

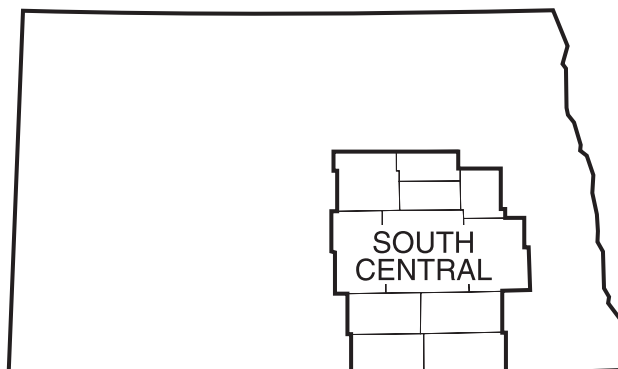
Farm Management Planning Guide



Section VI, Region 5
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Projected 2004 Crop Budgets South Central North Dakota

Andrew Swenson, Farm Management Specialist
Ron Haugen, Farm Management Specialist



The 2004 crop budgets provide an estimate of revenues and costs for selected crops. Each set of budgets are developed for a multi-county region. There is considerable variation in soil type and productivity, weather conditions, as well as management and production practices within each region. Therefore, **THESE BUDGETS ARE ONLY INTENDED TO BE USED AS A GUIDE. EVERY INDIVIDUAL IS HIGHLY ENCOURAGED TO DEVELOP HIS/HER OWN BUDGETS!**

PROFITABILITY and CASH FLOW budgets are shown because each provides valuable information to the producer. To fully understand the budgets, it is important that you study the explanations of how each item is calculated.

The PROFITABILITY budget accounts for full economic opportunity costs for land and machinery investment, regardless of farm operator equity position. The bottom line is the return to labor and management. This is the expected "payment" to the producer for the labor and managerial efforts required by the crop enterprise. Each individual must make the decision whether it is sufficient.

The profitability budget can be changed to conform to the more common definition of accounting profit (return to unpaid labor and management, and owner equity) by replacing the machinery investment and land investment cost items with your per acre interest, or rental, expense of machinery and land, respectively.

For short-run planning decisions you can omit the indirect costs if the land and machinery required to produce the different enterprises are in place. Simply compare the crop enterprises by calculating return over direct costs. Labor requirements and risk should also be considered. Insurance is not available for some crops.



North Dakota State University, Fargo, ND 58105

The profitability budget can be used for long run decisions if the revenues and costs are realistic for several years. (Crop prices, direct costs, and the land tax and investment are best estimates for only the 2004 crop year, but crop yields are historic averages and machinery ownership costs are an average for the total length of ownership). If the budget shows a high return to labor and management, and is representative for several years, increased acreage and corresponding investment should be considered. However, if long-run returns to labor and management are unsatisfactory the best decision may be to exit the crop enterprise and employ the machinery and land investment, and labor and management, in a different enterprise or investment.

The CASH FLOW budget shows the one-year cash flow feasibility of the crop enterprise. The net cash flow represents the cash left for family living, state and federal taxes, saving and investment after all the cash operating expenses and 2004 land and machinery debt obligations (principal and interest payments) have been met. It is assumed that there are loans on 40% of the land and machinery investment. No depreciation or provision for machinery replacement is considered.

De-coupled payments under the 2002 Farm Bill are not included in the budgets because those payments are not tied to crop selection or production.

Primary Assumptions For All Budgets:

Market Price: Best estimates of NDSU extension economists. The greater of projected market price and marketing loan rate is used.

Market Yields: Average yield for the 7 year period 1996-2002, after the low and high yield years are removed. Yields for canola, field peas, crambe, safflower, yellow mustard, buckwheat, millet and garbanzo beans are from NDSU extension agronomists and industry sources.

Current cropland value/acre = \$415.00

Current cropland rent/acre = \$ 33.35

Fertilizer: Cost of fertilizer applied, based on soil test, to meet yield goal of 130% of market yield.

Soil test - recrop:
 Nitrogen - 40 lb
 Phosphorus - 9 ppm
 Potassium -328 ppm

Fertilizer prices:
 Nitrogen - .24/lb
 Phosphorus - .22/lb
 Potassium - .13/lb

Seed Prices:

Spring Wheat	5.75/bu
Durum	6.25/bu
Barley	4.60/bu
Corn Grain	1.04/thous.kern.
Oil Sunflower	.64/thou.kern.
Conf. Sunflower	1.05/thou.kern.
Soybean RR	25/50 lbs
Dry Beans	.59/lb
Flax	9.00/bu
Canola	3.00/lb
Oats	3.50/bu
Field Peas	5.75/bu
Millet	.15/lb
Buckwheat	.28/lb
Mustard	.85/lb
Rye	4.00/bu
Winter Wheat	4.750/bu
Corn silage	.80/thou.kern.
Alfalfa	2.60/lb

Fuel prices:
 Diesel 1.05/gal
 Gas 1.45/gal

Lubrication charge: 15% of fuel cost

Miscellaneous: soil testing, machinery rent and custom work.

Direct costs charged 6.00% interest for 6 month period.

Costs of moving crop to storage are included.

Crops assumed to be planted on dryland recrop ground.

Assumptions for Profitability Budgets:

Misc. Overhead - Machinery housing and insurance at .5% and .85%, respectively, of average machinery investment. Also, liability insurance and license fees of trucks. In addition, \$1 per acre is assumed for general farm utilities, farm publications, meetings, dues, income tax preparation, legal fees, etc.

Land investment charge = average cash rent for region minus land tax.

Machinery investment: 4.5% real interest rate, over the years of machine ownership, is charged on average machinery investment. The real, or inflation adjusted, rate is the commercial rate minus the inflation rate. Ave. mach. investment = (Purchase price + Disposal price)/2

Depreciation = (Purchase price - disposal price / years ownership)

Assumptions for Cash Cost Budgets:

Misc. Overhead - same as for "profitability" budget except the housing expense calculation for machinery is omitted.

Machinery Investment cost = Annual principal and interest payment on machinery debt. Loan amount is 40% of total machinery investment. Terms of machinery debt is 7 years at 6.5% interest. You should enter your actual annual debt payment for machinery per acre.

Land Investment cost = Annual principal and interest payment on land debt. Loan amount is 40% of crop land value. Terms of land debt is 30 years at 6.75% interest. You should use your actual annual land loan payment per acre. Substitute cash rent cost for land taxes and loan payment if land is cash rented instead of owned.

Example Sequence of Operations

Field operations sequence for spring wheat, durum, barley and oats.

OP. NO.	DESCRIPTION	(FEET) WIDTH	(MPH) SPEED	(AC/HR) Fld Cap	(\$/AC) FUEL & LUBE	(\$/AC) EST. REPAIRS
1	Field Cultivate	45	5.0	23.2	\$ 0.64	\$ 0.81
2	Pick Rocks		3.0	29.1	0.18	0.39
3	Plant	35	5.0	14.8	1.00	3.09
4	Spray	70	6.0	33.1	0.16	0.41
5	Swath	25	5.0	12.1	0.44	0.65
6	Combine	25	4.0	8.5	1.44	2.70
7	Chisel Plow	35	4.5	16.2	0.92	1.04
	Trucks*				0.56	0.68
	Grain auger (pto)				0.07	0.01
	Pickup truck allocation				0.84	0.45
	Total				6.25	10.23

* Truck costs will vary between crops.

Spring Wheat

Market Yield	31	Profitability	Cash Flow	Your
Market Price	\$ 3.42	Per Acre	Per Acre	Figures
MARKET INCOME		106.02	106.02	_____
DIRECT COSTS				
-Seed		8.63	8.63	_____
-Herbicides		9.90	9.90	_____
-Fungicides*		1.50	1.50	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		18.73	18.73	_____
-Crop Insurance		3.90	3.90	_____
-Fuel & Lubrication		6.25	6.25	_____
-Repairs		10.23	10.23	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.80	1.80	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		61.93	61.93	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.67	2.78	_____
-Machinery Depreciation		12.61	xxxxxx	_____
-Machinery Investment		7.99	19.49	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		57.62	40.66	_____
SUM OF ALL LISTED COSTS		119.55	102.59	_____
RETURN TO LABOR & MANAGEMENT		(13.53)	xxxxxx	_____
NET CASH FLOW		xxxxxx	3.43	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		2.00	2.00	_____
-Indirect Costs		1.86	1.31	_____
-Total Costs		3.86	3.31	_____

notes:

*Foliar fungicide would cost about \$9.50 plus application. Recent trials consistently show 15% to 20% yield improvement over diseased untreated crop.

Durum

Market Yield	23	Profitability	Cash Flow	Your
Market Price	\$ 3.83	Per Acre	Per Acre	Figures
MARKET INCOME		88.09	88.09	_____
DIRECT COSTS				
-Seed		9.38	9.38	_____
-Herbicides		9.90	9.90	_____
-Fungicides*		1.50	1.50	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		11.42	11.42	_____
-Crop Insurance		4.40	4.40	_____
-Fuel & Lubrication		6.11	6.11	_____
-Repairs		10.05	10.05	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.61	1.61	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		55.37	55.37	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.52	2.66	_____
-Machinery Depreciation		12.28	xxxxxx	_____
-Machinery Investment		7.74	18.85	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		56.89	39.89	_____
SUM OF ALL LISTED COSTS		112.26	95.26	_____
RETURN TO LABOR & MANAGEMENT		(24.17)	xxxxxx	_____
NET CASH FLOW		xxxxxx	(7.17)	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		2.41	2.41	_____
-Indirect Costs		2.47	1.73	_____
-Total Costs		4.88	4.14	_____

notes:

*Foliar fungicide would cost about \$9.50 plus application. Recent trials consistently show 15% to 20% yield improvement over diseased untreated crop.

Malting Barley

Market Yield	54	Profitability	Cash Flow	Your
Market Price*	\$ 2.30	Per Acre	Per Acre	Figures
MARKET INCOME		124.20	124.20	_____
DIRECT COSTS				
-Seed		6.90	6.90	_____
-Herbicides		8.70	8.70	_____
-Fungicides		1.25	1.25	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		20.85	20.85	_____
-Crop Insurance		2.60	2.60	_____
-Fuel & Lubrication		6.66	6.66	_____
-Repairs		10.73	10.73	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.76	1.76	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		60.45	60.45	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.09	3.12	_____
-Machinery Depreciation		13.56	xxxxxx	_____
-Machinery Investment		8.71	21.35	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		59.70	42.85	_____
SUM OF ALL LISTED COSTS		120.15	103.30	_____
RETURN TO LABOR & MANAGEMENT		4.05	xxxxxx	_____
NET CASH FLOW		xxxxxx	20.90	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		1.12	1.12	_____
-Indirect Costs		1.11	0.79	_____
-Total Costs		2.22	1.91	_____

notes:

*On average, about 50% of production is feed quality.
Feed barley price projection is \$1.74.

Corn Grain

	103	Profitability	Cash Flow	Your
Market Yield		Per Acre	Per Acre	Figures
Market Price	\$ 1.96			
MARKET INCOME		201.88	201.88	_____
DIRECT COSTS				
-Seed		24.96	24.96	_____
-Herbicides		21.00	21.00	_____
-Fungicides		0.00	0.00	_____
-Insecticides*		0.00	0.00	_____
-Fertilizer		37.92	37.92	_____
-Crop Insurance**		8.00	8.00	_____
-Fuel & Lubrication		9.78	9.78	_____
-Repairs		15.67	15.67	_____
-Drying		9.32	9.32	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		3.83	3.83	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		131.47	131.47	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		6.11	4.53	_____
-Machinery Depreciation		22.56	xxxxxx	_____
-Machinery Investment		14.17	36.14	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		76.19	59.06	_____
SUM OF ALL LISTED COSTS		207.65	190.53	_____
RETURN TO LABOR & MANAGEMENT		(5.77)	xxxxxx	_____
NET CASH FLOW		xxxxxx	11.35	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		1.28	1.28	_____
-Indirect Costs		0.74	0.57	_____
-Total Costs		2.02	1.85	_____

notes:

*Corn borer insecticide, foliar applied mid-season, would cost about \$7 plus application.

**Crop insurance is only available by written agreement in some counties.

Oil Sunflower

Market Yield	1390	Profitability	Cash Flow	Your
Market Price	\$ 0.111	Per Acre	Per Acre	Figures
MARKET INCOME		154.29	154.29	_____
DIRECT COSTS				
-Seed		14.08	14.08	_____
-Herbicides		11.90	11.90	_____
-Fungicides		0.00	0.00	_____
-Insecticides*		0.00	0.00	_____
-Fertilizer		16.02	16.02	_____
-Crop Insurance		4.70	4.70	_____
-Fuel & Lubrication		7.33	7.33	_____
-Repairs		11.41	11.41	_____
-Drying		2.78	2.78	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		2.08	2.08	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		71.29	71.29	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.42	3.29	_____
-Machinery Depreciation		15.21	xxxxxx	_____
-Machinery Investment		10.10	25.16	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		63.07	46.84	_____
SUM OF ALL LISTED COSTS		134.36	118.13	_____
RETURN TO LABOR & MANAGEMENT		19.93	xxxxxx	_____
NET CASH FLOW		xxxxxx	36.16	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.05	0.05	_____
-Indirect Costs		0.05	0.03	_____
-Total Costs		0.10	0.08	_____

notes:

*Sunflower beetle insecticide would cost about \$2 plus application.

Red seed weevil insecticide would cost about \$6 plus application.

Confectionery Sunflower

Market Yield	1390	Profitability	Cash Flow	Your
Market Price	\$ 0.149	Per Acre	Per Acre	Figures
MARKET INCOME		207.11	207.11	_____
DIRECT COSTS				
-Seed		18.90	18.90	_____
-Herbicides		11.90	11.90	_____
-Fungicides		0.00	0.00	_____
-Insecticides*		6.00	6.00	_____
-Fertilizer		16.02	16.02	_____
-Crop Insurance		4.70	4.70	_____
-Fuel & Lubrication		7.33	7.33	_____
-Repairs		11.41	11.41	_____
-Drying		2.56	2.56	_____
-Miscellaneous		5.50	5.50	_____
-Operating Interest		2.53	2.53	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		86.84	86.84	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.42	3.29	_____
-Machinery Depreciation		15.21	xxxxxx	_____
-Machinery Investment		10.10	25.16	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		63.07	46.84	_____
SUM OF ALL LISTED COSTS		149.91	133.68	_____
RETURN TO LABOR & MANAGEMENT		57.20	xxxxxx	_____
NET CASH FLOW		xxxxxx	73.43	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.06	0.06	_____
-Indirect Costs		0.05	0.03	_____
-Total Costs		0.11	0.10	_____

notes:

*One treatment of insecticide for red seed weevil, lygus bugs and banded moths. Custom application cost of \$4.50 is under "Miscellaneous." A second treatment is often needed. Insecticide for sunflower beetle would cost about \$2 plus application.

Soybeans

Market Yield	31	Profitability	Cash Flow	Your
Market Price	\$ 5.13	Per Acre	Per Acre	Figures
MARKET INCOME		159.03	159.03	_____
DIRECT COSTS				
-Seed*		29.10	29.10	_____
-Herbicides*		9.75	9.75	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		4.97	4.97	_____
-Crop Insurance		4.30	4.30	_____
-Fuel & Lubrication		5.97	5.97	_____
-Repairs		10.19	10.19	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.50	1.50	_____
-Operating Interest		1.97	1.97	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		67.75	67.75	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.68	2.79	_____
-Machinery Depreciation		12.81	xxxxxx	_____
-Machinery Investment		8.04	19.87	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		57.89	41.05	_____
SUM OF ALL LISTED COSTS		125.64	108.80	_____
RETURN TO LABOR & MANAGEMENT		33.39	xxxxxx	_____
NET CASH FLOW		xxxxxx	50.23	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		2.19	2.19	_____
-Indirect Costs		1.87	1.32	_____
-Total Costs		4.05	3.51	_____

notes:

*Roundup (glyphosate) resistant soybeans. Per acre cost of conventional soybean seed be about \$11.50 for public varieties and \$18 for private varieties, and herbicide costs would be about \$18.

Drybeans

Market Yield	1500	Profitability	Cash Flow	Your
Market Price	\$ 0.17	Per Acre	Per Acre	Figures
MARKET INCOME		255.00	255.00	_____
DIRECT COSTS				
-Seed		29.50	29.50	_____
-Herbicides		20.42	20.42	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		20.37	20.37	_____
-Crop Insurance		11.80	11.80	_____
-Fuel & Lubrication		7.61	7.61	_____
-Repairs		12.45	12.45	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		3.09	3.09	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		106.25	106.25	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.48	3.27	_____
-Machinery Depreciation		16.24	xxxxxx	_____
-Machinery Investment		10.88	27.18	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		64.95	48.84	_____
SUM OF ALL LISTED COSTS		171.20	155.09	_____
RETURN TO LABOR & MANAGEMENT		83.80	xxxxxx	_____
NET CASH FLOW		xxxxxx	99.91	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.07	0.07	_____
-Indirect Costs		0.04	0.03	_____
-Total Costs		0.11	0.10	_____

notes:

Flax

Market Yield	18	Profitability	Cash Flow	Your
Market Price	\$ 5.35	Per Acre	Per Acre	Figures
MARKET INCOME		96.30	96.30	_____
DIRECT COSTS				
-Seed		6.30	6.30	_____
-Herbicides		14.71	14.71	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		9.89	9.89	_____
-Crop Insurance		4.20	4.20	_____
-Fuel & Lubrication		6.66	6.66	_____
-Repairs		10.76	10.76	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.61	1.61	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		55.12	55.12	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.62	2.71	_____
-Machinery Depreciation		12.82	xxxxxx	_____
-Machinery Investment		8.21	19.88	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		58.01	40.97	_____
SUM OF ALL LISTED COSTS		113.13	96.09	_____
RETURN TO LABOR & MANAGEMENT		(16.83)	xxxxxx	_____
NET CASH FLOW		xxxxxx	0.21	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		3.06	3.06	_____
-Indirect Costs		3.22	2.28	_____
-Total Costs		6.29	5.34	_____

notes:

Canola

Market Yield	1150	Profitability	Cash Flow	Your
Market Price	\$ 0.094	Per Acre	Per Acre	Figures
MARKET INCOME		108.10	108.10	_____
DIRECT COSTS				
-Seed		16.50	16.50	_____
-Herbicides		15.75	15.75	_____
-Fungicides*		0.00	0.00	_____
-Insecticides		7.00	7.00	_____
-Fertilizer**		24.25	24.25	_____
-Crop Insurance		4.10	4.10	_____
-Fuel & Lubrication		6.11	6.11	_____
-Repairs		10.05	10.05	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		2.54	2.54	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		87.30	87.30	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.52	2.66	_____
-Machinery Depreciation		12.28	xxxxxx	_____
-Machinery Investment		7.74	18.85	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		56.89	39.89	_____
SUM OF ALL LISTED COSTS		144.19	127.20	_____
RETURN TO LABOR & MANAGEMENT		(36.09)	xxxxxx	_____
NET CASH FLOW		xxxxxx	(19.10)	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.08	0.08	_____
-Indirect Costs		0.05	0.03	_____
-Total Costs		0.13	0.11	_____

notes:

*Fungicide for white mold would cost about \$16 plus application.

**Fertilizer cost includes 20 lbs sulfur at \$.26/lb.

Oats

Market Yield	54	Profitability	Cash Flow	Your
Market Price	\$ 1.28	Per Acre	Per Acre	Figures
MARKET INCOME		69.12	69.12	_____
DIRECT COSTS				
-Seed		7.00	7.00	_____
-Herbicides		1.88	1.88	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		16.55	16.55	_____
-Crop Insurance		3.90	3.90	_____
-Fuel & Lubrication		7.22	7.22	_____
-Repairs		11.34	11.34	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.47	1.47	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		50.36	50.36	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.19	3.19	_____
-Machinery Depreciation		14.14	xxxxxx	_____
-Machinery Investment		9.06	22.18	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		60.75	43.75	_____
SUM OF ALL LISTED COSTS		111.11	94.11	_____
RETURN TO LABOR & MANAGEMENT		(41.99)	xxxxxx	_____
NET CASH FLOW		xxxxxx	(24.99)	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		0.93	0.93	_____
-Indirect Costs		1.12	0.81	_____
-Total Costs		2.06	1.74	_____

notes:

Field Peas

Market Yield	35	Profitability	Cash Flow	Your
Market Price*	\$ 3.84	Per Acre	Per Acre	Figures
MARKET INCOME		134.40	134.40	_____
DIRECT COSTS				
-Seed**		17.25	17.25	_____
-Herbicides		14.64	14.64	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		4.32	4.32	_____
-Crop Insurance		7.10	7.10	_____
-Fuel & Lubrication		6.52	6.52	_____
-Repairs		11.05	11.05	_____
-Drying		0.00	0.00	_____
-Miscellaneous		2.00	2.00	_____
-Operating Interest		1.89	1.89	_____
SUM OF LISTED DIRECT COSTS		64.77	64.77	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.85	2.91	_____
-Machinery Depreciation		13.90	xxxxxx	_____
-Machinery Investment		8.48	20.76	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
SUM OF LISTED INDIRECT COSTS		59.58	42.05	_____
SUM OF ALL LISTED COSTS		124.36	106.83	_____
RETURN TO LABOR & MANAGEMENT		10.04	xxxxxx	_____
NET CASH FLOW		xxxxxx	27.57	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		1.85	1.85	_____
-Indirect Costs		1.70	1.20	_____
-Total Costs		3.55	3.05	_____

notes:

*Food quality price estimate. Feed price of about \$2.75 is below loan rate.

**Producer's own seed is used. Seed cost for new grower would be about \$27.

Millet

Market Yield	1800	Profitability	Cash Flow	Your
Market Price	\$ 0.06	Per Acre	Per Acre	Figures
MARKET INCOME		108.00	108.00	_____
DIRECT COSTS				
-Seed		3.75	3.75	_____
-Herbicides		1.50	1.50	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		13.76	13.76	_____
-Crop Insurance		0.00	0.00	_____
-Fuel & Lubrication		6.34	6.34	_____
-Repairs		10.33	10.33	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.10	1.10	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		37.79	37.79	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.76	2.86	_____
-Machinery Depreciation		12.81	xxxxxx	_____
-Machinery Investment		8.14	19.90	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		58.07	41.13	_____
SUM OF ALL LISTED COSTS		95.86	78.92	_____
RETURN TO LABOR & MANAGEMENT		12.14	xxxxxx	_____
NET CASH FLOW		xxxxxx	29.08	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.02	0.02	_____
-Indirect Costs		0.03	0.02	_____
-Total Costs		0.05	0.04	_____

notes:

Buckwheat

Market Yield	950	Profitability	Cash Flow	Your
Market Price	\$ 0.109	Per Acre	Per Acre	Figures
MARKET INCOME		103.55	103.55	_____
DIRECT COSTS				
-Seed		14.00	14.00	_____
-Herbicides		0.00	0.00	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		7.23	7.23	_____
-Crop Insurance		0.00	0.00	_____
-Fuel & Lubrication		5.36	5.36	_____
-Repairs		9.13	9.13	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.10	1.10	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		37.82	37.82	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.19	2.45	_____
-Machinery Depreciation		11.02	xxxxxx	_____
-Machinery Investment		6.69	16.30	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		54.26	37.13	_____
SUM OF ALL LISTED COSTS		92.08	74.94	_____
RETURN TO LABOR & MANAGEMENT		11.47	xxxxxx	_____
NET CASH FLOW		xxxxxx	28.61	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.04	0.04	_____
-Indirect Costs		0.06	0.04	_____
-Total Costs		0.10	0.08	_____

notes:

Yellow Mustard

Market Yield	900	Profitability	Cash Flow	Your
Market Price	\$ 0.146	Per Acre	Per Acre	Figures
MARKET INCOME		131.40	131.40	_____
DIRECT COSTS				
-Seed		10.20	10.20	_____
-Herbicides		5.95	5.95	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		12.82	12.82	_____
-Crop Insurance		0.00	0.00	_____
-Fuel & Lubrication		5.55	5.55	_____
-Repairs		9.26	9.26	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.34	1.34	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		46.12	46.12	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.21	2.44	_____
-Machinery Depreciation		11.27	xxxxxx	_____
-Machinery Investment		6.88	16.83	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		54.71	37.65	_____
SUM OF ALL LISTED COSTS		100.83	83.78	_____
RETURN TO LABOR & MANAGEMENT		30.57	xxxxxx	_____
NET CASH FLOW		xxxxxx	47.62	_____
LISTED COSTS PER BUDGET UNIT (lb) :				
-Direct Costs		0.05	0.05	_____
-Indirect Costs		0.06	0.04	_____
-Total Costs		0.11	0.09	_____

notes:

Rye

Market Yield	39	Profitability	Cash Flow	Your
Market Price	\$ 2.06	Per Acre	Per Acre	Figures
MARKET INCOME		80.34	80.34	_____
DIRECT COSTS				
-Seed		4.80	4.80	_____
-Herbicides		0.00	0.00	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		26.04	26.04	_____
-Crop Insurance		4.50	4.50	_____
-Fuel & Lubrication		6.23	6.23	_____
-Repairs		9.99	9.99	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.58	1.58	_____
SUM OF LISTED DIRECT COSTS		54.14	54.14	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.71	2.84	_____
-Machinery Depreciation		12.53	xxxxxx	_____
-Machinery Investment		7.90	19.35	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
SUM OF LISTED INDIRECT COSTS		57.49	40.57	_____
SUM OF ALL LISTED COSTS		111.63	94.70	_____
RETURN TO LABOR & MANAGEMENT		(31.29)	xxxxxx	_____
NET CASH FLOW		xxxxxx	(14.36)	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		1.39	1.39	_____
-Indirect Costs		1.47	1.04	_____
-Total Costs		2.86	2.43	_____

notes:

Winter Wheat

Market Yield*	38	Profitability	Cash Flow	Your
Market Price	\$ 3.03	Per Acre	Per Acre	Figures
MARKET INCOME		115.14	115.14	_____
DIRECT COSTS				
-Seed		4.75	4.75	_____
-Herbicides		1.50	1.50	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		25.13	25.13	_____
-Crop Insurance		3.90	3.90	_____
-Fuel & Lubrication		6.38	6.38	_____
-Repairs		10.38	10.38	_____
-Drying		0.00	0.00	_____
-Miscellaneous		1.00	1.00	_____
-Operating Interest		1.59	1.59	_____
SUM OF LISTED DIRECT COSTS		54.62	54.62	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		3.80	2.88	_____
-Machinery Depreciation		12.90	xxxxxx	_____
-Machinery Investment		8.21	20.06	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
SUM OF LISTED INDIRECT COSTS		58.25	41.32	_____
SUM OF ALL LISTED COSTS		112.87	95.95	_____
RETURN TO LABOR & MANAGEMENT		2.27	xxxxxx	_____
NET CASH FLOW		xxxxxx	19.19	_____
LISTED COSTS PER BUDGET UNIT (bu) :				
-Direct Costs		1.44	1.44	_____
-Indirect Costs		1.53	1.09	_____
-Total Costs		2.97	2.52	_____

notes:

*Yield is per harvested acre, 1996-2002 acreage abandonment averaged 14%.

Corn Silage

Market Yield	9.2	Profitability	Cash Flow	Your
Market Price	\$ 18.00	Per Acre	Per Acre	Figures
MARKET INCOME		165.60	165.60	_____
DIRECT COSTS				
-Seed		17.60	17.60	_____
-Herbicides		15.00	15.00	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		26.75	26.75	_____
-Crop Insurance		3.70	3.70	_____
-Fuel & Lubrication		5.33	5.33	_____
-Repairs		8.60	8.60	_____
-Drying		0.00	0.00	_____
-Miscellaneous*		28.50	28.50	_____
-Operating Interest		3.16	3.16	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		108.65	108.65	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		2.85	2.16	_____
-Machinery Depreciation		7.94	xxxxxx	_____
-Machinery Investment		6.16	14.74	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		50.30	35.29	_____
SUM OF ALL LISTED COSTS		158.94	143.93	_____
RETURN TO LABOR & MANAGEMENT		6.66	xxxxxx	_____
NET CASH FLOW		xxxxxx	21.67	_____
LISTED COSTS PER BUDGET UNIT (ton) :				
-Direct Costs		11.81	11.81	_____
-Indirect Costs		5.47	3.84	_____
-Total Costs		17.28	15.64	_____

notes:

*includes custom harvest and hauling

Oats Hay Crop and Alfalfa Seeding

Market Yield	2.0	Profitability	Cash Flow	Your
Market Price	\$ 36.00	Per Acre	Per Acre	Figures
MARKET INCOME		72.00	72.00	_____
DIRECT COSTS				
-Seed		33.00	33.00	_____
-Herbicides		0.00	0.00	_____
-Fungicides		0.00	0.00	_____
-Insecticides		0.00	0.00	_____
-Fertilizer		14.14	14.14	_____
-Crop Insurance		0.00	0.00	_____
-Fuel & Lubrication		6.26	6.26	_____
-Repairs		11.83	11.83	_____
-Drying		0.00	0.00	_____
-Miscellaneous		3.10	3.10	_____
-Operating Interest		2.05	2.05	_____
		=====	=====	=====
SUM OF LISTED DIRECT COSTS		70.37	70.37	_____
INDIRECT (FIXED) COSTS				
-Misc. Overhead		4.63	3.58	_____
-Machinery Depreciation		12.29	xxxxxx	_____
-Machinery Investment		9.45	23.10	_____
-Land Taxes		5.34	5.34	_____
-Land Investment		28.01	13.04	_____
		=====	=====	=====
SUM OF LISTED INDIRECT COSTS		59.72	45.07	_____
SUM OF ALL LISTED COSTS		130.10	115.45	_____
RETURN TO LABOR & MANAGEMENT		(58.10)	xxxxxx	_____
NET CASH FLOW		xxxxxx	(43.45)	_____
LISTED COSTS PER BUDGET UNIT (ton) :				
-Direct Costs		35.19	35.19	_____
-Indirect Costs		29.86	22.54	_____
-Total Costs		65.05	57.72	_____

notes:

Alfalfa (established)

		Profitability	Cash Flow	Your
Market Yield	2.0	Per Acre	Per Acre	Figures
Market Price	\$ 55.00			
MARKET INCOME		110.00	110.00	
DIRECT COSTS				
-Seed		0.00	0.00	
-Herbicides		0.00	0.00	
-Fungicides		0.00	0.00	
-Insecticides		0.00	0.00	
-Fertilizer		4.65	4.65	
-Crop Insurance		0.00	0.00	
-Fuel & Lubrication		6.97	6.97	
-Repairs		14.58	14.58	
-Drying		0.00	0.00	
-Miscellaneous		3.00	3.00	
-Operating Interest		0.88	0.88	
		=====	=====	
SUM OF LISTED DIRECT COSTS		30.07	30.07	
INDIRECT (FIXED) COSTS				
-Misc. Overhead		5.33	4.02	
-Machinery Depreciation		15.10	xxxxxx	
-Machinery Investment		11.76	29.74	
-Land Taxes		5.34	5.34	
-Land Investment		28.01	13.04	
		=====	=====	
SUM OF LISTED INDIRECT COSTS		65.55	52.15	
SUM OF ALL LISTED COSTS		95.62	82.22	
RETURN TO LABOR & MANAGEMENT		14.38	xxxxxx	
NET CASH FLOW		xxxxxx	27.78	
LISTED COSTS PER BUDGET UNIT (ton) :				
-Direct Costs		15.04	15.04	
-Indirect Costs		32.77	26.07	
-Total Costs		47.81	41.11	

notes:

Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
2WD 100HP Tractor	49800	400 hr	20	16068	4.22/hr	3.71/hr	5.07/hr	
2WD 160HP Tractor	82100	500 hr	15	24287	7.71/hr	4.79/hr	8.36/hr	
4WD 280HP Tractor	113000	500 hr	15	33440	10.61/hr	6.59/hr	6.58/hr	
SP Combine (base unit)	130900	250 hr	12	32549	32.78/hr	14.71/hr	21.24/hr	
Tandem Truck (2)	50300	150 hr	20	12750	12.52/hr	9.46/hr	6.60/hr	
Pick-up Truck	18600	300 hr	10	3800	4.93/hr	1.68/hr	2.47/hr	
Swather 25 ft	13500	1000 ac	20	3183	0.52/ac	0.38/ac	0.23/ac	12.1
Sprayer 70 ft	15600	2200 ac	15	6203	0.28/ac	0.22/ac	0.26/ac	33.1
Chisel Plow 35 ft	23800	1600 ac	15	13906	0.41/ac	0.53/ac	0.64/ac	16.2
Field Cultivator 45 ft	29800	3000 ac	15	16489	0.30/ac	0.35/ac	0.53/ac	23.2
Tandem Disk 28 ft	22800	800 ac	20	6553	1.02/ac	0.83/ac	0.65/ac	12.2
Harrow (springtooth) 60 ft	9700	1200 ac	20	5589	0.17/ac	0.29/ac	0.13/ac	34.0
Row-crop cultivator 12-30	9900	800 ac	15	5463	0.37/ac	0.43/ac	0.37/ac	11.6
Air Seeder 35 ft	67400	1800 ac	12	31533	1.66/ac	1.24/ac	2.65/ac	14.8
Planter 12-30	36500	800 ac	20	12143	1.52/ac	1.37/ac	2.02/ac	10.6
Bean cutter 6-30	7800	400 ac	20	2233	0.70/ac	0.56/ac	0.43/ac	6.5
Corn head 6-30	23400	400 ac	20	2192	2.65/ac	1.44/ac	0.83/ac	4.5
Grain head w/pu	10200	1200 ac	10	3606	0.55/ac	0.26/ac	0.19/ac	8.5
Grain str. cut 25 ft	13800	400 ac	20	1436	1.55/ac	0.86/ac	0.25/ac	8.5
Head w/sunf pans 25 ft	17200	400 ac	20	1813	1.92/ac	1.07/ac	0.32/ac	8.5
Soybeans str. cut 25 ft	21300	800 ac	20	1978	1.21/ac	0.65/ac	0.40/ac	8.5
Head w/drybean pickups	21300	400 ac	20	2253	2.38/ac	1.32/ac	0.40/ac	8.5
Mower-conditioner 14 ft	18700	400 ac	20	4412	1.79/ac	1.30/ac	1.19/ac	5.7
Baler (large round)	19000	400 ac	20	6058	1.62/ac	1.41/ac	2.66/ac	5.0
Rock picker	14300	50 hr	20	4530	0.33/ac	0.28/ac	0.21/ac	29.1
Loader for tractor	4900	150 hr	15	1922	1.35/hr	1.04/hr	2.28/hr	
Grain auger	5000	50 hr	20	700	4.30/hr	2.57/hr	0.62/hr	