record System</u>	<u>Number</u>	Total tillable acres (owned + rented)	___ 621
Account book	3		
Accounting service	1	<u>Number of Cows</u>	<u>My Farm</u> <u>Average</u>
On-farm computer	11	Beg. year (owned)	___ 152
Other	1	End year (owned & leased)	___ 157
		Average for year (owned & leased)	___ 151

*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 16 organic dairy farms include the single proprietorship, parlor milking system, freestall barn, two time a day milking, herd records with a testing service, and an on-farm computer record system.

The average size of the labor force on the organic dairy farms was similar to the 3.91 worker equivalent on non-organic dairy farms. The organic dairy farms averaged 621 tillable acres compared to 308 tillable acres on the 64 non-organic dairy farms. The non-organic dairy farms averaged 38 cows per worker, and the organic dairy farms averaged 34 cows per worker. In 2011, the non-organic dairy farms used labor resources more efficiently than the organic dairy farms when comparing pounds of milk sold per worker.

Income Statement

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

CASH AND ACCRUAL FARM EXPENSES
16 New York Organic Dairy Farms, 2011

Expense Item	Cash Paid	-	Change in Inventory or Prepaid Exp.	+	Change in Accounts Payable	=	Accrual Expenses	Percent of Total
<u>Hired Labor</u>	\$ 100,904		\$ -164	<<*	\$ 17		\$ 101,084	19
<u>Feed</u>								
Dairy grain & concentrate	121,031		516		-2,597		117,919	22
Dairy roughage	7,773		406		0		7,366	1
Nondairy feed	162		19		0		143	<1
Professional nutritional services	325		0	<<	0		325	<1
<u>Machinery</u>								
Machinery, hire, rent & lease	20,008		0	<<	-3,254		16,754	3
Mach. repair & farm vehicle exp.	51,608		-244		312		52,164	10
Fuel, oil & grease	41,051		145		0		40,906	8
<u>Livestock</u>								
Replacement livestock	0		0	<<	0		0	0
Breeding	6,112		121		32		6,022	1
Veterinary & medicine	10,422		29		-25		10,368	2
Milk marketing	6,618		0	<<	38		6,655	1
Bedding	6,964		-551		-78		7,437	1
Milking supplies	13,731		-18		-17		13,733	3
Cattle lease & rent	439		0	<<	0		439	<1
Custom boarding	1,833		0	<<	0		1,833	<1
Livestock professional fees	2,865		269	<<	0		2,596	<1
Other livestock expense	5,067		0		0		5,067	1
<u>Crops</u>								
Fertilizer & lime	14,840		911		-1		13,927	3
Seeds & plants	15,137		1,070		526		14,593	3
Spray, other crop expense	1,500		3		0		1,497	<1
Crop professional fees	510		0	<<	69		579	<1
<u>Real Estate</u>								
Land, building & fence repair	27,650		-402		-4,320		23,732	4
Taxes	15,958		0	<<	-947		15,010	3
Rent & lease	15,725		0	<<	0		15,725	3
<u>Other</u>								
Insurance	10,064		0	<<	0		10,064	2
Utilities (farm share)	15,977		0	<<	-8		15,969	3
Interest paid	21,750		0	<<	0		21,750	4
Other professional fees	6,644		490	<<	0		6,154	1
Miscellaneous	10,181		139		15		10,057	2
Total Operating	\$552,844		\$ 2,738		\$ -10,237		\$ 539,869	100
Expansion livestock	\$ 3,913		\$ 0	<<	\$ 0		3,913	
Extraordinary expense	\$ 0		\$ 0	<<	\$ 0		0	
Machinery depreciation							43,593	
Building depreciation							19,243	
TOTAL ACCRUAL EXPENSES							\$ 606,617	

*A change in prepaid expense is noted by <<.

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, 2012 rent paid in 2011. 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 farm operator 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	-	Change in Inventory or Prepaid Exp.	+	Change in Accounts Payable	=	Accrual Expenses
<u>Hired Labor</u>	\$ _____		\$ _____	<<*	\$ _____		\$ _____
<u>Feed</u>							
Dairy grain & concentrate	_____		_____		_____		_____
Dairy roughage	_____		_____		_____		_____
Nondairy feed	_____		_____		_____		_____
Professional nutritional services	_____		_____	<<	_____		_____
<u>Machinery</u>							
Machinery, hire, rent & lease	_____		_____	<<	_____		_____
Mach. repair & farm vehicle exp.	_____		_____		_____		_____
Fuel, oil & grease	_____		_____		_____		_____
<u>Livestock</u>							
Replacement livestock	_____		_____	<<	_____		_____
Breeding	_____		_____		_____		_____
Veterinary & medicine	_____		_____		_____		_____
Milk marketing	_____		_____	<<	_____		_____
Bedding	_____		_____		_____		_____
Milking supplies	_____		_____		_____		_____
Cattle lease & rent	_____		_____	<<	_____		_____
Custom boarding	_____		_____	<<	_____		_____
bST expense	_____		_____		_____		_____
Livestock professional fees	_____		_____	<<	_____		_____
Other livestock expense	_____		_____		_____		_____
<u>Crops</u>							
Fertilizer & lime	_____		_____		_____		_____
Seeds & plants	_____		_____		_____		_____
Spray, other crop expense	_____		_____		_____		_____
Crop professional fees	_____		_____	<<	_____		_____
<u>Real Estate</u>							
Land, building & fence repair	_____		_____		_____		_____
Taxes	_____		_____	<<	_____		_____
Rent & lease	_____		_____	<<	_____		_____
<u>Other</u>							
Insurance	_____		_____	<<	_____		_____
Utilities (farm share)	_____		_____	<<	_____		_____
Interest paid	_____		_____	<<	_____		_____
Other professional fees	_____		_____	<<	_____		_____
Miscellaneous	_____		_____		_____		_____
Total Operating	\$ _____		\$ _____		\$ _____		\$ _____
Expansion livestock	\$ _____		\$ _____	<<	\$ _____		\$ _____
Extraordinary expense	\$ _____		\$ _____	<<	\$ _____		\$ _____
Machinery depreciation							_____
Building depreciation							_____
TOTAL ACCRUAL EXPENSES							\$ _____

*A change in prepaid expense is noted by <<.

CASH AND ACCRUAL FARM RECEIPTS
16 New York Organic Dairy Farms, 2011

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Receipts
Milk Sales	\$ 663,926				\$ 2,603		\$ 666,529
Dairy cattle	24,015		\$ 12,046		125		36,186
Dairy calves	5,069		3,122		0		8,191
Other livestock	3,604		-2,310		0		1,294
Crops	1,955		-22,051		-269		-20,364
Government receipts	13,261		0*		110		13,371
Custom machine work	5,291				0		5,291
Gas tax refund	229				0		229
Other	13,360				347		13,707
- Nonfarm noncash capital**			(-) 0				(-) 0
Total Accrual Receipts	\$ 730,712		\$ -9,193		\$ 2,916		\$ 724,435

*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 farm operator during the year.

CASH AND ACCRUAL FARM RECEIPT WORKSHEET

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Receipts
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 New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64* Non-organic Dairy Farms	My Farm
Total accrual receipts	\$ 724,435	\$ 761,564	\$ _____
+ Appreciation: Livestock	-5,187	3,399	_____
Machinery	17,395	5,472	_____
Real Estate	75,121	18,750	_____
Other Stock & Certificates	<u>-331</u>	<u>-428</u>	_____
= Total Including Appreciation	\$ 811,434	\$ 788,756	\$ _____
- Total accrual expenses	<u>606,617</u>	<u>615,785</u>	_____
= Net Farm Income (with appreciation)	\$ 204,816	\$ 172,971	\$ _____
Per cow	\$ 1,355	\$ 1,177	\$ _____
Net Farm Income (without appreciation)	\$ 117,817	\$ 145,778	\$ _____
Per cow	\$ 779	\$ 992	\$ _____

*These are 64 non-organic dairy farms in New York that are similar in size and location to the organic farms.

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 farm operator might expect to earn in comparable risk investments in a low inflation economy.

LABOR AND MANAGEMENT INCOME
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
Net farm income without appreciation	\$ 117,817	\$ 145,778	\$ _____
- Family labor unpaid @ \$2,550 per month	- 4,558	- 10,192	- _____
- Interest on average equity capital @ 5% real rate	- <u>78,225</u>	- <u>56,146</u>	- _____
= Labor & Management Income per Farm	\$ 35,035	\$ 79,441	\$ _____
Labor & Management Income per Operator/Manager	\$ 20,251	\$ 53,676	\$ _____

Return to equity capital measures the net return remaining for the farm operator'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. Net farm income from operations ratio is net farm income (without appreciation) divided by total accrual receipts.

RETURN TO EQUITY CAPITAL AND RETURN TO ALL CAPITAL
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
Net farm income with appreciation	\$ 204,816	\$ 172,971	\$ _____
- Family labor unpaid @ \$2,550 per month	\$ 4,558	\$ 10,192	\$ _____
- Value of operators' labor & management	<u>66,484</u>	<u>57,532</u>	_____
= Return to equity capital with appreciation	\$ 133,774	\$ 105,246	\$ _____
+ Interest paid	<u>21,750</u>	<u>16,477</u>	_____
= Return to all capital with appreciation	\$ 155,524	\$ 121,723	\$ _____
Return to equity capital without appreciation	\$ 46,776	\$ 78,054	\$ _____
Return to all capital without appreciation	\$ 68,525	\$ 94,531	\$ _____
Rate of return on average equity capital:			
with appreciation	8.6%	9.4%	_____
without appreciation	3.0%	7.0%	_____
Rate of return on all capital:			
with appreciation	7.5%	7.9%	_____
without appreciation	3.3%	6.2%	_____
Net farm income from operations ratio	0.16	0.19	_____

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.

2011 FARM BUSINESS & NONFARM BALANCE SHEET 16 New York Organic Dairy Farms

Farm Assets			Farm Liabilities & Net Worth		
	January 1	December 31		January 1	December 31
<u>Current</u>			<u>Current</u>		
Farm cash, checking & savings	\$ 15,926	\$ 21,571	Accounts payable	\$ 19,163	\$ 8,926
Accounts receivable	56,308	59,223	Operating debt	14,209	23,638
Prepaid expenses	856	1,451	Short term	1,827	18,044
Feed & supplies	210,893	190,985	Advanced gov't. receipt	0	0
Total Current	\$ 283,982	\$ 273,230	Current portion:		
			Intermediate	40,977	46,065
			Long term	20,671	24,175
			Total Current	\$ 96,848	\$ 120,847
<u>Intermediate</u>			<u>Intermediate</u>		
Dairy Cows:			Structured debt		
owned	\$ 253,149	\$ 259,475	1-10 years	\$ 143,751	\$ 142,010
leased	817	423	Financial lease		
Heifers	127,835	131,427	(cattle & machinery)	3,737	5,785
Bulls & other livestock	6,041	3,794	Farm Credit stock	389	381
Mach. & equip. owned	394,476	447,321	Total Intermediate	\$ 147,878	\$ 148,177
Mach. & equip. leased	2,921	5,363			
Farm Credit stock	389	381	<u>Long Term</u>		
Other stock & certificate	31,868	34,496	Structured debt		
Total Intermediate	\$ 817,495	\$ 882,679	≥ 10 years	\$ 258,848	\$ 243,653
<u>Long Term</u>			Financial lease		
Land & buildings:			(structures)	0	0
owned	\$ 900,933	\$ 986,912	Total Long Term	\$ 258,848	\$ 243,653
leased	0	0			
Total Long Term	\$ 900,933	\$ 986,912	Total Farm Liabilities	\$ 503,573	\$ 512,677
Total Farm Assets	\$ 2,002,410	\$ 2,142,821	FARM NET WORTH	\$ 1,498,837	\$ 1,630,144
(Average for 8 farms reporting)			<u>Nonfarm Liabilities*</u>		
<u>Nonfarm Assets*</u>	January 1	December 31	& Net Worth	January 1	December 31
Personal cash, checking & savings	\$ 383	\$ 785	Nonfarm Liabilities	\$ 0	\$ 0
Cash value life insurance	17,084	16,539	NONFARM NET WORTH	\$ 166,767	\$ 164,365
Nonfarm real estate	57,500	57,500			
Auto (personal share)	312	237	FARM & NONFARM**	January 1	December 31
Stocks & bonds	80,114	79,555	Total Assets	\$ 2,169,177	\$ 2,307,186
Household furniture	9,125	3,500	Total Liabilities	503,573	512,677
All other	2,250	6,250			
Total Nonfarm	\$ 166,767	\$ 164,365	TOTAL FARM & NON-FARM NET WORTH	\$ 1,665,604	\$ 1,794,509

*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 farm operator 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 2011 that are for participation in the 2012 program are the end year balance and payments received in 2010 for participation in the 2011 program are the beginning year balance.

Date _____

2011 FARM BUSINESS & NONFARM BALANCE SHEET

Farm Assets	January 1	December 31	Farm Liabilities & Net Worth	January 1	December 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 & certificate	_____	_____			
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	_____	_____
Nonfarm Assets	January 1	December 31	Nonfarm Liabilities & Net Worth	January 1	December 31
Personal cash, checking & savings	_____	_____	Nonfarm Liabilities	_____	_____
Cash value life insurance	_____	_____		_____	_____
Nonfarm real estate	_____	_____		_____	_____
Auto (personal share)	_____	_____		_____	_____
Stocks & bonds	_____	_____	Total Nonfarm Liabilities	_____	_____
Household furniture	_____	_____			
All other	_____	_____	Nonfarm Net Worth	_____	_____
Total Nonfarm	_____	_____			
TOTAL FARM & NONFARM			January 1	December 31	
Total Farm and Nonfarm Assets			_____	_____	
Less Total Farm & Nonfarm Liabilities			_____	_____	
Farm & Nonfarm Net Worth			_____	_____	

Balance sheet analysis involves examination of relative asset and debt levels for the business. Percent equity is calculated by dividing end of year net worth by end of year assets. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect business solvency and the potential capacity to borrow. The leverage ratio is the dollars of debt per dollar of equity, computed by dividing total farm liabilities by farm net worth. Debt levels per productive unit represent old standards that are still useful if used with measures of cash flow and repayment ability. A current ratio of less than 1.5 or that has been falling warrants additional evaluation. The amount of working capital that is adequate must be related to the size of the farm business.

BALANCE SHEET ANALYSIS
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
<u>Financial Ratios - Farm:</u>			
Percent equity	76%	74%	_____ %
Debt/asset ratio: total	0.24	0.26	_____
long term	0.25	0.25	_____
intermediate & current	0.23	0.27	_____
Leverage ratio	0.31	0.35	_____
Current ratio	2.26	2.29	_____
Working capital \$152,383 as % of total expenses	25%	(\$126,810) 21%	_____ %
<u>Farm Debt Analysis:</u>			
Accounts payable as % of total debt	2%	5%	_____ %
Long term liabilities as a % of total debt	48%	41%	_____ %
Current & intermediate liabilities as a % of total debt	52%	59%	_____ %
Cost of term debt (weighted average)	3.6%	4.5%	_____ %
<u>Farm Debt Levels Per Cow:</u>			
Total farm debt	\$ 3,269	\$ 2,793	\$ _____
Long term debt	\$ 1,555	\$ 1,158	\$ _____
Intermediate & long term debt	\$ 2,501	\$ 2,133	\$ _____
Intermediate & current debt	\$ 1,714	\$ 1,635	\$ _____

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
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
Value beginning of year	\$ 394,476	\$ 288,827	\$ _____
Purchases	\$81,032	\$ 49,345	\$ _____
+ Nonfarm noncash transfer	0	386	_____
- Net Sales	1,989	2,289	_____
- Depreciation	<u>43,593</u>	<u>30,114</u>	_____
= Net investment	35,450	17,328	_____
+ Appreciation	<u>17,395</u>	<u>5,472</u>	_____
= Value end of year	\$ 447,321	\$ 311,627	\$ _____

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 farm operator 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)
16 New York Organic Dairy Farms, 2011

Item	Average 16 Organic Dairy Farms	My Farm
Beginning of year farm net worth	\$1,498,837	\$ _____
Net farm income without appreciation	\$ 117,817	\$ _____
+ Nonfarm cash income	+ 7,397	+ _____
- Personal withdrawals & family expenditures excluding nonfarm borrowings	- <u>80,205</u>	- _____
RETAINED EARNINGS	+\$45,010	+ \$ _____
Nonfarm noncash transfers to farm	\$ 0	\$ _____
+ Cash used in business from nonfarm capital	+ 18,229	+ _____
- Note/mortgage from farm real estate sold (nonfarm)	- <u>0</u>	- _____
CONTRIBUTED/WITHDRAWN CAPITAL	+\$18,229	+ \$ _____
Appreciation	\$ 86,999	\$ _____
- Lost capital	- <u>24,996</u>	- _____
CHANGE IN VALUATION EQUITY	+\$62,002	+ \$ _____
IMBALANCE/ERROR	- <u>\$ -6,065</u>	- \$ _____
End of year farm net worth*	=\$1,630,144	= \$ _____
Change in net worth with appreciation.	\$131,307	\$ _____

Change in Net Worth

Without appreciation	\$ 44,308	\$ _____
With appreciation	\$ 131,307	\$ _____

*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
16 New York Organic Dairy Farms, 2011

Item	Average 16 Organic Dairy Farms		
<u>Cash Flow from Operating Activities</u>			
Cash farm receipts	\$ 730,712		
- Cash farm expenses	552,844		
- Extraordinary expense	<u>0</u>		
= Net cash farm income		\$ 177,868	
Personal withdrawals & family expenses including nonfarm debt payments	\$ 80,205		
- Nonfarm income	<u>7,397</u>		
- Net cash withdrawals from the farm		<u>\$ 72,808</u>	
= Net Provided by Operating Activities			\$ 105,060
<u>Cash Flow From Investing Activities</u>			
Sale of assets: Machinery	\$ 1,989		
+ real estate	3,438		
+ other stock & certificates	<u>63</u>		
= Total asset sales		\$ 5,489	
Capital purchases: expansion livestock	\$ 3,913		
+ machinery	81,032		
+ real estate	58,534		
+ other stock & certificates	<u>3,021</u>		
- Total invested in farm assets		<u>\$ 146,500</u>	
= Net Provided by Investment Activities			\$ -141,011
<u>Cash Flow From Financing Activities</u>			
Money borrowed (intermediate & long term)	\$ 77,763		
+ Money borrowed (short term)	16,217		
+ Increase in operating debt	9,429		
+ Cash from nonfarm capital used in business	18,229		
+ Money borrowed - nonfarm	<u>0</u>		
= Cash inflow from financing		\$ 121,638	
Principal payments (intermediate & long term)	\$ 86,107		
+ Principal payments (short term)	0		
+ Decrease in operating debt	<u>0</u>		
- Cash outflow for financing		<u>\$ 86,107</u>	
= Net Provided by Financing Activities			\$ 35,531
<u>Cash Flow From Reserves</u>			
Beginning farm cash, checking & savings		\$ 15,926	
- Ending farm cash, checking & savings		<u>21,571</u>	
= Net Provided from Reserves			<u>\$ -5,645</u>
<u>Imbalance (error)</u>			\$ -6,065

ANNUAL CASH FLOW STATEMENT

Item		My Farm
<u>Cash Flow from Operating Activities</u>		
Cash farm receipts	\$ _____	
- Cash farm expenses	_____	
- Extraordinary expense	_____	
= 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		\$ _____
<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 for many farm operators and lenders is whether planned payments can be made in 2012. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 2012 debt payments shown below.

FARM DEBT PAYMENTS PLANNED Same 13 New York Organic Dairy Farms, 2010 & 2011*

Debt Payments	Average			My Farm		
	2011 Payments		Planned 2012	2011 Payments		Planned 2012
	Planned	Made		Planned	Made	
Long-term	\$ 29,747	\$ 35,416	\$ 37,526	\$ _____	\$ _____	\$ _____
Intermediate-term	70,756	76,475	57,268	_____	_____	_____
Short-term	1,200	219	11,442	_____	_____	_____
Operating (net red.)	0	538	13,160	_____	_____	_____
Accounts payable (net reduction)	0	13,055	0	_____	_____	_____
Total	\$ 101,703	\$ 125,703	\$ 119,396	\$ _____	\$ _____	\$ _____
Per cow	\$ 645	\$ 797		\$ _____	\$ _____	
Per cwt. 2011 milk	\$ 4.42	\$ 5.46		\$ _____	\$ _____	
Percent of total 2011 receipts	13%	16%		_____	_____	
Percent of 2011 milk receipts	14%	17%		_____	_____	

*Farms that completed Dairy Farm Business Summaries for both 2010 and 2011.

The cash flow coverage ratio and debt coverage ratio measure the ability of the farm business to meet its planned debt payment schedule. The ratios show the percentage of planned payments (as of December 31, 2010) that could have been made with the amount available for debt service in 2011. Farm operators that did not participate in DFBS last year will find in their report coverage ratios based on planned debt payments for 2012.

COVERAGE RATIOS Same 13 New York Organic Dairy Farms, 2010 & 2011

Item	Average	Item	Average
<u>Cash Flow Coverage Ratio</u>		<u>Debt Coverage Ratio</u>	
Cash farm receipts	\$ 799,632	Net farm income (w/o appreciation)	\$ 122,567
- Cash farm expenses	608,057	+ Depreciation	68,908
+ Interest paid (cash)	22,391	+ Interest paid (accrual)	22,391
- Net personal withdrawals from farm*	77,426	- Net personal withdrawals from farm*	77,426
(A) = Amount Available for Debt Service	\$ 136,541	(A') = Repayment Capacity	\$ 136,440
(B) = Debt Payments Planned for 2011 (as of December 31, 2010)	\$ 101,703	(B) = Debt Payments Planned for 2011 (as of December 31, 2010)	\$ 101,703
(A/B)=Cash Flow Coverage Ratio for 2011	1.34	(A'/B)=Debt Coverage Ratio for 2011	1.34

Same 57 New York Non-organic Dairy Farms, 2010 & 2011

(A) = Amount Available for Debt Service	\$ 115,258	(A') = Repayment Capacity	\$ 165,562
(B) = Debt Payments Planned for 2011	\$ 61,495	(B) = Debt Payments Planned for 2011	\$ 61,495
(A/B)=Cash Flow Coverage Ratio for 2011	1.87	(A'/B)=Debt Coverage Ratio for 2011	2.69

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

ANNUAL CASH FLOW WORKSHEET

Item	16 Organic Dairy Farms	My Farm		Expected Change	2012 Projection
		Total	Per Cow		
Average number of cows	151				
<u>Accrual Operating Receipts</u>	(per cow)				
Milk	\$4,409	\$	\$		\$
Dairy cattle	239				
Dairy calves	54				
Other livestock	9				
Crops	-135				
Miscellaneous receipts	<u>216</u>				
Total	\$4,792	\$	\$		\$
<u>Accrual Operating Expenses</u>					
Hired labor	\$ 669	\$	\$		\$
Dairy grain & concentrate	780				
Dairy roughage	49				
Nondairy feed	1				
Professional nutritional services	2				
Machinery hire, rent & lease	111				
Machinery repair & vehicle exp.	345				
Fuel, oil & grease	271				
Replacement livestock	0				
Breeding	40				
Veterinary & medicine	69				
Milk marketing	44				
Bedding	49				
Milking supplies	91				
Cattle lease	3				
Custom boarding	12				
Livestock professional fees	17				
Other livestock expense	34				
Fertilizer & lime	92				
Seeds & plants	97				
Spray & other crop expense	10				
Crop professional fees	4				
Land, building & fence repair	157				
Taxes	99				
Real estate rent & lease	104				
Insurance	67				
Utilities	106				
Misc. & other professional fees	<u>107</u>				
Total Less Interest Paid	\$3,427	\$	\$	\$	\$
<u>Net Accrual Operating Income</u>	(Total)				
(without interest paid)	\$ 206,316	\$			\$
- Change in livestock & crop inv.	-9,193				
- Change in accounts receivable	2,916				
- Change in feed & supply inv.*	2,738				
+ Change in accounts payable**	<u>-10,237</u>				
NET CASH FLOW	\$ 199,618	\$			\$
- Net family withdrawals	<u>66,279</u>				
Available for Farm Debt & Investments	\$ 133,338	\$			\$
- Farm debt payments	<u>118,176</u>				
Available for Farm Investments	\$15,163	\$			\$
- Capital purchases: cattle, machinery & improvements	<u>146,500</u>	\$		\$	\$
Additional Capital Needed	\$ 131,337	\$			\$

*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
New York Organic Dairy Farms Reporting, 2011

Item	Average of Organic Farms Reporting			My Farm	
Crop Yields	Farms	Acres	Production/Acre*	Acres	Production/Acre
Hay crop	16	338	2.49 tons DM	_____	_____ tons DM
Corn silage	7	75	11.70 tons	_____	_____ tons
			4.64 tons DM	_____	_____ tons DM
Other forage	0	0	0.00 tons DM	_____	_____ tons DM
Total forage	16	371	2.68 tons DM	_____	_____ tons DM
Corn grain	6	93	148 bushels	_____	_____ bushels
Oats	0	0	0 bushels	_____	_____ bushels
Wheat	2	26	18 bushels	_____	_____ bushels
Other crops	8	131		_____	
Tillable pasture	11	189		_____	
Idle	2	178		_____	
Total Tillable Acres	16	621		_____	

*2011 average yields for 64 non-organic dairy farms in New York included: all hay crops, 3.1 tons dry matter per acre; corn silage, 16.2 tons per acre.

Average crop acres and yields compiled above 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 farm operators. 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 FOR FARMS GROWING FORAGES
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

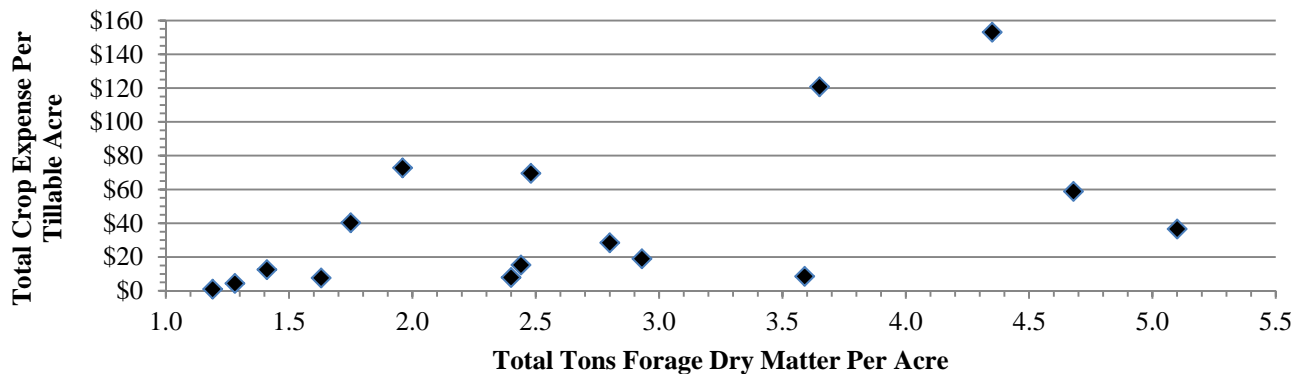
Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
Total tillable acres per cow	4.11	2.25	_____
Total forage acres per cow	2.46	1.98	_____
Harvested forage dry matter, tons per cow	6.58	7.73	_____

Average fertilizer and lime, seeds and plants, and spray and other crop expenses have been computed per tillable acre for all farms that grew forages. Additional expense items such as fuel, labor, and machinery repairs are not included. Rotational grazing was used on 13 organic farms and 22 non-organic dairy farms.

CROP RELATED ACCRUAL EXPENSES FOR FARMS GROWING FORAGES
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	Average Per Tillable Acre		
	16 Organic Dairy Farms	60 Non-Organic Dairy Farms	My Farm
Average number of acres	621	308	
Fertilizer and lime expense	\$19.64	\$47.93	\$ _____
Seeds & plants	18.59	30.93	_____
Spray and other crop expense	<u>2.82</u>	<u>16.25</u>	_____
Total	\$41.05	\$95.11	\$ _____

CROP EXPENSE PER ACRE BY TOTAL FORAGE PRODUCTION PER ACRE
Organic Dairy Farms That Grow Forages, 2011



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 FOR FARMS GROWING FORAGES
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	Average Per Tillable Acre		My Farm	
	16 Organic Dairy Farms	60 Non-organic Dairy Farms	Total Expenses	Per Tillable Acre
Fuel, oil & grease	\$ 65.87	\$ 91.88	\$ _____	\$ _____
Machine repair & farm vehicle expense	83.99	112.59	_____	_____
Machine hire, rent & lease	26.98	44.60	_____	_____
Interest (5%)	34.22	47.80	_____	_____
Depreciation	<u>70.19</u>	<u>92.58</u>	_____	_____
Total	\$281.25	\$389.45	\$ _____	\$ _____

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 the following 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
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	Dairy Cows		Heifers				Calves	
	No.	Value	Bred		Open		No.	Value
	No.	Value	No.	Value	No.	Value	No.	Value
<u>16 Organic Dairy Farms:</u>								
Beginning year (owned)	152	\$ 253,149	42	\$ 65,186	46	\$ 43,599	31	\$ 19,050
+ Change w/o appreciation		9,845		-2,094		4,295		3,122
+ Appreciation		<u>-3,519</u>		<u>-586</u>		<u>-456</u>		<u>-689</u>
End year (owned)	157	\$ 259,475	42	\$ 62,506	51	\$ 47,438	35	\$ 21,483
End including leased	157							
Average number	151		124	(all age groups)				
<u>64 Non-organic Dairy Farms:</u>								
Beginning year (owned)	145	\$ 195,561	40	\$ 52,633	43	\$ 34,380	34	\$ 16,212
+ Change w/o appreciation		912		6,038		730		577
+ Appreciation		<u>1,878</u>		<u>1,005</u>		<u>185</u>		<u>371</u>
End year (owned)	147	\$ 198,352	45	\$ 59,676	44	\$ 35,295	36	\$ 17,161
End including leased	148							
Average number	147		123	(all age groups)				
<u>My Farm:</u>								
Beginning year (owned)	—	\$ _____	—	\$ _____	—	\$ _____	—	\$ _____
+ Change w/o appreciation		_____		_____		_____		_____
+ 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.

MILK PRODUCTION
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms	64 Non-organic Dairy Farms	My Farm
Total milk sold, pounds	2,117,746	3,136,491	_____
Milk sold per cow, pounds	14,007	21,348	_____
Average milk plant test, % butterfat	3.7%	3.8%	_____

Monitoring and evaluating culling practices and experiences on an annual basis are important herd management tools. Culling rate can have an effect on both milk per cow and profitability.

ANIMALS LEAVING THE HERD
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms		64 Non-organic Dairy Farms		My Farm	
	Number	Percent*	Number	Percent*	Number	Percent*
Cows sold for beef	30	20	39	27	_____	_____
Cows sold for dairy	2	1	1	1	_____	_____
Cows died	7	5	8	5	_____	_____
Culling rate**		25		32	_____	_____

*Percent of average number of cows in the herd. ** Cows sold for beef plus cows died.

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
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	16 Organic Dairy Farms		64 Non-organic Dairy Farms		My Farm	
	Total	Per Cwt.	Total	Per Cwt.	Total	Per Cwt.
<u>Accrual Cost of Producing Milk</u>						
Operating cost	\$485,875	\$22.94	\$486,556	\$15.51	\$ _____	\$ _____
Purchased input cost	\$548,711	\$25.91	\$533,436	\$17.01	\$ _____	\$ _____
Total cost	\$697,978	\$32.96	\$657,306	\$20.96	\$ _____	\$ _____
<u>Accrual Receipts from Milk</u>	\$666,529	\$31.47	\$679,214	\$21.66	\$ _____	\$ _____
Net Milk Receipts	\$659,873	\$31.16	\$649,126	\$20.70	\$ _____	\$ _____

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
New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	Average Per Cwt. Milk		My Farm
	16 Organic Dairy Farms	64 Non-Organic Dairy Farms	Per Cwt.
Purchased dairy grain & concentrate	\$5.57	\$6.31	\$ _____
Purchased dairy roughage	<u>0.35</u>	<u>0.73</u>	_____
Total Purchased Dairy Feed	\$5.92	\$7.04	\$ _____
Purchased grain & concentrate as % of milk receipts	19%	30%	_____ %
Purchased feed & crop expense	\$7.36	\$8.07	\$ _____
Purchased feed & crop expense as % of milk receipts	24%	38%	_____ %
Breeding	\$0.28	\$0.26	\$ _____
Veterinary & medicine	0.49	0.58	_____
Milk marketing	0.31	0.96	_____
Bedding	0.35	0.34	_____
Milking supplies	0.65	0.41	_____
Cattle lease	0.02	0.02	_____
Custom boarding	0.09	0.23	_____
bST expense	0.00	0.08	_____
Livestock professional fees	0.12	0.09	_____
Other livestock expense	0.24	0.12	_____

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 New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Item	Per Worker	Per Cow	Per Tillable Acre
<u>16 Organic Dairy Farms:</u>			
Farm capital	\$ 463,587	\$ 13,706	\$ 3,337
Real estate		6,243	1,520
Machinery & equipment	95,087	2,811	684
<u>Ratios</u>			
Asset turnover	Operating expense	Interest expense	Depreciation expense
0.39	0.72	0.03	0.09
<u>64 Non-organic Dairy Farms:</u>			
Farm capital	\$ 392,760	\$ 10,453	\$ 4,981
Real estate		4,595	2,191
Machinery & equipment	77,057	2,051	977
<u>Ratios</u>			
Asset turnover	Operating expense	Interest expense	Depreciation expense
0.51	0.73	0.02	0.06
<u>My Farm:</u>			
Farm capital	\$ _____	\$ _____	\$ _____
Machinery & equipment	_____	_____	_____
<u>Ratios</u>			
Asset turnover	Operating expense	Interest expense	Depreciation expense
_____	_____	_____	_____

LABOR FORCE ANALYSIS New York Organic Dairy Farms and Non-Organic Dairy Farms, 2011

Efficiency	16 Organic Dairy Farms		64 Non-organic Dairy Farms		My Farm	
	Total	Per Worker	Total	Per Worker	Total	Per Worker
Cows, average number	151	34	147	38	_____	_____
Milk sold, pounds	2,117,746	473,945	3,136,491	802,172	_____	_____
Tillable acres	621	139	308	79	_____	_____
Labor Costs	16 Organic Dairy Farms		64 Non-organic Dairy Farms		My Farm	
	Total	Per Cow	Total	Per Cow	Total	Per Cow
Value of operator(s) labor*	\$ 57,299	\$ 379	\$ 50,898	\$ 346	\$ _____	\$ _____
Family unpaid*	4,565	30	10,200	69	_____	_____
Hired	101,084	669	60,336	411	_____	_____
Total Labor	\$ 162,947	\$ 1,078	\$ 121,434	\$ 827	\$ _____	\$ _____
Machinery Cost	\$ 174,670	\$ 1,155	\$ 123,938	\$ 844	\$ _____	\$ _____
Total Labor & Machinery	\$ 337,617	\$ 2,233	\$ 245,371	\$ 1,670	\$ _____	\$ _____
Hired labor expense per hired worker equivalent	\$ 41,315		\$ 31,534		\$ _____	
Hired labor expense as % of milk sales	15.2%		8.9%		_____%	

*\$2,550 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 13 New York Organic Dairy Farms, 2010 & 2011

Selected Factors	Average 13 Organic Farms		My Farm		Goal
	2010	2011	2010	2011	
<u>Size of Business</u>					
Average number of cows	150	158	_____	_____	_____
Average number of heifers	116	128	_____	_____	_____
Milk sold, pounds	2,180,798	2,301,633	_____	_____	_____
Worker equivalent	4.57	4.60	_____	_____	_____
Total tillable acres	624	618	_____	_____	_____
<u>Rates of Production</u>					
Milk sold per cow, pounds	14,569	14,589	_____	_____	_____
Hay DM per acre, tons	2.5	2.9	_____	_____	_____
Corn silage per acre, tons	11.4	11.6	_____	_____	_____
<u>Labor Efficiency</u>					
Cows per worker	33	34	_____	_____	_____
Milk sold per worker, lbs.	477,199	500,355	_____	_____	_____
<u>Cost Control</u>					
Grain & concentrate purchased as % of milk sales	16%	17%	_____ %	_____ %	_____ %
Dairy feed & crop expense per hundredweight milk	\$6.04	\$7.29	\$ _____	\$ _____	\$ _____
Labor & machinery costs/cow	\$2,252	\$2,307	\$ _____	\$ _____	\$ _____
Operating cost of producing hundredweight milk	\$16.77	\$23.33	\$ _____	\$ _____	\$ _____
<u>Capital Efficiency*</u>					
Farm capital per cow	\$13,118	\$13,703	\$ _____	\$ _____	\$ _____
Machinery & equipment per cow	\$2,707	\$2,992	\$ _____	\$ _____	\$ _____
Asset turnover ratio	0.41	0.41	_____	_____	_____
<u>Profitability</u>					
Net farm income without appreciation	\$187,313	\$122,567	\$ _____	\$ _____	\$ _____
Net farm income with appreciation	\$218,068	\$226,833	\$ _____	\$ _____	\$ _____
Labor & management income per operator/manager	\$62,090	\$22,169	\$ _____	\$ _____	\$ _____
Rate of return on equity capital with appreciation	9.4%	9.4%	_____ %	_____ %	_____ %
Rate of return on all capital with appreciation	8.3%	8.1%	_____ %	_____ %	_____ %
<u>Financial Summary</u>					
Farm net worth, end year	\$1,575,384	\$1,707,745	\$ _____	\$ _____	\$ _____
Debt to asset ratio	0.24	0.24	_____	_____	_____
Farm debt per cow	\$3,158	\$3,283	\$ _____	\$ _____	\$ _____

*Average for the year.

RECEIPTS AND EXPENSES PER COW AND PER HUNDREDWEIGHT
Same 13 New York Organic Dairy Farms, 2010 & 2011

Item	2010		2011	
	Per Cow	Per Cwt.	Per Cow	Per Cwt.
Average Number of Cows	150		158	
Cwt. of Milk Sold		21,808		23,016
<u>ACCRUAL OPERATING RECEIPTS</u>				
Milk	\$4,295	\$29.48	\$4,618	\$31.65
Dairy cattle	336	2.31	246	1.68
Dairy calves	43	0.30	62	0.43
Other livestock	26	0.18	6	0.04
Crops	284	1.95	-170	-1.16
Miscellaneous receipts	<u>214</u>	<u>1.47</u>	<u>235</u>	<u>1.61</u>
Total Receipts	\$5,197	\$35.68	\$4,997	\$34.26
<u>ACCRUAL OPERATING EXPENSES</u>				
Hired labor	\$ 641	\$ 4.40	\$ 719	\$ 4.93
Dairy grain & concentrate	669	4.59	788	5.40
Dairy roughage	23	0.16	45	0.31
Nondairy feed	1	0.00	1	0.01
Professional nutritional services	0	0.00	0	0.00
Machine hire/rent/lease	171	1.18	118	0.81
Machinery repair & vehicle expense	319	2.19	370	2.54
Fuel, oil & grease	213	1.46	278	1.91
Replacement livestock	15	0.10	0	0.00
Breeding	54	0.37	46	0.32
Veterinary & medicine	76	0.52	76	0.52
Milk marketing	71	0.49	48	0.33
Bedding	26	0.18	57	0.39
Milking supplies	80	0.55	85	0.58
Cattle lease	4	0.03	3	0.02
Custom boarding	14	0.10	14	0.10
bST expense	0	0.00	0	0.00
Livestock professional fees	19	0.13	20	0.14
Other livestock expense	32	0.22	40	0.27
Fertilizer & lime	82	0.57	106	0.72
Seeds & plants	83	0.57	109	0.75
Spray/other crop expense	18	0.12	12	0.08
Crop professional fees	5	0.03	5	0.03
Land, building, fence repair	100	0.69	179	1.23
Taxes	106	0.73	89	0.61
Real estate rent/lease	116	0.80	121	0.83
Insurance	58	0.40	65	0.44
Utilities	108	0.74	105	0.72
Interest paid	139	0.95	142	0.97
Other professional fees	38	0.26	47	0.32
Miscellaneous	<u>53</u>	<u>0.36</u>	<u>67</u>	<u>0.46</u>
Total Operating Expenses	\$3,334	\$22.89	\$3,753	\$25.73
Expansion Livestock	12	0.08	31	0.21
Extraordinary Expense	71	0.49	0	0.00
Machinery Depreciation	366	2.51	294	2.02
Real Estate Depreciation	<u>163</u>	<u>1.12</u>	<u>143</u>	<u>0.98</u>
Total Expenses	\$3,946	\$27.09	\$4,221	\$28.94
Net Farm Income Without Appreciation	\$1,251	\$ 8.59	\$ 777	\$ 5.33

Condensed Summary and Selected Business Factors for Two Herd Size Groups

CONDENSED FARM BUSINESS SUMMARY FOR TWO ORGANIC GROUPS BY HERD SIZE
16 New York Organic Dairy Farms, 2011

Item	8 Organic Dairy Farms with Less Than 100 Cows		8 Organic Dairy Farms with More Than 100 Cows	
	Per Cow	Per Cwt.	Per Cow	Per Cwt.
<u>ACCRUAL EXPENSES</u>				
Hired labor	\$ 278	\$ 2.39	\$ 772	\$ 5.28
Dairy grain & concentrate	811	6.97	772	5.27
Dairy roughage	66	0.56	44	0.30
Nondairy feed	5	0.04	0	0.00
Professional nutritional services	10	0.09	0	0.00
Machine hire, rent & lease	67	0.57	123	0.84
Machine repairs & farm vehicle expense	279	2.40	363	2.48
Fuel, oil & grease	221	1.90	284	1.94
Replacement livestock	0	0.00	0	0.00
Breeding	21	0.18	45	0.31
Veterinary & medicine	42	0.36	76	0.52
Milk marketing	69	0.59	37	0.26
Bedding	16	0.14	58	0.40
Milking supplies	83	0.71	93	0.64
Cattle lease & rent	14	0.12	0	0.00
Custom boarding	0	0.00	15	0.10
bST expense	0	0.00	0	0.00
Livestock professional fees	11	0.09	19	0.13
Other livestock expense	32	0.27	34	0.23
Fertilizer & lime	71	0.61	98	0.67
Seeds & plants	46	0.40	110	0.75
Spray & other crop expense	10	0.09	10	0.07
Crop professional fees	0	0.00	5	0.03
Land, building & fence repair	87	0.75	176	1.20
Taxes & rent	177	1.51	210	1.44
Utilities	115	0.99	103	0.70
Interest paid	125	1.08	149	1.02
Other professional fees	20	0.17	46	0.32
Misc. (including insurance)	127	1.09	135	0.92
Total Operating Expenses	\$2,802	\$24.08	\$3,775	\$25.79
Expansion livestock	13	0.11	29	0.20
Extraordinary expense	0	0.00	0	0.00
Machinery depreciation	389	3.34	262	1.79
Building depreciation	48	0.41	148	1.01
Total Accrual Expenses	\$3,252	\$27.94	\$4,214	\$28.79
<u>ACCRUAL RECEIPTS</u>				
Milk sales	\$3,396	\$29.18	\$4,678	\$31.96
Dairy cattle	181	1.56	255	1.74
Dairy calves	59	0.50	53	0.36
Other livestock	12	0.10	8	0.05
Crops	4	0.04	-172	-1.17
Miscellaneous receipts	315	2.71	189	1.29
Total Accrual Receipts	\$3,967	\$34.09	\$5,011	\$34.23
<u>PROFITABILITY ANALYSIS (Total)</u>				
Net farm income (without appreciation)	\$45,409		\$190,226	
Net farm income (with appreciation)	\$60,463		\$349,170	
Labor & management income/operator	\$-3,466		\$41,872	
Rates of return on: Equity capital without appreciation	-2.1%		4.9%	
Equity capital with appreciation	-0.3%		11.8%	
All capital without appreciation	-1.0%		4.7%	
All capital with appreciation	0.5%		9.7%	

SELECTED BUSINESS FACTORS FOR TWO ORGANIC GROUPS BY HERD SIZE
16 New York Organic Dairy Farms, 2011

Item	8 Organic Dairy Farms with Less Than 100 Cows	8 Organic Dairy Farms with More Than 100 Cows
<u>Cropping Program Analysis</u>		
Total acres	517	1,179
Tillable acres	303	939
Hay crop acres*	212	465
Corn silage acres*	50	86
Hay crop, tons DM/acre*	1.9	2.8
Corn silage, tons/acre*	8.7	12.4
Forage DM per cow, tons*	6.9	6.5
Tillable acres/cow*	4.8	3.9
Fertilizer & lime expense/tillable acre*	\$21.66	\$17.62
Machinery cost/tillable acre*	\$226	\$299
<u>Dairy Analysis</u>		
Number of cows	64	239
Number of heifers	46	202
Milk sold, pounds	739,016	3,496,477
Milk sold/cow, pounds	11,638	14,637
Operating cost of producing milk/cwt.	\$19.28	\$23.72
Total cost of producing milk/cwt.	\$37.31	\$32.04
Price/cwt. milk sold	\$29.18	\$31.96
Purchased dairy feed/cow	\$876	\$816
Purchased dairy feed/cwt. milk	\$7.53	\$5.57
Purchased grain & concentrate as % of milk receipts	21%	17%
Purchased feed & crop expense/cwt. milk	\$8.63	\$7.09
<u>Capital Efficiency</u>		
Farm capital/worker	\$356,251	\$512,535
Farm capital/cow	\$15,709	\$13,174
Real estate/cow	\$9,386	\$5,408
Machinery investment/cow	\$2,512	\$2,891
Asset turnover ratio	0.27	0.43
<u>Labor Efficiency</u>		
Worker equivalent	2.80	6.14
Operator/manager equivalent	1.65	1.81
Milk sold/worker, lbs.	264,013	569,768
Cows/worker	23	39
Labor cost/cow	\$1,293	\$1,021
<u>Financial Measures</u>		
Percent equity	86%	73%
Debt/asset ratio - long term	0.12	0.30
Debt/asset ratio - intermediate & current	0.17	0.25
Change in net worth with appreciation	\$45,204	\$217,409
Total farm debt per cow	\$2,139	\$3,571
Debt payments made per cow	\$662	\$823
Debt payments as % of milk sales	18%	17%
Amount available for debt service	\$53,533	\$207,690
Debt coverage ratio for 2011	1.71	1.31

*Average of farms growing forages.

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 four figures in each column represent the average of each 25 percent or quartile of farms included in the summary.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

16 New York Organic Dairy Farms, 2011

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
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
8.33	327	4,835,477	19,487	4.1	16	47	682,668
4.39	151	2,157,477	15,268	2.9	5	34	532,028
3.09	78	1,087,813	12,151	2.1	0	25	378,091
2.08	49	390,219	6,299	1.3	0	20	137,128
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	
(12)		(12)	(14)	(14)	(12)	(12)	
\$148		7%	\$647	\$1,685	\$233	\$3.12	
648		13	960	2,010	887	5.74	
941		23	1,225	2,449	1,213	7.94	
1,478		35	1,885	3,234	1,713	12.79	
Value and Cost of Production			Profitability				
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Producing Milk Per Cwt.	Net Farm Income With Appreciation	Net Farm Income Without Appreciation	Labor & Management Income Per Operator	Change in New Worth with Appreciation	
(12)	(12)	(12)	(4)	(4)	(4)	(8)	
\$5,823	\$12.14	\$25.68	\$527,519	\$290,244	\$151,279	\$52,420	
4,792	18.34	31.26	188,218	108,549	33,198	26,294	
3,729	22.70	37.32	77,549	60,252	560	16,591	
1,983	29.31	57.48	25,980	12,225	-43,070	3,075	

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

**Most do not grow corn silage.

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 10, 11, 14 and 20 of this publication. References to DFBS output page numbers for participating dairy farm operators are provided in the table headings.

FINANCIAL ANALYSIS CHART
16 New York Organic Dairy Farms, 2011

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
(10)*	(16)	(10)	(10)	(7)
\$ 46	\$1,385	3.55	5%	\$1,127
344	1,087	1.97	15	2,065
626	956	1.51	21	3,247
1,036	236	0.31	36	5,001

Solvency			Profitability	
Leverage Ratio**	Percent Equity	Debt/Asset Ratio	Percent Rate of Return on (with Appreciation):	
		Current & Intermediate	Equity	Investment***
(7)	(7)	(7)	(4)	(4)
0.06	95%	0.05	15%	12%
0.18	85	0.16	10	8
0.39	73	0.24	3	3
0.79	56	0.51	-5	-3

Efficiency (Capital)			
Asset Turnover Ratio	Machinery Investment Per Cow	Total Farm Assets Per Cow	Change in Net Worth With Appreciation
(14)	(14)	(14)	(8)
0.60	\$1,482	\$22,240	\$52,420
0.43	1,985	14,903	26,294
0.34	2,569	12,697	16,591
0.16	5,342	9,315	3,075

*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 25 and 26 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 4)

Accrual Receipts - (defined on page 5)

Annual Cash Flow Statement - (defined on page 12)

Appreciation - (defined on page 6)

Asset Turnover Ratio - (defined on page 20)

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

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

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

Cash Flow Coverage Ratio - (defined on page 14)

Cash Paid - (defined on page 3)

Cash Receipts - (defined on page 5)

Change in Accounts Payable - (defined on page 4)

Change in Accounts Receivable - (defined on page 5)

Change in Inventory - (defined on page 3)

Cost of Term Debt - A weighted average of the cost of borrowed capital to the farm. Calculate by multiplying end of year principal of each loan that is borrowed by the interest rate for each loan at that time. Add up each amount that is calculated for each loan and then divide by total amount of borrowed funds. Do not include accounts payable, operating debt or advanced government receipts. This information is found on pages 8 and 9 of the data entry form.

Culling Rate - (defined on page 18)

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

Current Ratio - Measures the extent to which current farm assets, if liquidated, would cover current farm liabilities. Calculated as current farm assets at end year divided by current farm liabilities at end year.

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

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

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

Debt to Asset Ratios - (defined on page 10)

Depreciation Expense Ratio - Machinery and building depreciation divided by total accrual receipts.

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.

Hired Labor Expense per Hired Worker Equivalent - The total cost to the farm per hired worker equivalent. Divide accrual hired labor expense by number of hired plus family paid worker equivalent.

Hired Labor Expense as % of Milk Sales - The percentage of the gross milk receipts that is used for labor expense. Divide accrual hired labor expense by accrual milk sales.

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.

Interest Expense Ratio - Accrual interest expense divided by total accrual receipts.

Labor and Management Income - (defined on page 7)

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.

Leverage Ratio - (defined on page 10)

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

Net Farm Income - (defined on page 6)

Net Farm Income from Operations Ratio - (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 19)

Operating Expense Ratio - Total accrual expenses less interest and machinery and building depreciation divided by total accrual receipts.

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 farm operator'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 19)

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

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

Return on Equity Capital - (defined on page 7)

Return on Total Capital - (defined on page 7)

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

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 19)

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

Working Capital - A theoretical measure of the amount of funds available to purchase inputs and inventory items after the sale of current farm assets and payment of all current farm liabilities. Calculate as current farm assets at end year less current farm liabilities at end year.

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