



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

DAIRY FARM BUSINESS SUMMARY

March 1980

A.E. Ext. 80-10

COLUMBIA & DUTCHESS COUNTIES 1979

Stuart F. Smith

Department of Agricultural Economics
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

DAIRY FARM BUSINESS SUMMARY COLUMBIA & DUTCHESS COUNTIES

The 1979 Dairy Farm Business Summary for Columbia and Dutchess Counties is based on data from 55 farms located in the region. The Cooperative Extension Associations, the Hudson Valley Farm Credit Association, and Cornell University, cooperate in collecting, summarizing and publishing this farm management information annually.

The primary purpose of this farm management project is to help the participating farmer acquire a solid base of management information for decision making. This report is in workbook form and the farms are divided into three groups to make comparison easy and more meaningful.

The following table illustrates some of the changes that have taken place in the Hudson Valley dairy industry over the last five years.

FIVE YEARS OF COLUMBIA-DUTCHESS FARM MANAGEMENT DATA

Item	Year				
	1975	1976	1977	1978	1979
Number of farms	94	92	47	55	55
Cows per farm	89	87	83	88	84
Labor force	3.2	3.2	3.1	3.0	3.1
Investment per farm	\$291,900	\$304,500	\$328,633	\$353,000	\$375,588
Investment per cow	\$3,279	\$3,500	\$3,959	\$3,961	\$4,471
Labor & mgmt. income per operator	- \$318	\$5,923	\$3,415	\$26,200	\$17,836
Milk sold per cow, lbs.	13,071	13,293	14,053	13,847	14,244
Milk sold per man, lbs.	366,972	384,800	378,701	406,167	388,474
Average price per cwt. milk sold	\$9.07	\$10.16	\$10.35	\$11.43	\$12.83
Average operating exp. per cwt. milk sold	\$8.34	\$9.19	\$9.19	\$10.36	\$11.36

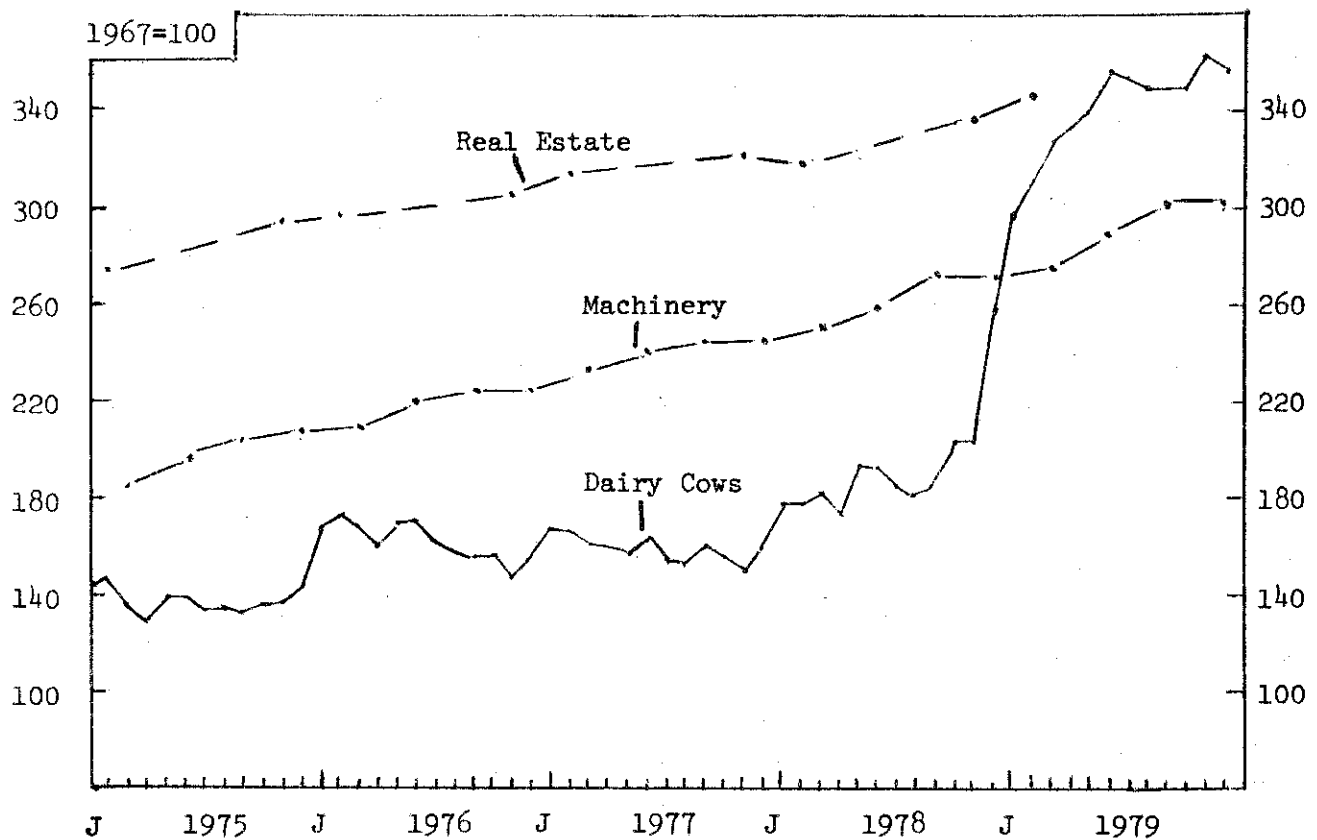
The average size of the dairy farm business included in this project has not increased since 1975 but investment per cow has increased 36 percent. Output per cow and per man has increased some but the 41 percent increase in milk price has had a bigger impact on farm profits.

The high 1978 and 1979 labor and management incomes were boosted by rising cow values which pushed year-end inventories up \$20,000 in 1978 and \$15,000 in 1979. The charge for using equity capital was increased from seven to nine percent in 1979, resulting in an increased cost of more than \$5,000 per farm.

This publication was prepared by Stuart F. Smith, Department of Agricultural Economics, New York State College of Agriculture and Life Sciences. Records were collected and submitted by David Arnold and Kenneth Piester, Columbia County Cooperative Extension Agents, David Tetor, Dutchess County Cooperative Extension Agent, and by Norman Coe and the staff of the Hudson Valley Farm Credit Association.

Prices

VALUE OF NEW YORK FARM REAL ESTATE, DAIRY COWS & MACHINERY
1975-1979



Price changes affect the inventory values on New York dairy farms. Real estate and machinery prices have risen steadily during the past five years. Dairy cow prices dropped during 1974, rose sharply in late 1975, fluctuated throughout 1976 and 1977, and then jumped 62 percent in 1978. Dairy cow prices continued upward in 1979 and were reported at \$1,105 for December, or 38 percent above the December 1978 price. From 1967 to 1979, machinery prices increased 202 percent, dairy cows 256 percent and real estate increased an estimated 255 percent.

Table 1. REPORTED VALUES OF DAIRY FARM INVENTORY ITEMS, 1975-1979

Year	N.Y. Dairy Cows		Machinery		N.Y. Farm Real Estate	
	Value/Head	1967=100	1967=100		Value/Acre	1967=100
1975	(Dec.) \$450	145	(Dec.) 222	(Nov.) \$543	294	
1976	(Dec.) 485	156	(Dec.) 233	(Nov.) 562	304	
1977	(Dec.) 495	160	(Dec.) 253	(Nov.) 593	320	
1978	(Dec.) 800	258	(Dec.) 276	(Nov.) 629	339	
1979	(Dec.) 1105	356	(Dec.) 302	(est.) 355		
Percent change:						
1975 to 1976	+ 8%		+ 5%	+ 3%		
1976 to 1977	+ 3%		+ 9%	+ 5%		
1977 to 1978	+62%		+ 9%	+ 6%		
1978 to 1979	+38%		+ 9%	+ 5% (est.)		

1979 DAIRY FARM BUSINESS SUMMARY
Average of 55 Columbia & Dutchess County Farms

CAPITAL INVESTMENT		1/1/79	1/1/80	RECEIPTS	
Livestock	\$	77,853	\$ 94,399	Milk sales	\$153,568
Feed & supplies		27,864	28,764	Crop sales	1,871
Machinery & equip.		56,818	65,690	Dairy cattle sold	14,675
Land & buildings		178,953	186,735	Calves & other livestock sales	2,508
Total Investment	\$341,488		\$375,588	Refunds & payments	590
				Machine work & work off farm	604
				Miscellaneous	1,734
EXPENSES				Total Cash Receipts	\$175,550
Hired Labor			\$ 17,264	Increase in livestock	16,546
Feed				Increase in feed & supplies	900
Dairy concentrate			39,021	TOTAL FARM RECEIPTS	\$192,996
Hay & other			364		
Machinery				FINANCIAL SUMMARY	
Machine hire			1,244	Cash farm receipts	\$175,550
Machinery repair & auto (f.s.)			7,833	Cash farm expenses	135,887
Gas & oil			5,773	Net Cash Farm Income	\$ 39,663
Livestock				Total farm receipts	\$192,996
Purchased livestock			3,858	Total farm expenses	169,988
Breeding fees			2,050	Labor & Management Income	\$ 23,008*
Veterinary & medicine			2,403	Number of operators	1.3
Milk mktg. (promo. & dues)			7,787	Labor & Mgmt. Inc./Operator	\$ 17,836*
Other livestock expense			6,940	Labor & management income	\$ 23,008
Crops				Real estate appreciation	2,730
Fertilizer & lime			7,846	Interest on equity capital @9%	23,149
Seeds & plants			2,298	Labor, Mgmt. & Ownership Inc.	\$ 48,887
Spray & other			1,466	Labor, Mgmt. & Ownshp. Inc./Op.	\$ 37,897
Real Estate				Return on equity cap. with appr.	13.2%
Repairs			2,001	BUSINESS FACTORS	
Taxes			3,531	Number of cows	84
Insurance			2,771	Number of heifers	62
Rent			4,773	Total acres of crops	245
Other Cash Expense				Man equivalent	3.1
Telephone (farm share)			514	Pounds of milk sold per cow	14,244
Electricity (farm share)			2,790	Tons hay crop per acre	3.0
Interest paid			11,767	Tons corn silage per acre	12.1
Miscellaneous			1,593	Cows per man	27
Total Cash Expenses			\$135,887	Milk sold per man - pounds	388,474
Noncash Items				Feed purchased per cow	\$465
Depreciation of machinery			7,430	% purchased feed is of milk rec.	25%
Depreciation of buildings			2,172	Hay equivalent per cow - tons	8.1
Unpaid labor @ \$450/mo.			1,350	Average price per cwt. of milk	\$12.83
Interest on equity cap. @9%			23,149	Machinery cost per cow	\$331
TOTAL FARM EXPENSES			\$169,988	Labor costs per cow	\$333
				Farm capital per cow	\$4,471

* Increases in cattle prices are included. If cattle values had been held constant, labor and management income would average approximately \$9,000 per farm and \$7,000 per operator.

1979 DAIRY FARM BUSINESS SUMMARY
Average of 40 Owned Columbia & Dutchess County Farms

CAPITAL INVESTMENT		1/1/79	1/1/80	RECEIPTS	
Livestock	\$	82,798	\$100,012	Milk sales	\$155,336
Feed & supplies		29,878	31,682	Crop sales	1,925
Machinery & equip.		59,708	69,638	Dairy cattle sold	16,255
Land & buildings		231,736	242,279	Calves & other livestock sales	2,784
Total Investment	\$	404,120	\$443,611	Refunds & payments	761
				Machine work & work off farm	484
				Miscellaneous	1,706
EXPENSES				Total Cash Receipts	\$179,251
Hired Labor			\$ 17,878	Increase in livestock	17,214
Feed				Increase in feed & supplies	1,804
Dairy concentrate			38,944	TOTAL FARM RECEIPTS	\$198,269
Hay & other			225		
Machinery				FINANCIAL SUMMARY	
Machine hire			1,115	Cash farm receipts	\$179,251
Machinery repair & auto (f.s.)			8,068	Cash farm expenses	138,928
Gas & oil			5,939	Net Cash Farm Income	\$ 40,323
Livestock				Total farm receipts	\$198,269
Purchased livestock			3,861	Total farm expenses	177,693
Breeding fees			2,109	Labor & Management Income	\$ 20,576*
Veterinary & medicine			2,398	Number of operators	1.3
Milk mktg. (promo. & dues)			7,765	Labor & Mgmt. Inc./Operator	\$ 15,828*
Other livestock expense			6,878	Labor & management income	\$ 20,576
Crops				Real estate appreciation	3,572
Fertilizer & lime			8,665	Interest on equity capital @9%	26,764
Seeds & plants			2,547	Labor, Mgmt. & Ownership Inc.	\$ 50,912
Spray & other			1,462	Labor, Mgmt. & Ownshp. Inc./Op.	\$ 39,163
Real Estate				Return on equity cap. with appr.	12%
Repairs			2,173	BUSINESS FACTORS	
Taxes			4,386	Number of cows	86
Insurance			2,907	Number of heifers	66
Rent			2,790	Total acres of crops	265
Other Cash Expense				Man equivalent	3.3
Telephone (farm share)			578	Pounds of milk sold per cow	14,099
Electricity (farm share)			2,886	Tons hay crop per acre	3.1
Interest paid			13,591	Tons corn silage per acre	12.1
Miscellaneous			1,763	Cows per man	26
Total Cash Expenses			\$138,928	Milk sold per man - pounds	373,077
Noncash Items				Feed purchased per cow	\$453
Depreciation of machinery	\$	7,847		% purchased feed is of milk rec.	25%
Depreciation of buildings		2,804		Hay equivalent per cow - tons	8.3
Unpaid labor @ \$450/mo.		1,350		Average price per cwt. of milk	\$12.81
Interest on equity cap. @9%		26,764		Machinery cost per cow	\$335
TOTAL FARM EXPENSES			\$177,693	Labor costs per cow	\$340
				Farm capital per cow	\$5,099

* Increases in cattle prices are included. If cattle values had been held constant, labor and management income would average approximately \$7,000 per farm and \$5,400 per operator.

SUMMARY OF THE FARM BUSINESS

Knowledge about the availability of farm resources and their characteristics is fundamental to judging management performance. The table below gives some facts about the physical and capital resources of these farms. The farms are divided into three groups to allow for better comparisons.

Business Characteristics

Forty-two of the 55 farms are individual proprietorships, ten are partnerships and three are corporations. Forty-nine of the herds are on DHIC, and one is on owner sampler. Sixty-two percent of the farms have stanchion barns, 36 percent have free-stalls. Eighty-eight percent of the conventional barns have pipelines. Fifty percent of the 22 milking parlors are herringbone systems.

Thirty-nine of the farmers in the summary keep Agrifax records. Eight are in the Cornell Electronic Record Program (CAMIS). The remainder used account books and other systems.

DESCRIPTION OF FARM RESOURCES 55 Columbia & Dutchess Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
Average number of cows		62	130	80
<u>Labor Force</u>				
Operator, months		15	17	15
Family paid, months		0	0	1
Family unpaid, months		3	3	2
Hired, months		14	31	17
Total Months		32	51	35
Man equivalent (years)		2.7	4.3	2.9
Average age of operator		46	46	40
<u>Land</u>				
Total acres owned		260	338	39
Total crop acres		200	385	192
Crop acres rented		87	203	192
<u>Capital Investment 1/1/80</u>				
Livestock	\$	\$ 74,056	\$148,218	\$ 79,433
Feed & supplies		24,799	44,465	20,982
Machinery & equipment		57,145	92,839	55,162
Land & buildings		219,479	284,621	38,616*
TOTAL FARM INVENTORY	\$	\$375,479	\$570,143	\$194,193

* Lease hold improvements.

Receipts

Receipts from the business should be large enough to cover the operating and overhead costs and leave a return for the operator's labor and management. Here we look at sources and amounts of receipts for this group of farms.

FARM RECEIPTS 55 Columbia & Dutchess Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
Milk sales	\$ _____	\$113,128	\$233,723	\$148,851
Crop sales	_____	1,976	1,832	1,728
Dairy cattle sold	_____	12,167	23,848	10,460
Calves & other livestock	_____	2,412	3,475	1,773
Gas tax refunds	_____	123	90	3
Government payments	_____	523	886	130
Work off farm	_____	300	0	0
Custom machine work	_____	202	451	924
Other	_____	1,126	2,783	1,808
Total Cash Receipts	\$ _____	\$131,957	\$267,088	\$165,677
Increase in livestock	_____	12,124*	26,667*	14,768*
Increase in feed & sup.	_____	1,862	1,697	0
TOTAL FARM RECEIPTS	\$ _____	\$145,943	\$295,452	\$180,445

* Primarily due to higher cattle prices at end of year although the large owned farms showed an average increase of five cows per farm. If cattle prices had remained unchanged during 1979, total farm receipts for each of the three groups of farms would have averaged \$135,000, \$274,000 and \$166,000 respectively.

INCOME ANALYSIS 55 Columbia & Dutchess Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
Average price/cwt. milk sold	\$ _____	\$ 12.75	\$ 12.87	\$ 12.90
Milk sales per cow	\$ _____	\$ 1,825	\$ 1,798	\$ 1,861
Total cash receipts per man	\$ _____	\$ 49,422	\$ 62,844	\$ 56,739

The average price of milk increased \$1.40 per hundredweight sold for all 55 farms compared with the 1978 average.

A higher proportion of colored breeds were on farms with 100 cows and more, resulting in a higher average milk price but lower total sales per cow. Average milk sales per cow increased 15 to 16 percent for each group of farms in 1979.

Expenses

Classifying expenses into the categories on this page will help you identify those that need tighter control.

FARM EXPENSES Columbia & Dutchess Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
<u>Hired Labor</u>	\$ _____	\$ 11,204	\$ 30,274	\$ 15,625
<u>Feed</u>				
Dairy concentrate	_____	24,992	64,855	39,225
Other feed	_____	347	0	733
<u>Machinery</u>				
Machine hire	_____	913	1,491	1,587
Machinery repairs	_____	5,748	12,165	7,101
Auto expense (farm share)	_____	92	39	109
Gas & oil	_____	4,617	8,394	5,330
<u>Livestock</u>				
Purchased livestock	_____	2,481	6,423	3,851
Breeding fees	_____	2,084	2,157	1,891
Veterinary & medicine	_____	1,778	3,549	2,418
Milk marketing (promotion & coop dues)	_____	6,061	10,931	7,845
Other livestock expense	_____	5,613	9,229	7,106
<u>Crops</u>				
Fertilizer & lime	_____	6,838	12,058	5,663
Seeds & plants	_____	1,730	4,064	1,634
Spray, other crop expense	_____	901	2,503	1,477
<u>Real Estate</u>				
Land, building, fence rep.	_____	1,732	2,991	1,543
Taxes	_____	3,869	5,348	1,250
Insurance	_____	2,436	3,781	2,411
Rent	_____	1,816	4,598	10,064
<u>Other</u>				
Telephone (farm share)	_____	595	545	345
Electricity (farm share)	_____	2,401	3,788	2,534
Interest paid	_____	9,277	21,603	6,902
Miscellaneous	_____	1,150	2,903	1,139
Total Cash Expenses	\$ _____	\$ 98,675	\$213,689	\$127,783
<u>Noncash Items</u>				
Machinery depreciation	\$ _____	\$ 5,773	\$ 11,697	\$ 6,319
Building depreciation	_____	2,290	3,757	486
Unpaid family labor	_____	1,350	1,350	900
Interest on equity cap. @9%	_____	24,304*	31,334*	13,508*
Dec. in lvstk. &/or feed	_____	0	0	1,511
TOTAL FARM EXPENSES	\$ _____	\$132,392	\$261,827	\$150,507

* Adjusted interest charges when effect of cattle price rise is omitted from increase in livestock inventory are \$23,053, \$29,400 and \$12,208 for the respective groups of farms.

Financial Summary of Year's Business

The returns from a business measure the success of management.

MEASURES OF FARM BUSINESS PROFITABILITY Columbia & Dutchess Dairy Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
Cash farm receipts	\$ _____	\$131,957	\$267,088	\$165,677
Cash farm expenses	- _____	- 98,675	-213,689	-127,783
NET CASH FARM INCOME	\$ _____	\$ 33,282	\$ 53,399	\$ 37,894
Total farm receipts	\$ _____	\$145,943	\$295,452	\$180,445
Total farm expenses	- _____	-132,392	-261,827	-150,507
LABOR & MANAGEMENT INCOME	\$ _____	\$ 13,551	\$ 33,625	\$ 29,938
Number of operators	÷ _____	÷ 1.23	÷ 1.43	÷ 1.26
LABOR & MGMT. INC./OPER.	\$ _____	\$ 11,017	\$ 23,547	\$ 23,648
Total farm receipts (adjusted)	\$ _____	\$135,000	\$274,000	\$166,000
Total farm expenses (adjusted)	- _____	-131,400	-259,900	-149,200
LABOR & MGMT. INC. (adjusted)	\$ _____	\$ 3,600	\$ 14,100	\$ 16,800
LABOR & MANAGEMENT INCOME PER OPERATOR (adjusted)	\$ _____	\$ 2,927	\$ 9,860	\$ 13,333
LABOR, MGMT. & OWNSHP. INC./FM.	\$ _____	\$ 39,876	\$ 71,410	\$ 43,932
LABOR, MGMT. & OWNSHP. INC./OP.	\$ _____	\$ 32,420	\$ 50,007	\$ 34,701
Return on eq. cap. with apprec.	% _____	9.2%	16.0%	20.0%
Return on eq. cap. without appr.	% _____	8.4%	14.1%	19.7%

Net Cash Farm Income reflects cash available for family living, principle payments and to make capital purchases and other investments from cash.

Labor and Management Income is the return to the farm operator(s) for his or her efforts in operating the business after deducting all farm expenses including a nine percent charge for the use of equity capital. It is computed with and without the affect of the large increase in livestock inventory caused by higher cattle prices. (The adjusted computation excludes the price increase and includes the interest adjustment on page 7.)

Labor, Management and Ownership Income measures total returns to the farm business by combining the growth in net worth due to appreciation, return on equity capital, and labor and management income.

Return on Equity Capital measures the rate of earnings the operator received for using owned capital in the business after deducting an estimated value for labor and management.

Farm Family Financial Situation

The financial situation is an important part of the farm business summary. It has a direct affect on current cash outflow and future capital investment decisions. A farmer may have a good labor income, but a high debt payment schedule may seriously restrict his management flexibility.

FARM FAMILY FINANCIAL SITUATION Columbia & Dutchess Farms, January 1, 1980

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
<u>Assets</u>				
Livestock	\$ _____	\$ 74,057	\$148,219	\$ 79,433
Feed & supplies	_____	24,799	44,466	20,982
Machinery & equipment	_____	57,146	92,839	55,162
Land & buildings	_____	219,480	284,621	38,617
Co-op investment	_____	8,706	17,352	8,334
Accounts receivable	_____	9,643	19,841	13,512
Cash & checking accounts	_____	3,785	2,150	3,628
Total Farm Assets	\$ _____	\$397,616	\$609,488	\$219,668
Savings accounts	\$ _____	\$ 10,963	\$ 4,745	\$ 4,093
Cash value life insurance	_____	3,113	3,942	713
Stocks & bonds	_____	6,669	2,587	433
Non-farm real estate	_____	384	142	1,333
Auto (personal share)	_____	0	0	0
All other	_____	1,793	2,682	1,346
Total Non-Farm Assets	\$ _____	\$ 22,922	\$ 14,098	\$ 7,918
TOTAL ASSETS	\$ _____	\$420,538	\$623,586	\$227,586
<u>Liabilities</u>				
Real estate mortgage	\$ _____	\$ 73,462	\$166,930	\$ 23,099
Liens on cattle & equipment	_____	44,514	73,021	39,836
Installment contracts	_____	1,727	3,345	1,268
Notes & other farm debt	_____	7,869	18,039	5,371
Total Farm Liabilities	\$ _____	\$127,572	\$261,335	\$ 69,574
Non-Farm Liabilities	_____	214	0	733
TOTAL LIABILITIES	\$ _____	\$127,786	\$261,335	\$ 70,307
Farm Net Worth (equity capital)	\$ _____	\$270,044	\$348,153	\$150,094
Family Net Worth	\$ _____	\$292,752	\$362,251	\$157,279
Percent Equity	_____ %	70%	58%	69%

Farm Net Worth or equity capital is total farm assets less total farm liabilities. It is the amount of farm capital owned by the farm operator. Family net worth is total assets less total liabilities. Percent equity is family net worth divided by total assets.

Payment Ability is the most important consideration in determining if and how proposed investments should be financed. The farm business must produce enough cash income to meet operating expenses, to cover family or personal living expenses and to make debt payments. Cash purchases of capital items that normally take place during the year must also be included.

Payment ability is calculated in the following table. Interest paid is added to net cash farm income because planned or budgeted debt payments will include interest as well as principle. Estimate family living expenses for your farm to calculate cash available for debt payments and capital purchases made in cash. Compare cash available for debt payments and capital purchases with debt payments planned for 1980. Scheduled interest and principle payments for 1980 are the scheduled debt payments as of January, 1980.

The average measures of debt commitment should not be used as goals or optimums. They only show the debt picture on these groups of farms.

FINANCIAL MEASURES & DEBT COMMITMENT
Columbia & Dutchess Farms, January 1, 1980

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
<u>Payment Ability</u>				
Net cash farm income	\$ _____	\$33,282	\$53,399	\$37,894
Add: Interest paid	_____	9,277	21,603	6,902
CASH AVAILABLE FOR DEBT SERVICE & LIVING	\$ _____	\$42,559	\$75,002	\$44,796
Less: Family living exp.	_____	12,700*	16,600*	14,000*
CASH AVAILABLE FOR DEBT PAY- MENT & CAPITAL PURCHASES	\$ _____	\$29,859	\$58,402	\$30,796
Scheduled interest & principle payments:				
Real estate mortgage	\$ _____	\$ 9,175	\$19,024	\$ 2,976
Cattle & equipment liens	_____	7,987	20,183	14,006
Installment contracts	_____	553	4,484	333
Notes & other	_____	3,614	13,272	2,852
TOTAL	\$ _____	\$21,329	\$56,963	\$20,167
<u>Measures of Debt Commitment</u>				
Farm debt per cow	\$ _____	\$ 2,025	\$ 1,965	\$ 904
Scheduled payments per cow	\$ _____	\$ 339	\$ 428	\$ 262
Payments as % of milk sales	_____ %	19%	24%	14%

* Estimated at \$6,000 per family, (assuming one family for each farm operator), plus four percent of cash farm receipts up to \$200,000.

SELECTED BUSINESS FACTORS BY HERD SIZE
Columbia & Dutchess County Dairy Farms, 1979

Item	My Farm	26 Owners less than 100 cows	14 Owners 100 cows and more	15 Farm Renters
<u>Size of Business</u>				
Number of cows	_____	62	130	80
Number of heifers	_____	47	101	52
Pounds of milk sold	_____	887,400	1,816,300	1,154,000
Man equivalent	_____	2.7	4.3	2.9
Total acres of crops	_____	200	385	192
<u>Rates of Production</u>				
Pounds milk sold per cow	_____	14,313	13,972	14,425
Tons hay crop per acre	_____	3.0	3.2	2.7
Tons corn silage per acre	_____	12.2	11.8	12.0
<u>Labor Efficiency</u>				
Cows per man	_____	23	31	27
Pounds milk sold per man	_____	332,360	427,365	395,205
<u>Feed Costs</u>				
Feed purchased per cow	\$ _____	\$403	\$499	\$490
Crop expense per cow	\$ _____	\$153	\$143	\$110
Purchased conc. per cwt. milk	\$ _____	\$2.82	\$3.57	\$3.40
% pur. feed of milk receipts	_____ %	22%	28%	26%
Tons hay equivalent per cow	_____	8.6	8.1	7.3
Crop acres per cow	_____	3.2	3.0	2.4
Lime & fert. per crop acre	\$ _____	\$34	\$31	\$29
Heifers as percent of cows	_____ %	76%	78%	65%
<u>Labor & Machinery Costs</u>				
Machinery cost per cow	\$ _____	\$355	\$318	\$314
Machinery cost per cwt. milk	\$ _____	\$2.48	\$2.28	\$2.18
Labor costs per cow	\$ _____	\$354	\$325	\$324
Labor costs per cwt. milk	\$ _____	\$2.47	\$2.33	\$2.24
<u>Other Costs</u>				
Veterinary & medicine/cow	\$ _____	\$28.68	\$27.30	\$30.23
Real estate expense per cow	\$ _____	\$158.92	\$128.60	\$190.85
<u>Capital Efficiency</u>				
Farm capital per cow	\$ _____	\$5,960	\$4,319	\$2,555
Land & buildings per cow	\$ _____	\$3,484	\$2,156	\$508
Land & bldgs./crop acre owned	\$ _____	\$1,942	\$1,564	0
Machinery investment per cow	\$ _____	\$907	\$703	\$726

CASH FLOW PLANNING & ANALYSIS

55 Columbia & Dutchess County Farms, 1979

Average: 84 cows, 14,244 lbs. milk per cow, \$12.83 per cwt.

Item	Average per cow	My Farm per cow	cows total	goal
<u>CASH RECEIPTS</u>				
Milk sales	\$1,828	\$	\$	\$
Crop sales	22			
Dairy cattle	175			
Calves & other livestock	30			
Other	35			
Total Cash Receipts	\$2,090	\$	\$	\$
<u>CASH EXPENSES</u>				
Hired labor	\$ 206	\$	\$	\$
Dairy concentrate	465			
Hay & other	4			
Machine hire	15			
Machine repair & auto expense	93			
Gas & oil	69			
Breeding fees	24			
Vet & medicine	29			
Milk marketing (ADA, dues, hauling)	93			
Other livestock expense	129			
Fertilizer & lime	93			
Seeds & plants	27			
Spray & other	17			
Land, bldg., fence repair (owner)	25			
Taxes (owner)	51			
Insurance (owner)	34			
Rent (owner)	33			
Telephone (farm share)	6			
Electricity (farm share)	33			
Miscellaneous	19			
Total Cash Expenses ^{1/}	\$1,465	\$	\$	\$
Total Cash Receipts	\$2,090	\$	\$	\$
Total Cash Expenses ^{1/}	-1,465	-	-	-
Net Cash Flow	\$ 625	\$	\$	\$
Cash Family Living Expense ^{2/}	- 176	-	-	-
Amount Left for Debt Service & Capital Investment	\$ 449	\$	\$	\$
Scheduled Debt Service	- 354	-	-	-
Available for Capital Investment	\$ 95	\$	\$	\$
Planned Cattle Purchase				
Planned Equipment Purchase				
Borrowed Funds Needed ^{3/}		\$	\$	\$

^{1/} Interest paid excluded from cash expenses since part of Scheduled Debt Service.
Purchased livestock are also excluded.

^{2/} Estimated at \$6,000 per family and four percent of cash farm receipts.

^{3/} May be replaced by equity capital.

PROGRESS OF THE FARM BUSINESS

Comparing your business with that of other farmers is one part of a business checkup. It is equally important to compare your current year's business with that of earlier years to show the progress you are making, and to plan ahead, by setting business targets or goals.

Item	1977	1978	1979	1980 Goal
<u>Size of Business</u>				
Number of cows	_____	_____	_____	_____
Number of heifers	_____	_____	_____	_____
Pounds of milk sold	_____	_____	_____	_____
Man equivalent	_____	_____	_____	_____
Acres of crops	_____	_____	_____	_____
<u>Rates of Production</u>				
Lbs. milk sold per cow	_____	_____	_____	_____
Tons hay crops per acre	_____	_____	_____	_____
Tons corn silage per acre	_____	_____	_____	_____
<u>Labor Efficiency</u>				
Cows per man	_____	_____	_____	_____
Lbs. milk sold per man	_____	_____	_____	_____
<u>Cost Control</u>				
Feed bought per cow	\$ _____	\$ _____	\$ _____	\$ _____
Machinery cost per cow	\$ _____	\$ _____	\$ _____	\$ _____
Labor cost per cow	\$ _____	\$ _____	\$ _____	\$ _____
<u>Capital Efficiency</u>				
Farm capital per cow	\$ _____	\$ _____	\$ _____	\$ _____
Land & bldgs. per cow	\$ _____	\$ _____	\$ _____	\$ _____
Machinery investment per cow	\$ _____	\$ _____	\$ _____	\$ _____
<u>Price</u>				
Price per cwt. milk	\$ _____	\$ _____	\$ _____	\$ _____
<u>Financial Summary</u>				
Net cash farm income	\$ _____	\$ _____	\$ _____	\$ _____
Total farm income	\$ _____	\$ _____	\$ _____	\$ _____
Total farm expense	\$ _____	\$ _____	\$ _____	\$ _____
Labor & mgt. inc./oper.	\$ _____	\$ _____	\$ _____	\$ _____
Net worth	\$ _____	\$ _____	\$ _____	\$ _____

Are you satisfied with your progress? Have you set a realistic goal for 1980?