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DAIRY FARM BUSINESS SUMMARY

WESTERN AND CENTRAL PLATEAU REGION 2005

Celebrating 50+ Years of Regional Farm Data Analyses

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WESTERN AND CENTRAL PLATEAU REGION
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2005 DAIRY FARM BUSINESS SUMMARY
WESTERN AND CENTRAL PLATEAU REGION*

INTRODUCTION

Dairy farm managers throughout New York State have been participating in Cornell Cooperative Extension's farm business summary and analysis program since the early 1950's. Managers of each participating farm business receive a comprehensive summary and analysis of their farm business. The information in this report represents averages of the data submitted from dairy farms in the Western and Central Plateau Region for 2005.

Program Objective

The primary objective of the dairy farm business summary, DFBS, is to help farm managers improve the business and financial management of their business through appropriate use of historical data and the application of modern farm business analysis techniques. This information can also be used to establish goals that enable the business to better fulfill its mission. In short, DFBS provides business and financial information needed in identifying and evaluating strengths and weaknesses of the farm business.

Format Features

This regional report follows the same general format as the 2005 DFBS individual farm report received by participating dairy farmers. The analysis tables have an open column or section labeled My Farm. It may be used by any dairy farm manager who wants to compare his or her business with the average data of this region. The individual farm data, the regional averages and other data can then be used to establish goals for the business. Non-DFBS participants can download a DFBS Data Check-In Form at http://dfbs.cornell.edu. After collecting the data on the form, it can be entered in the U. S. Top Dairies business summary program at the same web site to obtain a summary of their business.

This report features:

(1) an income statement including accrual adjustments for farm business expenses and receipts, as well as measures of profitability with and without appreciation,

(2) a complete balance sheet with analytical ratios;

(3) a statement of owner equity which shows the sources of the change in owner equity during the year;

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

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

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

(7) a capital and labor efficiency analysis; and

(8) progress of the farm business over the past two years.

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* This report was written by Wayne A. Knoblauch, Department of Applied Economics and Management, College of Agriculture and Life Sciences, Cornell University, in cooperation with Cooperative Extension Educators Joan Petzen, David Munsee, Jacob Schuelke, and James Grace; and Jason Karszes, Senior Extension Associate, PRO-DAIRY. Linda Putnam was in charge of data preparation. The Western and Central Plateau Region of New York State, with the number of participating farms in parentheses, is comprised of Allegany (2), Cattaraugus (4), Chautauqua (11), Chemung (3), Cortland (3), Schuyler (2), Steuben (6), Tioga (5), and Tompkins (3) Counties in New York

SUMMARY AND ANALYSIS OF THE FARM BUSINESS

Business Characteristics

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

BUSINESS CHARACTERISTICS
39 Western and Central Plateau Region Dairy Farms, 2005

Type of Farm	Number
Dairy	39
Part-time dairy	0
Dairy cash-crop	0
Certified organic milk producer	0
Rotational grazing farm	23

Type of Ownership	Number
Owner	38
Renter	1

Type of Business	Number
Sole Proprietorship	24
Partnership	11
Limited Liability Corporation	4
Subchapter S Corporation	0
Subchapter C Corporation	0

Type of Barn	Number
Stanchion or Tie-Stall	18
Freestall	18
Combination	3

Milking Frequency	Number
2 times per day	33
3 times per day	6
Other	0

Breed of Herd	Percent
Holstein	81
Jersey	9
Other	10

Milking System	Number
Bucket & carry	0
Dumping station	1
Pipeline	18
Herringbone conventional exit	11
Herringbone rapid exit	0
Parallel	7
Parabone	0
Rotary	0
Other	2

Production Records	Number
Testing Service	31
On Farm System	3
Other	0
None	5

bST Usage	Number
Used consistently	6
Used inconsistently	3
Started using in 2005	0
Stopped using in 2005	0
Not used in 2005	30
Average percent usage, if used	34%

Business Record System	Number
Account Book	12
Accounting Service	5
On-farm computer	21
Other	1

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

Income Statement

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

Cash paid is the actual cash outlay during the year and does not necessarily represent the cost of goods and services actually used in 2005.

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

CASH AND ACCRUAL FARM EXPENSES

39 Western and Central Plateau Region Dairy Farms, 2005

Expense Item	Cash Paid	-	Change in Inventory or Prepaid Expense	+	Change in Accounts Payable	=	Accrual Expenses
Hired Labor	$ 66,126		$ -76	<<	$ -88		$ 66,114
Feed							
Dairy grain & concentrate	136,577		2,080		-2,501		131,995
Dairy roughage	8,329		2,371		-641		5,317
Nondairy	13		0		0		13
Professional nutritional services	200		0		-4		196
Machinery							
Machinery hire, rent & lease	13,271		0	<<	-481		12,790
Machinery repairs & farm vehicle exp.	30,920		239		-592		30,089
Fuel, oil & grease	17,419		-326		-57		17,687
Livestock							
Replacement livestock	1,862		0	<<	0		1,862
Breeding	7,757		116		234		7,874
Veterinary & medicine	16,781		21		-13		16,748
Milk marketing	25,279		0	<<	-99		25,181
Bedding	7,470		217		-55		7,198
Milking supplies	11,103		537		34		10,599
Cattle lease & rent	16		0	<<	-6		10
Custom boarding	5,757		15	<<	273		6,014
bST	2,001		-3		-28		1,976
Livestock professional fees	1,996		138		12		1,870
Other livestock expense	2,744		47		4		2,701
Crops							
Fertilizer & lime	12,342		1,117		225		11,449
Seeds & plants	9,004		1,082		13		7,935
Spray, other crop expense	4,986		15		157		5,128
Crop professional fees	1,148		12		0		1,135
Real Estate							
Land, building & fence repair	8,872		21		71		8,921
Taxes	9,268		8	<<	0		9,260
Rent & lease	6,859		176	<<	158		6,842
Other							
Insurance	6,202		-23	<<	0		6,225
Utilities (farm share)	13,809		0	<<	12		13,821
Interest paid	17,075		0	<<	0		17,075
Other professional fees	2,767		-26		0		2,793
Miscellaneous	4,169		0		37		4,206
Total Operating	$ 452,120		$ 7,760		$ -3,335		$ 441,025
Expansion livestock	3,042		0	<<	0		3,042
Extraordinary expense	1,060		0	<<	0		1,060
Machinery depreciation							34,366
Building depreciation							18,256
TOTAL ACCRUAL EXPENSES							$ 497,749

Change in prepaid expenses (noted above by <<) is a net change in non-inventory expenses that have been paid in advance of their use. For example, prepaid lease expense on the beginning of year balance sheet represents last year's payment for use of the asset during this year. End of year prepaid expense represents payments made this year for next year's use of the asset. Adding payments made last year for this year's use of the asset, and subtracting payments made this year for next year's use of the asset is accomplished by subtracting the difference.

Change in accounts payable: An increase in accounts payable from beginning to end of year is added when calculating accrual expenses because these expenses were incurred (resources used) in 2005 but not paid for. A decrease is subtracted because it represents payment for resources used before 2005.

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

CASH AND ACCRUAL FARM RECEIPTS
39 Western and Central Plateau Region Dairy Farms, 2005

Receipt Item	Cash Receipts	+	Change in Inventory	+	Change in Accounts Receivable	=	Accrual Receipts
Milk sales	$ 497,776				$ -2,658		$ 495,118
Dairy cattle	24,668		$ 9,201		228		34,097
Dairy calves	8,806		947		0		9,753
Other livestock	673		87		0		760
Crops	2,985		-4,933		-247		-2,194
Government receipts	14,401		0 *		243		14,644
Custom machine work	283				0		283
Gas tax refund	271				0		271
Other	9,037				2,729		11,766
Less nonfarm noncash capital**		(-)	0 **			(-)	0
Total Receipts	$ 558,900		$ 5,303		$ 295		$ 564,498

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

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

Changes in inventory of assets produced by the business are calculated by subtracting beginning of year values from end of year values excluding appreciation. Increases in livestock inventory caused by herd growth and/or quality are added, and decreases caused by herd reduction and/or quality are subtracted. Changes in inventories of crops grown are also included. An increase in advanced government receipts is subtracted from cash income because it represents income received in 2005 for the 2006 crop year in excess of funds earned for 2005. Likewise, a decrease is added to cash government receipts because it represents funds earned for 2005 but received in 2004.

Changes in accounts receivable are calculated by subtracting beginning year balances from end year balances. Payments in January 2006 for milk produced in December 2005 compared to January 2005 payments for milk produced in 2004 are included as a change in accounts receivable in determining accrual milk sales.

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

Profitability Analysis

Farm operators* contribute labor, management, and equity capital to their businesses and the combination of these resources, and the other resources used in the business, determines profitability. Farm profitability can be measured as the return to all family resources or as the return to one or more individual resources such as labor and management.

The return to any individual resource must be viewed as an estimate because the cost of other family resources must be approximated to calculate returns to the selected resource. For example, the costs of operator and family labor and management must be approximated to calculate the returns to equity capital.

* Operators are the individuals who are integrally involved in the operation and management of the farm business. They are not limited to those who are the owner of a sole proprietorship or are formally a member of the partnership or corporation.

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

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

NET FARM INCOME

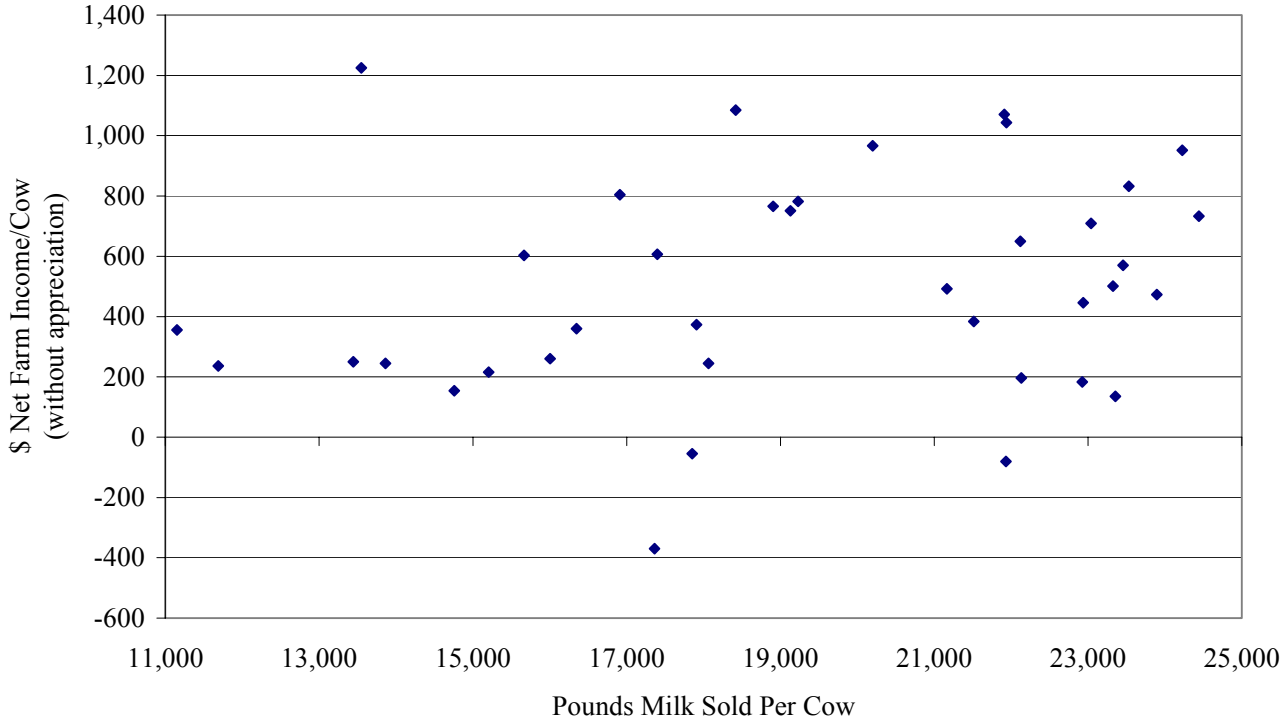
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average Total	Average Per Cow	My Farm Total	My Farm Per Cow
Total accrual receipts	$ 564,498		$ _____	
Appreciation: Livestock	9,412		_____	
Machinery	9,427		_____	
Real Estate	24,889		_____	
Other Stock & Certificates	219		_____	
Total Including Appreciation	$ 608,445		$ _____	
Total accrual expenses	- 497,749		- _____	
Net Farm Income (with appreciation)	$ 110,696	$ 752	$ _____	$ _____
Net Farm Income (without appreciation)	$ 66,749	$ 454	$ _____	$ _____

The chart below shows the relationship between net farm income per cow (without appreciation) and pounds of milk sold per cow. Higher net farm incomes can be achieved across a range of production levels as a result of different management systems, such as grazing, being utilized by the participating dairies.

NET FARM INCOME PER COW AND MILK PER COW

39 Western and Central Plateau Region Dairy Farms, 2005



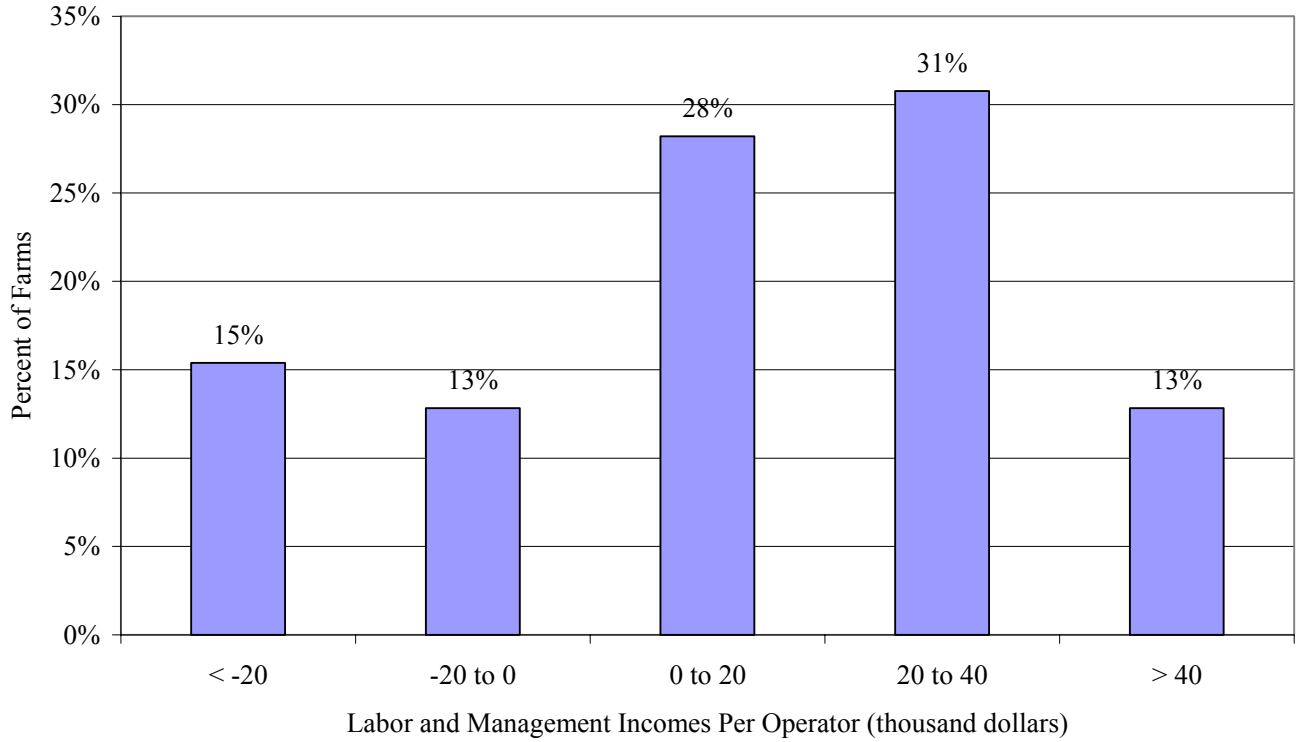
Labor and management income is the return which farm operators receive for their labor and management used in the farm business. Appreciation is not included as part of the return to labor and management because it results from ownership of assets rather than management of the farm business. Labor and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

LABOR AND MANAGEMENT INCOME
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average	My Farm
Net farm income without appreciation	$ 66,749	$ _____
Family labor unpaid @ $2,200 per month	- 3,599	-_____
Interest on $840,369 average equity capital @ 5% real rate	- 42,100	-_____
Labor & Management Income per Farm (1.49 Operators/farm)	$ 21,050	$ _____
Labor & Management Income per Operator/Manager	$ 14,128	$ _____

Labor and management income per operator averaged $14,128 on these 39 farms in 2005. The range in labor and management income per operator was from about $-63,000 to more than $175,000. Returns to labor and management were negative on 28 percent of the farms. Labor and management incomes per operator were between $0 and $20,000 on 28 percent of the farms while 44 percent showed labor and management incomes of $20,000 or more per operator.

DISTRIBUTION OF LABOR AND MANAGEMENT INCOMES PER OPERATOR
39 Western and Central Plateau Region Dairy Farms, 2005



Return on equity capital measures the net return remaining for the farmer's equity or owned capital after a charge has been made for the owner-operator's labor and management. The earnings or amount of net farm income allocated to labor and management is the opportunity cost of operators' labor and management estimated by the cooperators. Return on equity capital is calculated with and without appreciation. The rate of return on equity capital is determined by dividing the amount returned by the average farm net worth (market value) or equity capital. Rate of return on total capital is calculated by adding interest paid to the return on equity capital and then dividing by average farm assets (market value). Net farm income from operations ratio is net farm income (without appreciation) divided by total accrual receipts.

RETURN ON EQUITY CAPITAL AND RETURN ON TOTAL CAPITAL
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average	My Farm
Net farm income with appreciation	$ 110,696	$_____
Family labor unpaid @$2,200 per month	- 3,599	- _____
Value of operators' labor & management	- 50,890	- _____
Return on equity capital with appreciation	$ 56,208	$_____
Interest paid	+ 17,075	+ _____
Return on total capital with appreciation	$ 73,282	$_____
Return on equity capital without appreciation	$ 12,260	$_____
Return on total capital without appreciation	$ 29,335	$_____
Rate of return on average equity capital:		
with appreciation	6.7%	_____ %
without appreciation	1.5%	_____ %
Rate of return on average total capital:		
with appreciation	6.3%	_____ %
without appreciation	2.5%	_____ %
Net Farm Income from Operations Ratio	0.12	_____

Farm and Family Financial Status

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

Financial lease obligations are included in the balance sheet. The present value of all future payments is listed as a liability since the farmer is committed to make the payments by signing the lease. The present value is also listed as an asset, representing the future value the item has to the business. For 2005, lease payments were discounted by 7.25 percent to obtain their present value.

Advanced government receipts are included as current liabilities. Government payments received in 2005 that are for participation in the 2006 program are the end year balance and payments received in 2004 for participation in the 2005 program are the beginning year balance.

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

2005 FARM BUSINESS & NONFARM MARKET VALUE BALANCE SHEET

39 Western and Central Plateau Region Dairy Farms, 2005

Farm Assets	Jan. 1	Dec. 31	Farm Liabilities & Net Worth	Jan. 1	Dec. 31
Current			Current		
Farm cash, checking & savings	$ 12,601	$ 7,137	Accounts payable	$ 13,510	$ 10,174
Accounts receivable	28,869	29,164	Operating debt	6,595	12,660
Prepaid expenses	734	959	Short Term	1,876	1,721
Feed & supplies	84,486	87,089	Advanced govt. receipts	0	0
			Current Portion:		
			Intermediate	26,183	29,289
			Long Term	9,351	11,540
Total Current	$ 126,690	$ 124,348	Total Current	$ 57,514	$ 65,385
Intermediate			Intermediate		
Dairy cows:			Structured debt		
owned	$ 187,002	$ 194,918	1-10 years	$ 132,300	$ 121,059
leased	4	0	Financial lease		
Heifers	94,474	106,109	(cattle/machinery)	1,557	1,771
Bulls & other livestock	1,384	1,480	Farm Credit stock	3,039	2,596
Mach. & equip. owned	216,898	229,640	Total Intermediate	$ 136,896	$ 125,426
Mach. & equip. leased	1,553	1,771			
Farm Credit stock	3,039	2,596			
Other stock/certificate	8,563	9,057			
Total Intermediate	$ 512,916	$ 545,571			
			Long Term		
Long Term			Structured debt		
Land & buildings:			>10 years	$ 127,213	$ 136,567
owned	$ 490,089	$ 528,956	Financial lease		
leased	0	157	(structures)	0	157
Total Long Term	$ 490,089	$ 529,113	Total Long Term	$ 127,213	$ 136,724
			Total Farm Liabilities	$ 321,623	$ 327,535
Total Farm Assets	$1,129,696	$1,199,032	FARM NET WORTH	$ 808,072	$ 871,497

Nonfarm Assets, Liabilities & Net Worth (Average of 18 farms reporting)

Assets	Jan. 1	Dec. 31	Liabilities & Net Worth	Jan. 1	Dec. 31
Personal cash, checking & savings	$ 3,598	$ 3,412	Nonfarm Liabilities	$ 3,445	$ 4,125
Cash value life insurance	11,486	13,444			
Nonfarm real estate	8,500	11,833			
Auto (personal share)	6,039	6,542			
Stocks & bonds	23,939	32,367			
Household furnishings	11,639	11,750			
All other nonfarm assets	23,329	26,197			
Total Nonfarm Assets	$ 88,530	$ 105,544	NONFARM NET WORTH	$ 85,085	$ 101,419

Farm & Nonfarm Assets, Liabilities, and Net Worth*	Jan. 1	Dec. 31
Total Assets	$1,218,226	$1,304,576
Total Liabilities	325,068	331,660
TOTAL FARM & NONFARM NET WORTH	$ 893,158	$ 972,916

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

Balance sheet analysis involves examination of relative asset and debt levels for the business. Percent equity is calculated by dividing end of year net worth by end of year assets and multiplying by 100. The debt to asset ratio is compiled by dividing liabilities by assets. Low debt to asset ratios reflect business solvency and the potential capacity to borrow. 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

39 Western and Central Plateau Region Dairy Farms, 2005

Item			Average	My Farm
Financial Ratios - Farm:				
Percent equity			73%	_____ %
Debt/asset ratio: total			.27	_____
long-term			.26	_____
intermediate/current			.28	_____
Leverage Ratio:			.38	_____
Current Ratio:			1.90	
Working capital	$58,963	As % of total expenses:	12%	
Farm Debt Analysis:				
Accounts payable as % of total debt			3%	_____ %
Long-term liabilities as a % of total debt			42%	_____ %
Current & intermediate liabilities as a % of total debt			58%	_____ %
Cost of term debt (weighted average)			6.00%	_____ %

Farm Debt Levels:	Per Cow	Per Tillable Acre Owned	Per Cow	Per Tillable Acre Owned
Total farm debt	$ 2,213	$ 1,452	$ _____	$ _____
Long-term debt	924	606	_____	_____
Intermediate & long term	1,771	1,162	_____	_____
Intermediate & current debt	1,289	846	_____	_____

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

FARM INVENTORY BALANCE

39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average of Region's Farms			
	Real Estate		Machinery & Equipment	
Value beginning of year		$ 490,089		$ 216,898
Purchases	$ 52,377*		$ 38,468	
Gift & inheritance	+ 0		+ 0	
Lost capital	- 19,368			
Sales	- 774		- 788	
Depreciation	- 18,256		- 34,366	
Net investment		= 13,978		= 3,315
Appreciation		+ 24,889		+ 9,427
Value end of year		$ 528,956		$ 229,640

*$12,396 land and $39,981 buildings and/or depreciable improvements.

The Statement of Owner Equity has two purposes. It allows (1) verification that the accrual income statement and market value balance sheet are consistent (in accountants terms, they reconcile) and (2) identification of the causes of change in equity that occurred on the farm during the year. The Statement of Owner Equity allows you to determine to what degree the change in equity was caused by (1) earnings from the business, and nonfarm income, in excess of withdrawals being retained in the business (called retained earnings), (2) outside capital being invested in the business or farm capital being removed from the business (called contributed/withdrawn capital) , (3) increases or decreases in the value (price) of assets owned by the business (called change in valuation equity), and (4) the error in the business cash flow accounting.

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

STATEMENT OF OWNER EQUITY (RECONCILIATION)
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average		My Farm	
Beginning of year farm net worth		$ 808,072		$ _____
Net farm income without appreciation	$ 66,749		$ _____	
+Nonfarm cash income	+ 5,915		+ _____	
-Personal withdrawals & family expenditures excluding nonfarm borrowings	- 46,725		- _____	
RETAINED EARNINGS		+ $ 25,939		+$ _____
Nonfarm noncash transfers to farm	$ 0		$ _____	
+Cash used in business from nonfarm capital	+ 10,319		+ _____	
-Note or mortgage from farm real estate sold (nonfarm)	- 0		- _____	
CONTRIBUTED/WITHDRAWN CAPITAL		+ $ 10,319		+$ _____
Appreciation	$ 43,947		$ _____	
-Lost capital	- 19,368		- _____	
CHANGE IN VALUATION EQUITY		+ $ 24,579		+$ _____
IMBALANCE/ERROR		- -2,588		- $ _____
End of year net worth*		=$ 871,497		=$ _____

Change in Net Worth		
Without appreciation	$ 19,478	$ _____
With appreciation	$ 63,425	$ _____

*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

39 Western and Central Plateau Region Dairy Farms, 2005

Item			Average		
Cash Flow from Operating Activities					
Cash farm receipts		$ 558,900			
- Cash farm expenses		452,120			
- Extraordinary expense		1,060			
= Net cash farm income			$ 105,720		
Personal withdrawals & family expenses including nonfarm debt payments		$ 48,089			
- Nonfarm income		5,915			
- Net cash withdrawals from the farm			$ 42,174		
= Net Provided by Operating Activities				$	63,547
Cash Flow From Investing Activities					
Sale of assets:	machinery	$ 788			
	+ real estate	774			
	+ other stock & cert.	489			
= Total asset sales			$ 2,051		
Capital purchases:	expansion livestock	$ 3,042			
	+ machinery	38,468			
	+ real estate	52,377			
	+ other stock & cert.	764			
- Total invested in farm assets			$ 94,651		
= Net Provided by Investment Activities				$	-92,600
Cash Flow From Financing Activities					
Money borrowed (intermediate & long term)		$ 50,312			
+ Money borrowed (short term)		188			
+ Increase in operating debt		6,065			
+ Cash from nonfarm capital used in business		10,319			
+ Money borrowed - nonfarm		1,364			
= Cash inflow from financing			$ 68,248		
Principal payments (intermediate & long term)		$ 46,905			
+ Principal payments (short term)		343			
+ Decrease in operating debt		0			
- Cash outflow for financing			$ 47,248		
= Net Provided by Financing Activities				$	21,000
Cash Flow From Reserves					
Beginning farm cash, checking & savings			$ 12,601		
- Ending farm cash, checking & savings			7,137		
= Net Provided from Reserves				$	5,465
Imbalance (error)				$	-2,588

ANNUAL CASH FLOW STATEMENT

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

Repayment Analysis

A valuable use of cash flow analysis is to compare the debt payments planned for the last year with the amount actually paid. The measures listed below provide a number of different perspectives on the repayment performance of the business. However, the critical question to many farmers and lenders is whether planned payments can be made in 2006. The cash flow projection worksheet on the next page can be used to estimate repayment ability, which can then be compared to planned 2006 debt payments shown below.

FARM DEBT PAYMENTS PLANNED

Same 25 Western and Central Plateau Region Dairy Farms, 2004 & 2005

	Average			My Farm		
	2005 Payments		Planned	2005 Payments		Planned
Debt Payments	Planned	Made	2006	Planned	Made	2006
Long term	$ 24,538	$ 29,563	$ 28,598	$ _____	$ _____	$ _____
Intermediate term	49,859	49,414	45,384	_____	_____	_____
Short term	500	474	130	_____	_____	_____
Operating (net reduction)	1,756	846	5,649	_____	_____	_____
Accounts payable (net reduction)	5,897	4,819	240	_____	_____	_____
Total	$ 82,550	$ 85,116	$ 80,001	$ _____	$ _____	$ _____
Per cow	$ 456	$ 470		$ _____	$ _____	
Per cwt. 2005 milk	$ 2.08	$ 2.14		$ _____	$ _____	
Percent of total 2005 farm receipts	12%	12%		_____	_____	
Percent of 2005 milk receipts	13%	13%		_____	_____	

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 payments planned for 2005 (as of December 31, 2004) that could have been made with the amount available for debt service in 2005. Farmers who did not participate in DFBS in 2004 have their 2005 ratios based on planned debt payments for 2006.

COVERAGE RATIOS

Same 25 Western and Central Plateau Region Dairy Farms, 2004 & 2005

Item	Average	Item	Average
Cash Flow Coverage Ratio		Debt Coverage Ratio	
Cash farm receipts	$714,437	Net farm income (w/o appreciation)	$77,823
- Cash farm expenses	581,586	+ Depreciation	64,724
+ Interest paid (cash)	22,012	+ Interest paid (accrual)	22,012
- Net personal withdrawals from farm*	49,306	- Net personal withdrawals from farm*	49,306
(A) = Amount Available for Debt Service	$105,557	(A') = Repayment Capacity	$115,253
(B) = Debt Payments Planned for 2005 (as of December 31, 2004)	$82,550	(B) = Debt Payments Planned for 2005 (as of December 31, 2004)	$82,550
(A/ B)= Cash Flow Coverage Ratio for 2005	1.28	(A'/B)= Debt Coverage Ratio for 2005	1.40

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

ANNUAL CASH FLOW WORKSHEET

Item	39 Western and Central Plateau Region Dairy Farms Per Cow	39 Western and Central Plateau Region Dairy Farms Per Cwt.	My Farm Per Cow/ Per Cwt.	Expected Change	2006 Projection
Average number of cows	147				
Total cwt. of milk sold		30,903			
Accrual Operating Receipts					
Milk	$ 3,365	$ 16.02	$ _____	_____	$ _____
Dairy cattle	232	1.10	_____	_____	_____
Dairy calves	66	0.32	_____	_____	_____
Other livestock	5	0.02	_____	_____	_____
Crops	-15	-0.07	_____	_____	_____
Miscellaneous Receipts	183	0.87	_____	_____	_____
Total	$ 3,836	$ 18.27	$ _____	_____	$ _____
Accrual Operating Expenses					
Hired labor	$ 449	$ 2.14	$ _____	_____	$ _____
Dairy grain & concentrate	897	4.27	_____	_____	_____
Dairy roughage	36	0.17	_____	_____	_____
Nondairy feed	0	0.00	_____	_____	_____
Professional nutritional services	1	0.01	_____	_____	_____
Machinery hire, rent & lease	87	0.41	_____	_____	_____
Machinery repair & vehicle expense	204	0.97	_____	_____	_____
Fuel, oil & grease	120	0.57	_____	_____	_____
Replacement livestock	13	0.06	_____	_____	_____
Breeding	54	0.25	_____	_____	_____
Veterinary & medicine	114	0.54	_____	_____	_____
Milk marketing	171	0.81	_____	_____	_____
Bedding	49	0.23	_____	_____	_____
Milking supplies	72	0.34	_____	_____	_____
Cattle lease	0	0.00	_____	_____	_____
Custom boarding	41	0.19	_____	_____	_____
bST	13	0.06	_____	_____	_____
Livestock professional fees	13	0.06	_____	_____	_____
Other livestock expense	18	0.09	_____	_____	_____
Fertilizer & lime	78	0.37	_____	_____	_____
Seeds & plants	54	0.26	_____	_____	_____
Spray & other crop expense	35	0.17	_____	_____	_____
Crop professional fees	8	0.04	_____	_____	_____
Land, building & fence repair	61	0.29	_____	_____	_____
Taxes	63	0.30	_____	_____	_____
Real estate rent & lease	46	0.22	_____	_____	_____
Insurance	42	0.20	_____	_____	_____
Utilities	94	0.45	_____	_____	_____
Miscellaneous	48	0.23	_____	_____	_____
Total Less Interest Paid	$ 2,881	$ 13.72	$ _____	_____	$ _____
Net Accrual Operating Income		Total			
(without interest paid)		$ 140,547	$ _____		$ _____
- Change in livestock /crop inventory*		5,303	_____	_____	_____
- Change in accounts receivable		295	_____	_____	_____
- Change in feed & supply inventory**		7,760	_____	_____	_____
+ Change in accounts payable***		-3,335	_____	_____	_____
NET CASH FLOW		$ 123,855	$ _____		$ _____
- Net family withdrawals		$ 39,766	_____	_____	_____
Available for Farm		$ 84,089	$ _____		_____
- Farm debt payments		68,289	_____	_____	_____
Available for Farm Investment		$ 15,800	$ _____		$ _____
- Capital purchases		94,651	_____	_____	_____
Additional Capital Needed		$ 78,851	$ _____	_____	$ _____

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

Cropping Analysis

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

LAND RESOURCES AND CROP PRODUCTION
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average			My Farm		
Land	Owned	Rented	Total	Owned	Rented	Total
Tillable	226	125	351	_____	_____	_____
Nontillable	47	6	53	_____	_____	_____
Other nontillable	110	1	111	_____	_____	_____
Total	383	132	515	_____	_____	_____

Crop Yields	Farms	Acres*	Production/Acre	Acres	Production/Acre
Hay crop	35	224	2.33 tons DM	_____	_____ tons DM
Corn silage	30	138	15.04 ton	_____	_____ tons
			5.17 tons DM		_____ tons DM
Other forage	4	17	1.50 tons DM	_____	_____ tons DM
Total forage	36	334	3.30 tons DM	_____	_____ tons DM
Corn grain	8	53	108 bushels	_____	_____ bushels
Oats	1	30	45 bushels	_____	_____ bushels
Wheat	1	20	0 bushels	_____	_____ bushels
Other crops	9	60		_____	
Tillable pasture	15	40		_____	
Idle	7	15		_____	
Total Tillable Acres	39	351		_____	

*This column represents the average acreage for the farms producing that crop. Average acreages including those farms not producing were hay crop 201, corn silage 106, corn grain 11, oats 1, tillable pasture 15, and idle 3.

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

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

CROP/DAIRY RATIOS
35 Western and Central Plateau Region Dairy Farms, 2005

Item	Average*	My Farm
Total tillable acres per cow	2.42	_____
Total forage acres per cow	2.16	_____
Harvested forage dry matter, tons per cow	7.13	_____

*Excludes farms that do not harvest forages.

Cropping Analysis (continued)

A number of cooperators have allocated crop expenses among the hay crop, corn, and other crops produced. Fertilizer and lime, seeds and plants, and spray and other crop expenses have been computed per acre and per production unit for hay and corn. Additional expense items such as fuels, labor, and machinery repairs are not included. Rotational grazing was used on 23 farms in the region.

CROP RELATED ACCRUAL EXPENSES
Western and Central Plateau Region Dairy Farms Reporting, 2005

Item	Total Per Till. Acre	All Corn Per Acre	Corn Silage Per Ton DM	Corn Grain Per Dry Sh. Bu.	Hay Crop Per Acre	Hay Crop Per Ton DM	Pasture Per Tillable Acre	Pasture Per Total Acre
No. of farms reporting	39	14			15		8	
Ave. number of acres	351	113			206		10	65
Fert. & lime	$ 30.29	$ 59.69	$ 11.09	$ 0.09	$ 23.50	$ 12.05	$ 20.34	$ 28.71
Seeds & plants	17.59	38.11	8.16	0.07	7.93	4.59	6.61	2.24
Spray & other crop expense	11.22	28.52	6.30	0.07	2.45	1.37	0.00	0.00
TOTAL	$ 59.10	$ 126.32	$ 25.55	$ 0.23	$ 33.88	$ 18.01	$ 26.95	$ 30.95
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
35 Western and Central Plateau Region Dairy Farms, 2005*

Machinery Expense	Average Total Expenses	Average Per Tillable Acre	My Farm Total Expenses	My Farm Per Tillable Acre
Fuel, oil & grease	$ 18,896	$ 50.35	$ _____	$ _____
Mach. repair & vehicle expense	32,124	85.61	_____	_____
Machine hire, rent & lease	13,818	36.82	_____	_____
Interest (5%)	11,997	31.97	_____	_____
Depreciation	36,301	96.74	_____	_____
Total	$ 113,136	$ 301.49	$ _____	$ _____

*Excludes farms that do not harvest forages.

Dairy Analysis

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

DAIRY HERD INVENTORY

39 Western and Central Plateau Region Dairy Farms, 2005

	Dairy Cows		Heifer					
			Bred		Open		Calves	
Item	No.	Value	No.	Value	No.	Value	No.	Value
Beg. year (owned)	146	$187,002	40	$ 49,709	39	$ 30,541	32	$ 14,224
+ Change w/o apprec.		2,785		4,748		1,668		947
+ Appreciation		5,130		1,313		1,918		1,041
End year (owned)	148	$ 194,918	43	$ 55,770	41	$ 34,127	34	$ 16,212
End including leased	148							
Average number	147		113	(all age groups)				
My Farm:								
Beg. year (owned)	_____	$_____	_____	$ _____	_____	$_____	_____	$ _____
+ Change w/o apprec.		_____		_____		_____		_____
+ Appreciation		_____		_____		_____		_____
End year (owned)	_____	$_____	_____	$ _____	_____	$_____	_____	$ _____
End including leased	_____							
Average number	_____		_____	(all age groups)				

Total milk sold and milk sold per cow are extremely valuable measures of size and productivity, respectively, on the dairy farm. These measures of milk output are based on pounds of milk marketed during the year.

MILK PRODUCTION

39 Western and Central Plateau Region Dairy Farms, 2005

Item	Average	My Farm
Total milk sold, lbs.	3,090,311	_____
Milk sold per cow, lbs.	21,001	_____
Average milk plant test, percent butterfat	3.73%*	_____

*Average of farms reporting pounds of butterfat.

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

ANIMALS LEAVING THE HERD

39 Western and Central Plateau Region Dairy Farms, 2005

	Average		My Farm	
Item	Number	Percent*	Number	Percent*
Cows sold for beef	31	21.4	_____	_____
Cows sold for dairy	2	1.6	_____	_____
Cows died	13	8.5	_____	_____
Culling rate**		29.9		_____

*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 can be compared with the accrual costs of producing milk per cow and per hundredweight of milk. Using the whole farm method, operating costs of producing milk are estimated by deducting nonmilk accrual receipts from total accrual operating expenses including expansion livestock purchased. Purchased inputs cost of producing milk are the operating costs plus depreciation. Total costs of producing milk include the operating costs of producing milk plus depreciation on machinery and buildings, the value of unpaid family labor, the value of operators' labor and management, and the interest charge for using equity capital.

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

39 Western and Central Plateau Region Dairy Farms, 2005

	Average			My Farm		
Item	Total	Per Cow	Per Cwt.	Total	Per Cow	Per Cwt.
Accrual Cost of Producing Milk						
Operating costs	$ 374,687	$ 2,546	$ 12.12	$_____	$_____	$_____
Purchased inputs costs	$ 428,369	$ 2,911	$ 13.86	$_____	$_____	$_____
Total Costs	$ 524,957	$ 3,568	$ 16.99	$_____	$_____	$_____
Accrual Receipts From Milk	$ 495,118	$ 3,365	$ 16.02	$_____	$_____	$_____
Net Milk Receipts	$ 469,937	$ 2,872	$ 15.21	$_____	$_____	$_____
Net Farm Income without Apprec.	$ 66,749	$ 454	$ 2.16	$_____	$_____	$_____
Net Farm Income with Appreciation	$ 110,696	$ 752	$ 3.58	$_____	$_____	$_____

The accrual operating expenses most commonly associated with the dairy enterprise are listed in the table below. Feed and crop expenses include total purchased dairy feed plus fertilizer, seeds, spray and other crop expenses.

DAIRY RELATED ACCRUAL EXPENSES

39 Western and Central Plateau Region Dairy Farms, 2005

	Average		My Farm	
Item	Per Cow	Per Cwt.	Per Cow	Per Cwt.
Purchased dairy grain & concentrate	$ 897	$ 4.27	$_____	$_____
Purchased dairy roughage	36	.17	_____	_____
Total Purchased Dairy Feed	$ 933	$ 4.44	$_____	$_____
Purchased grain & concentrate as % of milk receipts	27%		_____ %	
Purchased feed & crop expense	$ 1,107	$ 5.27	$_____	$_____
Purchased feed & crop expense as % of milk receipts	35%		_____ %	
Breeding	$ 54	$ .25	$_____	$_____
Veterinary & medicine	114	.54	_____	_____
Milk marketing	171	.81	_____	_____
Bedding	49	.23	_____	_____
Milking supplies	72	.34	_____	_____
Cattle lease	0	.00	_____	_____
Custom boarding	41	.19	_____	_____
bST	13	.06	_____	_____
Livestock professional fees	13	.06	_____	_____
Other livestock expense	18	.09	_____	_____

Capital and Labor Efficiency Analysis

Capital efficiency factors measure how effectively the capital is being used in the farm business. Measures of labor efficiency are key indicators of management's success in generating products per unit of labor input. When evaluating a business, the relationship between capital efficiency and labor efficiency should be explored. For example, if capital efficiency shows high capital investment per worker or per cow, labor efficiency should be high reflecting use of capital to make labor more effective. However, if capital investment is high per worker or per cow, and labor efficiency is low, a problem may exist on that farm.

CAPITAL EFFICIENCY
39 Western and Central Plateau Region Dairy Farms, 2005

Item	Per Worker	Per Cow	Per Tillable Acre	Per Tillable Acre Owned
Farm capital	$292,554	$7,913	$3,319	$5,163
Real estate		3,463		2,259
Machinery & equipment	56,515	1,529	641	

Ratios

Asset turnover	Operating Expense	Interest Expense	Depreciation Expense
.52	.76	.03	.09

My Farm

Farm capital	$ _____	$ _____	$ _____	$ _____
Real estate	_____	_____	_____	_____
Machinery & equipment	_____	_____	_____	_____

Ratios

Asset turnover	Operating Expense	Interest Expense	Depreciation Expense
_____	_____	_____	_____

LABOR FORCE INVENTORY
39 Western and Central Plateau Region Dairy Farms, 2005

Labor Force	Months	Age	Years of Education	Value of Labor & Management
Operator number 1	13.0	49	14	$33,703
Operator number 2	5.6	44	13	15,446
Operator number 3	0.7	54	13	1,741
Family paid	2.6			
Family unpaid	1.6			
Hired	24.2			
Total	47.7	/ 12 = 3.98 Worker Equivalent		
		1.49 Operator/Manager Equivalent		
My Farm: Total	_____	/ 12 = ____ Worker Equivalent		
Operator's	_____	/ 12 = ____ Operator/Manager Equivalent		

Small conventional stall operations of 60 or less cows should strive for labor efficiency of 600,000 or more pounds of milk sold per worker. Large conventional stall operations should strive for 850,000 or more pounds of milk sold per worker. Small free stall operations of less than 300 cows should strive for 1,000,000 pounds of milk sold per worker and large free stall operations with more than 300 cows should strive for over 1,200,000 pounds of milk sold per worker.

Labor costs and machinery costs should also be evaluated both individually and jointly. The more machinery or technology at a worker's disposal, the less time, and therefore cost, that should be required to get work accomplished. Striving for labor and machinery costs per cow of less than $1,000 on small conventional stall barns, less than $900 on large conventional stall barns, less than $850 on small free stall barns and below $750 on large free stall barns should be a goal.

LABOR EFFICIENCY

39 Western and Central Plateau Region Dairy Farms, 2005

Labor	Average		My Farm	
Efficiency	Total	Per Worker	Total	Per Worker
Cows, average number	147	37	_____	_____
Milk sold, pounds	3,090,311	777,111	_____	_____
Tillable acres	351	88	_____	_____

LABOR AND MACHINERY COSTS

39 Western and Central Plateau Region Dairy Farms, 2005

	Average			My Farm		
Labor Costs	Total	Per Cow	Per Cwt.	Total	Per Cow	Per Cwt.
Value of operator(s) labor ($2,200/month)	$ 42,438	$ 288	$ 1.37	$_____	$ _____	$ _____
Family unpaid ($2,200/month)	3,608	25	.12	_____	_____	_____
Hired	66,114	449	2.14	_____	_____	_____
Total Labor	$ 112,160	$ 762	$ 3.63	$_____	$ _____	$ _____
Machinery Cost	$ 106,179	$ 722	$ 3.44	$_____	$ _____	$ _____
Total Labor & Mach.	$ 218,338	$ 1,484	$ 7.07	$_____	$ _____	$ _____

Hired labor expense per hired worker equivalent	$29,614	$ _____
Hired labor expense as % of milk sales	13.4%	_____%

COMPARATIVE ANALYSIS OF THE FARM BUSINESS

Progress of the Farm Business

Comparing your business with average data from regional DFBS cooperators that participated in both of the last two years can be helpful to establishing your goals for these parameters. It is equally important for you to determine the progress your business has made over the past two or three years, to compare this progress to your goals, and to set goals for the future.

PROGRESS OF THE FARM BUSINESS

Same 25 Western and Central Plateau Region Dairy Farms, 2004 & 2005

	Average of 25 Farms*		My Farm		
Selected Factors	2004	2005	2004	2005	Goal
Size of Business					
Average number of cows	172	181	_____	_____	_____
Average number of heifers	124	138	_____	_____	_____
Milk sold, pounds	3,695,300	3,975,523	_____	_____	_____
Worker equivalent	4.62	4.69	_____	_____	_____
Total tillable acres	400	411	_____	_____	_____
Rates of Production					
Milk sold per cow, pounds	21,514	21,940	_____	_____	_____
Hay DM per acre, tons	3.0	2.6	_____	_____	_____
Corn silage per acre, tons	17.0	15.1	_____	_____	_____
Labor Efficiency					
Cows per worker	37	39	_____	_____	_____
Milk sold/worker, pounds	799,848	847,659	_____	_____	_____
Cost Control					
Grain & conc. purchased as % of milk sales	27%	27%	_____ %	_____ %	_____ %
Dairy feed & crop expense per cwt. milk	$ 5.53	$ 5.24	$ _____	$ _____	$ _____
Labor & mach. costs/cow	$ 1,465	$ 1,459	$ _____	$ _____	$ _____
Operating cost of producing cwt. of milk	$ 12.34	$ 12.41	$ _____	$ _____	$ _____
Capital Efficiency**					
Farm capital per cow	$ 7,801	$ 8,017	$ _____	$ _____	$ _____
Mach. & equipment per cow	$ 1,510	$ 1,567	$ _____	$ _____	$ _____
Asset turnover ratio	.59	.53	_____	_____	_____
Profitability					
Net farm income w/o apprec.	$ 112,041	$ 77,823	$ _____	$ _____	$ _____
Net farm income with apprec.	$ 182,198	$ 136,280	$ _____	$ _____	$ _____
Labor & management income per operator/manager	$ 39,154	$ 14,500	$ _____	$ _____	$ _____
Rate of return on equity capital with appreciation	13.6%	7.6%	_____ %	_____ %	_____ %
Rate of return on all capital with appreciation	10.9%	7.0%	_____ %	_____ %	_____ %
Financial Summary					
Farm net worth, end year	$ 999,895	$ 1,082,729	$ _____	$ _____	$ _____
Debt to asset ratio	.29	.27	_____	_____	_____
Farm debt per cow	$ 2,278	$ 2,230	$ _____	$ _____	$ _____

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

RECEIPTS AND EXPENSES PER COW AND PER CWT.
Same 25 Western and Central Plateau Region Dairy Farms, 2004 & 2005

	2004		2005	
Item	Per Cow	Per Cwt.	Per Cow	Per Cwt.
Average Number of Cows	172		181	
Cwt. of Milk Sold		36,953		39,755
ACCRUAL OPERATING RECEIPTS				
Milk	$ 3,646	$ 16.95	$ 3,519	$ 16.04
Dairy cattle	274	1.27	222	1.01
Dairy calves	54	0.25	65	0.30
Other livestock	4	0.02	4	0.02
Crops	69	0.32	-28	-0.13
Miscellaneous receipts	119	0.55	155	0.71
Total Receipts	$ 4,167	$ 19.37	$ 3,938	$ 17.95
ACCRUAL OPERATING EXPENSES				
Hired labor	$ 480	$ 2.23	$ 481	$ 2.19
Dairy grain & concentrate	999	4.64	943	4.30
Dairy roughage	34	0.16	26	0.12
Nondairy feed	0	0.00	0	0.00
Professional nutritional services	1	0.00	1	0.01
Machine hire, rent & lease	110	0.51	88	0.40
Machinery repair & vehicle expense	207	0.96	204	0.93
Fuel, oil & grease	96	0.45	124	0.56
Replacement livestock	23	0.11	11	0.05
Breeding	52	0.24	60	0.27
Veterinary & medicine	125	0.58	130	0.59
Milk marketing	161	0.75	180	0.82
Bedding	52	0.24	56	0.26
Milking supplies	68	0.32	79	0.36
Cattle lease	0	0.00	0	0.00
Custom boarding	29	0.13	42	0.19
bST expense	16	0.07	15	0.07
Livestock professional fees	13	0.06	12	0.05
Other livestock expense	22	0.10	16	0.07
Fertilizer & lime	60	0.28	79	0.36
Seeds & plants	50	0.23	57	0.26
Spray & other crop expense	42	0.19	36	0.16
Crop professional fees	6	0.03	9	0.04
Land, building & fence repair	67	0.31	69	0.31
Taxes	62	0.29	61	0.28
Real estate rent & lease	27	0.13	39	0.18
Insurance	35	0.16	42	0.19
Utilities	88	0.41	95	0.43
Interest paid	117	0.54	121	0.55
Other professional fees	21	0.10	22	0.10
Miscellaneous	26	0.12	30	0.13
Total Operating Expenses	$ 3,089	$ 14.36	$ 3,126	$ 14.25
Expansion Livestock	86	0.40	16	0.08
Extraordinary Expense	11	0.05	9	0.04
Machinery Depreciation	202	0.94	223	1.02
Real Estate Depreciation	126	0.58	134	0.61
Total Expenses	$ 3,514	$ 16.33	$ 3,508	$ 16.00
Net Farm Income Without Appreciation	$ 652	$ 3.03	$ 429	$ 1.96

Regional Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing your business. Compare your business by drawing a line through or near the figure in each column which represents your current level of performance. The five figures in each column represent the average of each 20 percent or quintile of farms included in the regional summary. Use this information to identify business areas where more challenging goals are needed.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
39 Western and Central Plateau Region Dairy Farms, 2005

Size of Business			Rate of Production			Labor Efficiency	
Worker Equiv-alent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crop DM/Acre	Tons Corn Silage Per Acre	Cows Per Worker	Pounds Milk Sold Per Worker
(14)*	(12)	(12)	(12)	(11)	(11)	(14)	(14)
10.39	438	10,013,462	23,748	4.0	21	51	1,059,340
4.28	168	3,316,402	22,368	2.3	17	38	793,908
2.46	78	1,505,204	19,578	1.9	15	33	646,783
2.07	53	984,362	16,932	1.5	13	26	456,475
1.50	35	497,519	12,951	1.1	9	20	287,716

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)
$482	19%	$348	$1,072	$644	$4.03
698	24	585	1,441	937	4.82
851	27	687	1,621	1,085	5.40
941	30	810	1,787	1,234	6.25
1,154	37	1,112	2,206	1,405	7.87

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 w/o Appreciation	Labor & Mgt. Income Per Operator	Change in Net Worth with Appreciation
(12)	(12)	(12)	(4)	(4)	(4)	(8)
$3,800	$7.23	$14.64	$354,955	$201,226	$75,095	$247,982
3,489	10.92	16.37	124,824	84,081	28,975	78,473
3,123	11.65	17.98	58,066	43,905	13,219	32,256
2,729	12.50	19.74	36,222	24,498	786	12,328
2,090	14.40	24.93	9,945	-3,155	-39,422	-36,551

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

Supplementary Information

Each year DFBS cooperators volunteer to complete supplementary data collection forms looking at selected management aspects of the business or specific research areas being studied. This is in addition to the normal DFBS data collection form. An area that was examined this year was the source of dairy replacements. Following is a summary of this information.

SOURCE OF DAIRY REPLACEMENTS
53 New York Dairy Farms, 2005

Animals Entering Herd	Average
Number calving in 2005 for first time	139
Animals purchased, %[1]	11%
Animals raised by farm, %[2]	89%
Current Heifer Inventory	
Raised on dairy, %	86%
Raised by a custom grower, %	14%

[1] Animals purchased are animals purchased from a different farm and were not the farm's genetics.
[2] Animals raised by farm are animals that were born on the farm and entered the herd, which includes animals raised by the farm or custom grower.

On the average farm, 139 animals calved for the first time in 2005. The breakdown on these animals for source was 11 percent purchased and 89 percent raised by the farm. Of the current heifer inventory, 86 percent were raised on the dairy and 14 percent were being raised by a custom grower. There is increased interest in evaluating the dairy replacement enterprise.

Milk Income and Marketing Expense Breakdown

Starting January 1st, 2000, the northeast switched to multiple components pricing, which changed the format of the milk check and how farmers received payment for their milk. To examine the breakdown of the gross milk income and the marketing expenses, 31 Western and Central Plateau farms provided data for all the different sources of income for milk sales and the milk marketing expenses on an accrual basis. This information is reported in the following two tables. The tables are divided into six different areas, each representing a different area of income or expenses.

The first section looks at the value of the milk components on a per cwt. basis. The second area looks at the Producer Price Differential. The third area looks at the premiums a farm receives. Any premiums not specifically noted as quality or volume related are included in market premiums. The fourth area looks at the expenses associated with marketing milk. A new line item in this section is the expenses associated with utilizing forward contracting or hedging programs to market milk, such as commission or broker fees. The fifth area is income from the compact program or from forward contracting or hedging programs. The sixth area is the patronage dividends or refunds from the milk cooperatives. Equity purchased in the milk cooperative utilizing a monthly deduction from the milk check or a percent of the patronage dividend is treated as a capital purchase and is not a milk marketing expense. The cumulative total for these six areas is the net price received on farms. Your net farm price can be found on page 12 of your farm's DFBS report.

The table on page 25 reports the averages for these different areas. The table on page 26 contains the range for each of the individual lines of the report. This table is in farm business chart format with each item sorted independently and ranked by fifths. Numbers for the different areas will not add to the totals for that quintile or to the net price received because the highest farms for each item were averaged, not the same farms throughout the six areas. This table shows the range of income and expenses received by farms for all the different areas.

For your individual farm, compare your accrual numbers following this same format to look at how you compare to other farms in your region and to identify possible areas to generate additional revenue.

AVERAGE MILK INCOME AND MARKETING REPORT
31 Western and Central Plateau Region Dairy Farms, 2005

	Pounds	Percent	Price/Pound	Total	$/Cwt of Milk
BASE FARM PRICE					
Butterfat	125,394.70	3.64%	$1.71	$214,370.00	$6.23
Protein	104,567.20	3.04%	$2.45	$256,596.00	$7.46
Solids	192,090.30	5.58%	$0.12	$23,714.70	$0.69
Total Component Contribution					$14.38
PPD	3,441,044.00			$29,162.58	$0.85
Base Farm Price					$15.23
Premiums					
Quality				$6,791.07	$0.20
Volume				$7,856.03	$0.23
Market Premiums				$12,847.74	$0.37
Total Premiums					$0.80
BASE FARM PRICE + PREMIUM					$16.03
Deductions					
Promotion				$5,731.32	$0.17
Hauling + Stop Charges.				$21,058.71	$0.61
Market Fees & Coop Dues				$1,716.68	$0.05
Total Deductions					$0.83
BASE FARM PRICE + PREMIUMS - DEDUCTIONS					$15.20
Marketing Programs					
Futures Contracts, Forward Contracting, Etc.				$0.00	$0.00
Total Marketing Income					$0.00
Patronage Dividends				$670.23	$0.02
NET PRICE RECEIVED ON FARM, ALL SOURCES					**$15.22**
PPD - Hauling, $ per cwt.					$0.24
PPD - Hauling + Market Premiums, $ per cwt.					$0.61
Net Marketing Value (PPD + Total Premiums - Total Deductions), $ per cwt.					$0.82

MILK PRICE INFORMATION BY QUINTILE
(Each Category Sorted Independently)
31 Western and Central Plateau Region Dairy Farms, 2005

	Lowest Quintile	←		→	Highest Quintile
Butterfat, %	3.44	3.60	3.67	3.76	4.07
Protein, %	2.92	2.98	3.05	3.11	3.28
Other Solids, %	4.48	5.61	5.67	5.69	5.74
Butterfat, $ per Cwt.	5.86	6.16	6.28	6.46	6.94
Protein, $ per Cwt.	7.10	7.30	7.47	7.67	8.07
Other solids, $ per Cwt.	0.66	0.68	0.69	0.71	0.73
Total Component Value per Cwt.	**$13.68**	**$14.19**	**$14.49**	**$14.77**	**$15.63**
PPD, $ per Cwt.	0.58	0.68	0.75	0.82	1.25
Base Farm Price per Cwt.	**$14.33**	**$15.03**	**$15.34**	**$15.61**	**$16.53**
Quality, $ per Cwt.	0.02	0.10	0.16	0.29	0.56
Volume, $ per Cwt.	0.00	0.00	0.04	0.16	0.43
Market premium, $ per Cwt.	-0.08	0.03	0.20	0.35	0.77
Total Premium, $ per Cwt.	**0.11**	**0.31**	**0.55**	**0.81**	**1.23**
Base Farm Price + Premiums per Cwt.	**$14.85**	**$15.45**	**$15.74**	**$16.16**	**$17.58**
Promotion, $ per Cwt.	0.13	0.15	0.15	0.19	0.29
Hauling, $ per Cwt.	0.37	0.54	0.60	0.65	0.97
Market fees & coop dues per Cwt.	0.00	0.00	0.04	0.05	0.11
Total Marketing Expenses per Cwt.	**$0.60**	**$0.75**	**$0.81**	**$0.87**	**$1.19**
Base + Premiums – Deductions per Cwt.	**$14.12**	**$14.62**	**$14.94**	**$15.39**	**$16.51**
Futures contract, forward contracting, $ per Cwt.	0.00	0.00	0.00	0.00	0.00
Total Marketing Income, $ per Cwt.	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**
Patronage Dividends, $ per Cwt.	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.23**
Net Price Received From All Sources, $ per Cwt.	**$14.13**	**$14.62**	**$15.02**	**$15.49**	**$16.55**
PPD - Hauling, $ per cwt.	**-0.06**	**0.11**	**0.18**	**0.28**	**0.50**
PPD - Hauling + Market Premiums, $ per cwt.	**-0.04**	**0.28**	**0.38**	**0.60**	**1.03**
Net Marketing Value (PPD + Total Premiums - Total Deductions), $ per cwt.	**-0.09**	**0.34**	**0.59**	**0.80**	**1.20**

New York State Farm Business Charts

The Farm Business Chart is a tool which can be used in analyzing a business by drawing a line through the figure in each column which represents the current level of management performance. The figure at the top of each column is the average of the top 10 percent of the 200 farms for that factor. The other figures in each column are the average for the second 10 percent, third 10 percent, etc. Each column of the chart is independent of the others. The farms which are in the top 10 percent for one factor would not necessarily be the same farms which make up the top 10 percent for any other factor.

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

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
200 New York Dairy Farms, 2004

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)
27.4	1,320	30,813,655	25,912	5.6	24	61	1,276,169
15.2	627	14,673,004	23,717	4.3	21	51	1,100,689
10.7	430	9,341,701	22,791	3.9	20	46	981,861
7.2	309	6,569,316	21,971	3.5	19	42	868,108
5.4	225	4,326,245	21,304	3.3	18	38	787,445
4.2	144	2,848,633	20,482	3.0	17	35	700,990
3.4	110	2,072,815	19,295	2.8	16	32	631,342
2.7	78	1,398,571	17,658	2.3	15	29	547,027
2.0	59	1,035,229	15,829	2.0	13	26	445,686
1.5	42	687,413	12,854	1.4	9	19	321,988

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)
$507	17%	$323	$903	$660	$3.87
669	22	444	1,124	863	4.71
780	24	499	1,221	994	5.10
839	26	552	1,293	1,082	5.34
900	27	592	1,370	1,133	5.54
979	28	637	1,463	1,183	5.75
1,031	29	683	1,541	1,242	6.05
1,094	31	750	1,664	1,308	6.36
1,166	33	835	1,796	1,394	6.82
1,295	39	1,044	2,173	1,591	7.69

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

FARM BUSINESS CHART FOR
FARM MANAGEMENT COOPERATORS
200 New York Dairy Farms, 2004

Milk Receipts Per Cow	Milk Receipts Per Cwt.	Oper. Cost Milk Per Cow	Oper. Cost Milk Per Cwt.	Total Cost Production Per Cow	Total Cost Production Per Cwt.
(12)	(12)	(12)	(12)	(12)	(12)
$4,409	$18.64	$1,505	$9.19	$2,552	$13.68
3,964	17.86	1,892	10.50	2,955	14.56
3,777	17.47	2,164	11.20	3,132	15.16
3,662	17.13	2,319	11.80	3,275	15.81
3,573	16.92	2,449	12.19	3,381	16.56
3,421	16.71	2,587	12.60	3,490	17.26
3,279	16.55	2,733	13.13	3,621	18.37
3,027	16.28	2,884	13.71	3,774	19.14
2,662	16.06	3,090	14.37	3,992	20.42
2,246	15.46	3,400	15.99	4,485	24.72

Profitability						
Net Farm Income Without Appreciation			Net Farm Income With Appreciation		Labor & Management Income	
Total	Per Cow	Operations Ratio	Total	Per Cow	Per Farm	Per Operator
(4)	(12)	(4)	(4)	(12)	(4)	(4)
$838,746	$1,306	0.30	$1,189,067	$1,919	$657,429	$357,551
413,151	1,025	0.25	570,269	1,344	293,399	181,620
286,223	860	0.22	384,433	1,155	200,179	107,460
171,989	773	0.20	263,743	1,033	105,888	66,066
120,112	667	0.17	187,418	908	57,054	35,606
78,969	561	0.14	116,687	805	31,211	21,959
53,830	449	0.12	79,113	688	17,970	12,836
36,206	347	0.09	57,505	579	5,373	4,198
21,262	216	0.06	35,671	419	-12,627	-9,507
-11,854	-70	-0.03	10,807	103	-75,681	-63,025

Farm Business Charts for farms with freestall barns and 150 cows or less, 151-300 cows, and more than 300 cows; and farms with conventional barns with 60 cows or less and more than 60 cows are shown on pages 32-36.

Financial Analysis Chart

The farm financial analysis chart on page 29 is designed just like the Farm Business Chart and may be used to assess the financial health of the farm business. Most of the financial measures used in the chart are defined on pages 6, 9, 13 and 19 of this publication. References to DFBS output page numbers for participating dairy farmers are provided in the table headings.

FINANCIAL ANALYSIS CHART
200 New York Dairy Farms, 2004

Liquidity (repayment)							
Planned Debt Payments Per Cow	Available for Debt Service Per Cow	Cash Flow Coverage Ratio	Debt Coverage Ratio	Debt Payments as Percent of Milk Sales	Debt Per Cow	Working Capital as % of Total Expenses	Current Ratio
(10)*	(16)	(10)	(10)	(10)	(7)	(7)	(7)
$52	$1,138	5.77	7.80	2%	$231	42%	22.29
199	844	2.42	3.24	6	1,035	29	4.31
294	748	1.82	2.53	9	1,683	24	3.02
353	671	1.49	2.06	11	2,125	18	2.43
421	596	1.32	1.71	12	2,464	15	2.01
470	513	1.17	1.44	14	2,758	11	1.67
518	449	1.01	1.22	15	3,021	8	1.39
562	357	0.83	0.95	17	3,360	4	1.16
658	244	0.61	0.62	20	3,931	-2	0.89
815	-373	-1.30	-1.52	28	5,108	-17	0.52

Solvency				Operational Ratios		
		Debt/Asset Ratio				
Leverage Ratio**	Percent Equity	Current & Intermediate	Long Term	Operating Expense Ratio	Interest Expense Ratio	Depreciation Expense Ratio
(7)	(7)	(7)	(7)	(14)	(14)	(14)
0.02	98%	0.03	0.00	0.58	0.00	0.02
0.14	88	0.11	0.00	0.64	0.01	0.04
0.23	81	0.20	0.02	0.68	0.02	0.05
0.35	74	0.25	0.14	0.71	0.02	0.06
0.45	69	0.31	0.24	0.74	0.03	0.06
0.56	64	0.37	0.34	0.76	0.03	0.07
0.75	57	0.44	0.43	0.78	0.04	0.08
0.95	51	0.50	0.56	0.80	0.04	0.09
1.22	45	0.58	0.68	0.83	0.05	0.11
2.76	30	0.79	0.89	0.91	0.08	0.15

Efficiency (Capital)					Profitability	
					Percent Rate of Return with Appreciation on:	
Asset Turnover (ratio)	Real Estate Investment Per Cow	Machinery Investment Per Cow	Total Farm Assets Per Cow	Change in Net Worth With Appreciation	Equity	Investment***
(14)	(14)	(14)	(14)	(8)	(4)	(4)
.93	$1,360	$533	$4,895	$965,036	46%	23%
.72	2,072	885	5,982	456,002	26	16
.66	2,333	1,089	6,498	311,468	20	13
.61	2,631	1,221	6,895	196,995	16	11
.57	2,932	1,356	7,355	140,216	12	9
.53	3,306	1,558	8,008	82,241	9	7
.48	3,807	1,796	8,583	45,148	6	5
.42	4,253	1,982	9,301	30,133	3	3
.36	4,981	2,320	10,637	14,529	-1	1
.27	7,946	3,464	13,990	-57,407	-11	-5

*Page number of the participant's DFBS report 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

Comparison by Type of Barn and Herd Size

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

The table on page 31 includes the average values for the resulting five groups of dairy farms. The average size of farms in the five groups ranges from 46 cows on the small conventional farms to 721 cows on the largest freestall farms.

The largest freestall farms averaged the highest milk output per cow and per worker, the lowest total cost of production and investment per cow, and the greatest returns to labor, management and capital.

Farm business charts have been computed for each of the five housing and herd size categories and are on pages 32-36. By comparing the farm's performance on the most appropriate business chart, a farm manager will be better able to evaluate his or her business performance.

Herd Size Comparisons

A detailed comparison of profitability, financial situation and business analysis factors across herd sizes is contained on pages 48-60 of the 2004 State Summary*. As herd size increases, the net farm income profitability generally increases (page 48)*. Net farm income without appreciation averaged $23,339 per farm for the less than 50 cow farms and $624,346 per farm for those with more than 600 cows. Return to all capital without appreciation and labor and management income per operator generally increased as herd size increased.

Assets, liabilities and financial measures are presented on pages 55-58*. All herd size categories saw an increase in net worth during 2004. The largest herd size category experienced an increase in net worth of over $729,000. However, percent equity went down as assets increased. The largest herds had the lowest percent equity; while the smaller herds averaged 78 percent.

Crop yields showed little relationship to herd size, but fertilizer and lime expenses, and machinery cost per tillable acre generally increased as herd size increased (pages 59-60)*. The farms with 600 and more cows per farm averaged 29 percent more milk sold per cow than the smallest farms. All of the groups with 200 or more cows averaged above 20,000 pounds of milk sold per cow while the farms smaller than 200 cows averaged 18,483 pounds of milk sold per cow. Farm capital per worker increased, and farm capital per cow decreased as herd size increased. Milk sold per worker increased dramatically as herd size increased, ranging from 365,964 pounds at the lowest herd size category up to 1,112,493 pounds at the largest size category.

*Wayne A. Knoblauch, Linda D. Putnam, and Jason Karszes, Dairy Farm Management Business Summary, New York, 2004, Department of Applied Economics and Management, Cornell University, R.B. 2005-03, November 2005.

SELECTED BUSINESS FACTORS BY TYPE OF BARN AND HERD SIZE

191 New York Dairy Farms, 2004

	Conventional		Freestall		
Item Farms with:	<= 60 Cows	>60 Cows	<=150 Cows	151-300 Cows	≥300 Cows
Number of farms	30	27	32	32	70
Cropping Program Analysis					
Total Tillable acres	156	315	283	568	1,349
Tillable acres rented*	68	115	126	288	684
Hay crop acres*	109	179	166	284	605
Corn silage acres*	18	57	73	167	540
Hay crop, tons DM/acre	2.4	2.5	2.9	2.9	3.9
Corn silage, tons/acre	14.7	17.4	16.0	16.4	18.0
Oats, bushels/acre	0	50	60	53	55
Forage DM per cow, tons	8.0	8.8	9.0	8.0	7.9
Tillable acres/cow	3.5	3.5	2.9	2.6	1.9
Fertilizer & lime expense/tillable acre	$18.02	$25.60	$28.81	$31.75	$33.72
Total machinery costs	$29,905	$70,440	$68,491	$146,434	$392,561
Machinery cost/tillable acre	$187	$223	$221	$253	$279
Dairy Analysis					
Number of cows	46	89	103	227	721
Number of heifers	34	74	85	172	561
Milk sold, lbs.	811,167	1,666,824	1,901,213	4,775,050	16,492,528
Milk sold/cow, lbs.	17,634	18,688	18,437	21,038	22,887
Operating cost of producing milk/cwt.	$11.70	$12.25	$12.77	$12.76	$12.58
Total cost of producing milk/cwt.	$19.90	$19.12	$18.32	$16.53	$15.24
Price/cwt. milk sold	$16.75	$17.07	$17.08	$16.92	$16.52
Purchased dairy feed/cow	$879	$904	$953	$1,031	$1,110
Purchased dairy feed/cwt. milk	$4.99	$4.84	$5.17	$4.90	$4.85
Purchased grain & concentrate as % of milk receipts	29%	28%	28%	27%	27%
Purchased feed & crop expense/cwt milk	$5.67	$5.76	$6.04	$5.72	$5.56
Capital Efficiency					
Farm capital/worker	$226,694	$278,771	$300,917	$307,527	$294,409
Farm capital/cow	$9,659	$10,221	$8,696	$7,547	$6,586
Farm capital/tillable acre owned	$5,026	$4,563	$5,724	$6,121	$7,138
Real estate/cow	$4,797	$4,523	$3,768	$3,095	$2,551
Machinery investment/cow	$1,949	$2,341	$1,855	$1,444	$1,073
Asset turnover ratio	0.38	0.40	0.43	0.59	0.69
Labor Efficiency					
Worker equivalent	1.95	3.27	2.98	5.57	16.12
Operator/manager equivalent	1.21	1.45	1.40	1.73	1.94
Milk sold/worker, lbs.	415,273	509,862	637,991	856,767	1,023,057
Cows/worker	24	27	35	41	45
Labor cost/cow	$1,067	$884	$785	$708	$746
Labor cost/tillable acre	$314	$250	$286	$283	$399
Profitability & Balance Sheet Analysis					
Net farm income (without appreciation)	$29,499	$52,175	$55,987	$137,058	$433,769
Labor & management income/operator	$4,396	$3,034	$12,637	$46,154	$157,455
Rate return on all capital with appreciation	2.1%	4.4%	4.7%	11.3%	13.6%
Farm debt/cow	$2,366	$1,548	$2,279	$2,764	$3,011
Percent equity	75%	85%	74%	64%	55%

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

FARM BUSINESS CHART FOR SMALL CONVENTIONAL STALL DAIRY FARMS

30 Conventional Stall Dairy Farms with 60 or Less Cows, New York, 2004

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)
3.22	57	1,133,707	24,089	4.2	23	42	703,501
2.67	54	1,045,992	21,880	3.3	19	35	597,059
2.20	53	955,714	20,457	2.9	18	30	539,444
1.99	51	898,535	18,678	2.7	16	28	463,053
1.95	50	831,754	17,910	2.4	15	25	438,231
1.83	45	794,187	17,233	2.3	13	23	407,325
1.63	43	757,164	15,949	2.1	11	20	375,185
1.54	41	717,533	14,769	1.8	11	19	327,774
1.36	37	651,795	13,648	1.7	10	17	268,092
1.17	30	325,286	10,933	1.3	9	15	240,908

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)
$439	16%	$249	$1,045	$586	$3.64
552	22	401	1,248	681	4.44
660	25	489	1,405	729	5.01
743	27	543	1,482	803	5.16
799	27	617	1,672	928	5.39
857	28	650	1,765	1,092	5.75
959	30	700	1,908	1,167	6.36
1,027	33	805	2,056	1,217	6.50
1,073	37	858	2,224	1,281	7.17
1,241	45	1,070	2,508	1,534	7.96

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation		Labor & Mgmt. Income Per Operator	Change in Net Worth w/Appreciation
			Total	Per Cow		
(12)	(12)	(12)	(4)	(12)	(4)	(8)
$4,139	$8.95	$15.64	$65,615	$1,417	$34,907	$56,545
3,609	9.96	16.73	53,094	1,057	25,157	39,942
3,371	10.34	18.19	43,380	855	15,921	32,522
3,152	10.74	18.95	37,978	782	13,101	25,724
2,994	11.28	19.21	33,091	730	9,366	21,782
2,798	11.64	19.42	24,986	508	2,667	19,045
2,648	12.28	20.57	15,518	412	-772	13,697
2,562	13.40	22.06	13,372	306	-6,272	10,020
2,311	14.27	24.21	10,509	272	-11,253	5,776
1,802	15.81	29.77	-2,547	-92	-32,189	-17,925

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

FARM BUSINESS CHART FOR LARGE CONVENTIONAL STALL DAIRY FARMS

27 Conventional Stall Dairy Farms with More Than 60 Cows, New York, 2004

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)
7.23	163	3,202,431	25,150	4.7	25	42	814,565
4.44	122	2,352,081	22,786	4.0	24	36	764,671
4.13	112	2,129,506	21,627	3.7	22	36	705,555
3.69	97	1,903,718	20,728	3.2	19	34	672,474
3.18	91	1,684,049	20,172	3.1	17	32	579,958
2.84	83	1,488,916	19,014	2.5	17	30	512,690
2.67	72	1,369,555	17,369	2.2	16	27	479,264
2.50	70	1,256,258	16,255	2.0	14	23	422,381
2.18	65	1,184,462	14,824	1.6	12	21	375,024
1.83	62	991,768	13,589	1.2	7	19	315,051

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)
$437	14%	$463	$1,205	$676	$3.69
690	21	547	1,331	896	4.80
732	24	602	1,419	959	5.19
814	25	653	1,512	1,057	5.43
869	26	705	1,593	1,098	5.60
915	29	785	1,710	1,125	6.00
986	32	812	1,839	1,142	6.57
1,085	37	874	1,950	1,186	7.11
1,188	40	1,001	2,166	1,331	7.59
1,332	44	1,710	2,544	1,544	8.26

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation		Labor & Mgmt. Income Per Operator	Change in Net Worth w/Appreciation
			Total	Per Cow		
(12)	(12)	(12)	(4)	(12)	(4)	(8)
$4,223	$8.82	$14.13	$134,367	$1,343	$70,126	$172,691
3,733	10.13	15.75	124,089	1,272	50,269	111,611
3,624	10.76	16.97	106,546	1,139	32,318	78,720
3,561	11.80	18.66	73,883	941	24,579	63,284
3,406	12.34	19.62	56,295	714	14,088	49,668
3,202	13.25	20.19	44,700	545	5,513	41,071
3,095	13.69	20.77	32,908	401	-2,950	23,803
2,685	14.07	21.79	23,788	372	-13,888	5,082
2,571	15.16	24.47	14,470	141	-28,902	-10,405
2,359	16.68	28.65	-19,802	-204	-115,200	-272,653

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

FARM BUSINESS CHART FOR SMALL FREESTALL DAIRY FARMS

32 Freestall Barn Dairy Farms with 150 or Less Cows, New York, 2004

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)
4.83	141	2,841,997	22,522	5.5	22	60	1,050,540
4.11	130	2,613,323	21,432	4.6	20	48	858,837
3.68	125	2,359,415	20,771	4.2	19	42	754,070
3.39	121	2,244,505	19,815	3.6	18	39	678,744
3.25	111	2,101,750	18,982	2.9	17	35	651,909
3.03	108	2,030,754	18,383	2.5	15	33	635,943
2.68	103	1,770,415	17,577	2.1	14	32	614,418
2.22	80	1,446,587	16,945	1.9	13	30	559,852
1.90	74	1,231,628	15,798	1.6	11	28	510,864
1.56	62	921,519	12,691	1.1	7	26	415,621

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)
$523	19%	$338	$944	$650	$4.18
645	23	454	1,126	889	5.02
756	26	500	1,226	977	5.65
828	27	533	1,303	1,040	5.85
863	28	594	1,366	1,103	6.06
915	29	678	1,441	1,171	6.36
997	30	714	1,541	1,235	6.80
1,088	33	742	1,659	1,327	7.02
1,136	33	844	1,785	1,384	7.26
1,249	37	962	1,976	1,509	7.44

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation		Labor & Mgmt. Income Per Operator	Change in Net Worth w/Appreciation
			Total	Per Cow		
(12)	(12)	(12)	(4)	(12)	(4)	(8)
$3,782	$8.83	$14.88	$147,360	$1,290	$82,291	$277,345
3,661	10.67	16.84	99,576	858	30,316	132,961
3,512	11.97	17.42	80,680	710	24,754	99,601
3,383	12.26	17.82	72,142	664	20,332	71,653
3,278	12.62	18.40	64,239	632	17,565	49,907
3,175	13.05	18.58	46,650	574	13,351	43,007
2,974	13.67	19.26	41,725	524	7,985	36,388
2,819	14.03	20.00	35,016	428	2,028	28,159
2,611	15.28	21.03	22,125	241	-13,716	20,684
2,342	16.51	24.26	-14,771	-136	-54,626	-1,213

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

FARM BUSINESS CHART FOR MEDIUM FREESTALL DAIRY FARMS

32 Freestall Barn Dairy Farms with 151-300 Cows, New York, 2004

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)
8.68	293	7,147,274	25,374	5.0	24	57	1,174,860
6.53	282	6,262,072	22,839	3.9	21	53	1,039,002
6.18	274	5,824,237	22,349	3.7	19	49	979,973
6.00	265	5,399,379	21,960	3.5	18	43	917,607
5.65	243	5,032,567	21,723	3.2	18	42	868,644
5.47	234	4,603,802	21,480	3.0	17	41	838,897
5.19	213	4,105,275	21,200	2.7	15	38	819,778
4.74	184	3,802,061	20,215	2.4	13	36	793,825
4.34	169	3,500,387	19,205	2.0	11	34	755,846
3.92	156	3,067,513	15,633	1.5	9	30	582,545

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)
$603	17%	$426	$1,023	$869	$4.18
775	24	539	1,126	1,033	5.12
851	25	576	1,209	1,112	5.38
900	26	596	1,283	1,130	5.55
965	26	625	1,328	1,162	5.63
1,001	28	659	1,434	1,197	5.79
1,018	28	689	1,504	1,252	6.05
1,067	30	817	1,605	1,312	6.23
1,169	33	877	1,700	1,366	6.45
1,281	36	958	1,760	1,669	7.61

Value and Cost of Production			Profitability			
			Net Farm Income Without Appreciation			
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Production Per Cwt.	Total	Per Cow	Labor & Mgmt. Income Per Operator	Change in Net Worth w/Appreciation
(12)	(12)	(12)	(4)	(12)	(4)	(8)
$4,359	$10.58	$13.81	$324,384	$1,184	$158,209	$384,827
3,901	11.23	14.92	244,650	1,046	105,475	272,525
3,812	11.66	15.79	195,548	904	84,728	224,633
3,700	12.09	16.42	154,177	805	66,855	160,063
3,638	12.60	16.76	140,894	689	46,755	152,308
3,606	12.97	16.97	132,538	583	36,333	143,827
3,542	13.54	17.50	106,024	492	26,726	126,677
3,458	14.05	18.29	92,124	417	16,453	89,041
3,260	14.44	18.78	51,266	226	3,267	55,236
2,648	16.68	20.53	2,445	-12	-46,021	-33,893

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

FARM BUSINESS CHART FOR LARGE FREESTALL DAIRY FARMS

70 Freestall Barn Dairy Farms with 300 or More Cows, New York, 2004

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)
36.83	1,884	43,636,486	26,368	6.3	23	65	1,412,402
23.81	1,111	26,056,052	25,314	4.6	21	53	1,201,551
20.22	894	21,070,884	24,334	4.2	20	51	1,155,441
16.81	712	16,132,617	23,557	3.9	19	50	1,112,192
14.50	572	13,747,324	23,004	3.5	18	46	1,059,322
12.88	515	12,177,341	22,639	3.4	18	43	998,166
11.46	463	9,681,631	21,969	3.3	17	41	910,099
9.74	393	8,542,048	21,405	3.1	17	36	816,758
8.36	347	7,553,662	20,624	2.9	16	32	714,290
6.60	316	6,327,232	17,011	2.5	12	28	611,921

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)
$677	20%	$310	$827	$897	$4.36
817	23	417	1,089	1,050	4.79
866	24	464	1,160	1,115	5.07
971	26	507	1,231	1,189	5.27
1,026	27	560	1,278	1,237	5.40
1,056	28	590	1,338	1,270	5.57
1,117	29	618	1,422	1,319	5.78
1,154	30	670	1,502	1,395	6.10
1,206	31	720	1,571	1,514	6.35
1,330	34	847	1,733	1,598	7.12

Value and Cost of Production			Profitability			
Milk Receipts Per Cow	Operating Cost Producing Milk Per Cwt.	Total Cost Production Per Cwt.	Net Farm Income Without Appreciation		Labor & Mgmt. Income Per Operator	Change in Net Worth w/Appreciation
			Total	Per Cow		
(12)	(12)	(12)	(4)	(12)	(4)	(8)
$4,557	$10.04	$13.48	$1,240,002	$1,189	$508,847	$1,512,947
4,239	11.08	14.03	696,919	952	311,387	735,240
4,028	11.71	14.42	529,859	854	233,557	563,802
3,895	12.01	14.85	440,284	803	204,122	479,557
3,794	12.26	15.11	400,814	712	166,981	428,181
3,707	12.54	15.33	330,951	608	135,493	354,786
3,645	12.94	15.66	289,642	500	92,550	314,047
3,531	13.44	16.14	245,892	370	69,981	245,606
3,339	14.03	16.81	134,416	261	28,119	185,396
2,977	15.30	18.62	28,907	65	-39,314	53,781

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

IDENTIFY AND SET GOALS

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

1. Goals should be **S**pecific.

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

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

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

5. Goals should be **T**imed with a designated date by which the goal will be achieved.

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

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

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

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

b. Identify 4-6 objectives.

c. Identify SMART goals.

Worksheet for Setting Goals

I. Mission and Objectives

_____

_____

_____

_____

_____

_____

_____

_____

Worksheet for Setting Goals (Continued)

II. Goals

What	How	When	Who is Responsible

Summarize Your Business Performance

The Farm Business and Financial Analysis Charts on pages 23 and 27-29 can be used to help identify strengths and weaknesses of your farm business. Identify three major strengths and three areas of your farm business that need improvement.

Strengths:	Needs improvement:

GLOSSARY AND LOCATION OF COMMON TERMS

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

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

Accrual Expenses - (defined on page 3)

Accrual Receipts - (defined on page 4)

Annual Cash Flow Statement - (defined on page 11)

Appreciation - (defined on page 5)

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

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

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

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

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

Cash Flow Coverage Ratio - (defined on page 13)

Cash Paid - (defined on page 2)

Cash Receipts - (defined on page 4)

Change in Accounts Payable - (defined on page 3)

Change in Accounts Receivable - (defined on page 4)

Change in Inventory - (defined on page 2)

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 & 9 of the data entry form.

Culling Rate - (defined on page 17)

Current Portion - (defined on page 7)

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 Coverage Ratio – (defined on page 13)

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

Debt to Asset Ratios - (defined on page 9)

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 14.

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

Financial Lease - A long-term non-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 equivalents.

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 6)

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

Labor Efficiency - Production capacity and output per worker.

Leverage Ratio - (defined on page 9)

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

Net Farm Income - (defined on page 5)

Net Farm Income from Operations Ratio - (defined on page 7)

Net Milk Receipts – Accrual milk receipts less milk marketing expense.

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

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

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

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

Other Livestock Expenses - All other dairy herd and livestock expenses not included in more specific categories. Other livestock expenses include; bST, DHIC, registration fees and transfers.

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

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

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

Purchased Inputs Cost of Producing Milk - (defined on page 18)

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

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

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

Return on Equity Capital - (defined on page 7)

Return on Total Capital - (defined on page 7)

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

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

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

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. Calculated as current farm assets at end year less current farm liabilities at end year.

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