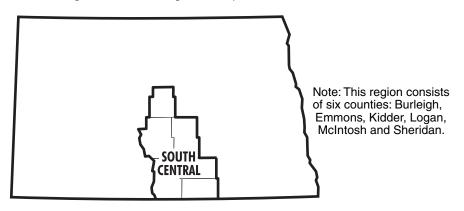


Projected 2010 Crop Budgets South Central North Dakota

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The 2010 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!

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

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enterprise. Each individual must make the decision whether it is sufficient.

The 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 charge cost items with your per acre interest and rental expense of machinery and land, and real estate tax if land is owned.

The budget can be used for long run decisions if the revenues and costs are realistic for several ears. (Crop prices, direct costs, and the land charge are best estimates for only the 2010 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.

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.

The budget can be used to estimate cashflow by making a few modifications. Machinery depreciation should be omitted and the machinery investment number replaced with your per acre principal and interest payment on machinery debt. For owned land, the land charge should be replaced with your per acre real estate tax and principal and interest payment on land debt.

Direct and counter-cyclical payments under the Farm Bill are omitted from the budgets because those payments are tied to historic farm program base acres and payment yields, not to current crop selection or production. Direct payments for this region are \$6.50 per acre when averaged over all crop acreage. Counter-cyclical payments, which occur if the national average price of program crops are below a certain level, are not expected with the price levels used in the budgets.

Primary Assumptions:

Crops are planted on dryland recrop ground. Costs of moving crop to local market/storage are included.

The budgets for the South West, North West, South Central and North Central regions typically represent production systems where soil disturbance only occurs at seeding.

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 2002-2008, after the low and high yield years are removed. Yields for safflower, yellow mustard, buckwheat, millet, rye and chickpeas are from NDSU extension agronomists and industry sources.

Fertilizer: Cost of fertilizer applied, based on soil test, to meet yield goal of 130% of market yield. N fertilizer can be reduced if previous crop was soybean, dry bean, field peas or lentil.

Soil test - recrop:

Nitrogen - 35 lb

Phosphorus - 9 ppm

Potassium - 328 ppm

Fertilizer prices:

Nitrogen - .34/lb Phosphorus - .32/lb Potassium - .46/lb

Seed Prices:

Spring Wheat 8.40/bu
Durum 8.25/bu
Barley 6.60/bu

Corn grain RR/Bt 2.56/thou.kern.
Corn grain RR 2.15/thou.kern.
Soybean RR .285/thou.kern.

Dry Beans .84/lb

Oil Sunflower 1.17/thou.kern. Conf. Sunflower 2.05/thou.kern.

Canola 8.00/lb Flax 12.50/bu Field Peas 10.50/bu Oats 4.25/bu Mustard .95/lb Buckwheat .50/lb Millet .22/lb Winter Wheat 7.50/bu Rye 5.20/bu

Fuel prices:

Diesel 2.50/gal Gas 2.70/gal

Lubrication charge: 15% of fuel cost

Crop Insurance: Coverage levels are 70% on all insurable crops. MPCI estimates are used, except for RA-HPO on all wheat, soybeans and canola.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 5.25% interest for 6 month period.

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, \$2 per acre is assumed for general farm utilities, farm publications, meetings, dues, income tax preparation, legal fees, etc.

Land charge = average cash rent.

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)

Spring Wheat

Durum

		Your		Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	31		30	
Market Price	5.49		6.26*	
MARKET INCOME	170.19		187.80	
DIRECT COSTS				
-Seed	12.60		12.38	
-Herbicides	18.90		18.90	
-Fungicides**	5.50		5.50	
-Insecticides***	0.00		0.00	
-Fertilizer	28.39		27.09	
-Crop Insurance	9.10		9.80	
-Fuel & Lubrication	9.74		9.70	
-Repairs	12.68		12.66	
-Drying	0.00		0.00	
-Miscellaneous	6.00		6.00	
-Operating Interest	2.70		2.68	
	=======	=========	=======	========
SUM OF LISTED DIRECT COSTS	105.61		104.70	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.75		4.74	
-Machinery Depreciation	14.33		14.29	
-Machinery Investment	8.26		8.24	
-Land Charge	34.90		34.90	
SUM OF LISTED INDIRECT COSTS	62.23	========	====== 62.17	========
SUM OF ALL LISTED COSTS	167.84		166.88	
RETURN TO LABOR & MANAGEMENT	2.35		20.92	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	3.41		3.49	
-Indirect Costs	2.01		2.07	
-Total Costs	5.41		5.56	

Wheat notes:

^{*}Durum price is for milling quality. There is risk of lower quality and lower price.

^{**}Includes seed treatment (\$1.50-\$2) and early season foliar fungicide (\$3-\$4.50). Late season fungicide, often not warranted in this region, would cost \$4-\$14, plus application. Trials consistantly show yield response of 5-10% with early season fungicide, IF wheat planted into residue, and 15-20% with late application IF weather favors disease development.

^{***}Cereal grain aphid insecticide would cost about \$6 per acre plus application.

Malting Barley Corn Grain

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	50		76	
Market Price	3.49*		3.41	
Market Free	0.10		3	
MARKET INCOME	174.50		259.16	
DIRECT COSTS				
-Seed	9.90		56.99*	
-Herbicides	17.30		14.00	
-Fungicides	1.50		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	28.22		38.02	
-Crop Insurance	4.40		18.90	
-Fuel & Lubrication	11.67		14.63	
-Repairs	13.98		14.85	
-Drying	0.00		15.20	
-Miscellaneous	6.00		6.00	
-Operating Interest	2.44		4.69	
	======	=======================================	=======	=========
SUM OF LISTED DIRECT COSTS	95.41		183.28	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	5.37	- <u></u> -	6.31	
-Machinery Depreciation	16.56		21.79	
-Machinery Investment	9.77		12.29	
-Land Charge	34.90		34.90	
OUNT OF LIGHTED INDIDEOT COOTS	=======	========	=======	=========
SUM OF LISTED INDIRECT COSTS	66.60		75.30	
SUM OF ALL LISTED COSTS	162.01		258.58	
RETURN TO LABOR & MANAGEMENT	12.49		0.58	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	ì.91		2.41	
-Indirect Costs	1.33		0.99	
-Total Costs	3.24		3.40	

Barley notes:

Corn notes:

^{*}Use \$2.84 estimate for feed barley price.

^{*}RR/Bt corn is planted on 80 percent of acres and RR corn without Bt Trait is on 20 percent of acres for corn borer refuge. Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

Soybeans

Drybeans*

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	23		1270	
Market Price	8.63		0.26	
MARKET INCOME	198.49		330.20	
DIRECT COSTS				
-Seed	49.87*		42.00	
-Herbicides	14.00		35.50**	
-Fungicides	0.00		0.00	
-Insecticides	8.00**		0.00	
-Fertilizer	2.77		22.83	
-Crop Insurance	17.00		23.30	
-Fuel & Lubrication	9.75		14.14	
-Repairs	12.98		15.65	
-Drying	0.00		0.00	
-Miscellaneous	6.00		4.00	
-Operating Interest	3.16		4.13	
	======	========	=======	
SUM OF LISTED DIRECT COSTS	123.53		161.55	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.73		5.57	
-Machinery Depreciation	14.90		19.78	
-Machinery Investment	8.44		11.27	
-Land Charge	34.90		34.90	
	======	=========	=======	========
SUM OF LISTED INDIRECT COSTS	62.98		71.52	
SUM OF ALL LISTED COSTS	186.51		233.07	
RETURN TO LABOR & MANAGEMENT	11.98		97.13	
LISTED COSTS PER BUDGET UNIT	(bu):		(lb):	
-Direct Costs	5.37		0.13	
-Indirect Costs	2.74		0.06	
-Total Costs	8.11		0.18	

Soybean notes:

Drybean notes:

^{*}Roundup (glyphosate) resistant soybeans.

^{**}Soybean aphid and/or spider mite insecticide.

^{*}Acreage limitations exist under the farm bill. The general rule is drybean acres can not be planted on base acres. If farm or producer has drybean history, drybean can be planted on base acres but government payments on those acres will be forfeited.

^{**}Includes dessicant prior to straight cutting.

Oil Sunflower

Confectionery Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1270		1230	
Market Price	0.154		0.232	
MARKET INCOME	195.58		285.36	
DIRECT COSTS				
-Seed	25.74*		36.90*	
-Herbicides	27.00		27.00	
-Fungicides	0.00		0.00	
-Insecticides	6.00**		12.00**	
-Fertilizer	21.40		20.35	
-Crop Insurance	12.30		17.00	
-Fuel & Lubrication	11.40		11.36	
-Repairs	12.30		12.28	
-Drying	2.54		2.46	
-Miscellaneous	12.00		18.00	
-Operating Interest	3.43		4.13	
	=======	=========	=======	========
SUM OF LISTED DIRECT COSTS	134.11		161.48	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	5.21		5.19	
-Machinery Depreciation	15.98		15.94	
-Machinery Investment	9.54		9.52	
-Land Charge	34.90		34.90	
	======	=========	======	=========
SUM OF LISTED INDIRECT COSTS	65.63		65.55	
SUM OF ALL LISTED COSTS	199.74		227.03	
RETURN TO LABOR & MANAGEMENT	(4.16)		58.33	
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.11		0.13	
-Indirect Costs	0.05		0.05	
-Total Costs	0.16		0.18	

Oil Sunflower notes:

Confectionery Sunflower notes:

^{*}Cost includes seed treatment for control of wireworm and flea beetle.

^{**}One spraying for head feeding insects (red seed weevil, lygus bug and banded moths). Custom application cost of \$6 is under "Miscellaneous." Insecticide treatment for cutworms would cost about \$5 plus application (usually tank mixed with herbicide).

^{*}Cost includes seed treatment for control of wireworm and flea beetle.

^{**}Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$6 per application. Each custom application cost of \$6 is under "Miscellaneous." Insecticide treatment for cutworms would cost about \$5 plus application (usually tank mixed with herbicide).

Canola

Flax

	Your			Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	1270		16	
Market Price	0.168		8.50	
MARKET INCOME	213.36		136.00	
DIRECT COSTS				
-Seed	40.00*		8.75	
-Herbicides	14.00		21.50	
-Fungicides	0.00**		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	38.15		12.73	
-Crop Insurance	11.60		6.70	
-Fuel & Lubrication	10.19		10.42	
-Repairs	12.98		13.41	
-Drying	0.00		0.00	
-Miscellaneous	6.00		1.50	
-Operating Interest	3.49		1.97	
	=======	=========	=======	========
SUM OF LISTED DIRECT COSTS	136.41	·	76.98	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.83		4.91	
-Machinery Depreciation	15.21		15.46	
-Machinery Investment	8.73		9.23	
-Land Charge	34.90		34.90	
SUM OF LISTED INDIRECT COSTS	63.67	========	====== 64.50	=========
SUM OF ALL LISTED COSTS	200.08		141.48	
RETURN TO LABOR & MANAGEMENT	13.28		(5.48)	
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.11		4.81	
-Indirect Costs	0.05		4.03	
-Total Costs	0.16		8.84	- <u></u> -

Canola notes:

^{*}Cost includes insecticide seed treatment for flea beetles, \$6.
**Fungicide for white mold would cost about \$18 plus application.

Field Peas

Oats

	Your			Your	
	Per Acre	Figures	Per Acre	Figures	
Market Yield	32		54		
Market Price	6.00*		2.16		
MARKET INCOME	192.00		116.64		
DIRECT COSTS					
-Seed	31.50		8.50		
-Herbicides	25.50		7.50		
-Fungicides	0.00		0.00		
-Insecticides	0.00		0.00		
-Fertilizer	5.75		25.31		
-Crop Insurance	6.00		7.90		
-Fuel & Lubrication	11.03		11.82		
-Repairs	14.27		14.05		
-Drying	0.00		0.00		
-Miscellaneous	7.00		6.00		
-Operating Interest	2.65		2.13		
, ,	=======		=======		
SUM OF LISTED DIRECT COSTS	103.71		83.20		
INDIRECT (FIXED) COSTS					
-Misc. Overhead	5.04		5.42		
-Machinery Depreciation	16.74		16.68		
-Machinery Investment	9.21		9.83		
-Land Charge	34.90		34.90		
Land Charge	=======		=======		
SUM OF LISTED INDIRECT COSTS	65.89		66.84		
SUM OF ALL LISTED COSTS	169.60		150.04		
RETURN TO LABOR & MANAGEMENT	22.40		(33.40)		
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):		
-Direct Costs	3.24		1.54		
-Indirect Costs	2.06		1.24		
-Total Costs	5.30		2.78		
10.0. 000.0	0.00	·	2.70		

Field Pea notes:

^{*}Food quality price. Use \$3.25 price estimate for feed quality peas.

Yellow Mustard

Buckwheat

		Your		Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	900		900	
Market Price	0.233		0.192	
MARKET INCOME	209.70		172.80	
DIRECT COSTS				
-Seed	11.40		25.00	
-Herbicides	15.00		13.50	
-Fungicides	0.00		0.00	
-Insecticides	0.00	·	0.00	
-Fertilizer	20.02	·	10.80	
-Crop Insurance	0.00	·	8.70	
-Fuel & Lubrication	10.42		10.06	
-Repairs	13.41		12.92	
-Drying	0.00		0.00	
-Miscellaneous	6.00		1.50	
-Operating Interest	2.00		2.17	
-	======	=========	=======	========
SUM OF LISTED DIRECT COSTS	78.26		84.65	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	4.91		4.78	
-Machinery Depreciation	15.47		15.08	
-Machinery Investment	9.23		8.68	
-Land Charge	34.90		34.90	
SUM OF LISTED INDIRECT COSTS	64.51		====== 63.44	
SUM OF ALL LISTED COSTS	142.76		148.08	
30M OF ALL LISTED COSTS	142.70		146.06	
RETURN TO LABOR & MANAGEMENT	66.94		24.72	
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.09		0.09	- <u></u>
-Indirect Costs	0.07		0.07	
-Total Costs	0.16		0.16	

notes:

Millet WinterWheat

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1500		43*	
Market Price	0.065		4.86	
MARKET INCOME	97.50		208.98	
DIRECT COSTS				
-Seed	5.00		7.50	
-Herbicides	6.00		15.40	
-Fungicides	0.00		9.00	
-Insecticides	0.00		0.00	
-Fertilizer	15.80		43.99	
-Crop Insurance	0.00		9.10	
-Fuel & Lubrication	10.94	-	9.75	
-Repairs	13.64		12.39	
-Drying	0.00		0.00	
-Miscellaneous	6.00		6.00	
-Operating Interest	1.51		2.97	
	======	========	=======================================	========
SUM OF LISTED DIRECT COSTS	58.88		116.09	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	5.10		4.76	
-Machinery Depreciation	15.91		14.11	
-Machinery Investment	9.45		7.93	
-Land Charge	34.90		34.90	
SUM OF LISTED INDIRECT COSTS	65.36		======================================	
SUM OF ALL LISTED COSTS	124.25		177.78	
RETURN TO LABOR & MANAGEMENT	(26.75)		31.20	
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.04		2.70	
-Indirect Costs	0.04		1.43	
-Total Costs	0.08		4.13	
13141 33013	5.00		7.10	

Winter Wheat notes:

^{*}Yield is per harvested acre, 2002-2008 acreage abandonment averaged 14%.

Rye

	Per Acre	Your Figures
Market Yield Market Price	40 3.59	
MARKET INCOME	143.60	
DIRECT COSTS -Seed -Herbicides -Fungicides -Insecticides -Fertilizer -Crop Insurance -Fuel & Lubrication -Repairs -Drying -Miscellaneous	6.24 3.50 0.00 0.00 40.09 5.80 9.77 12.27 0.00 6.00	
-Operating Interest SUM OF LISTED DIRECT COSTS	2.20 ====== 85.86	
INDIRECT (FIXED) COSTS -Misc. Overhead -Machinery Depreciation -Machinery Investment -Land Charge	4.77 14.17 8.08 34.90	
SUM OF LISTED INDIRECT COSTS	61.92	
SUM OF ALL LISTED COSTS	147.78	
RETURN TO LABOR & MANAGEMENT	(4.18)	
LISTED COSTS PER BUDGET UNIT -Direct Costs -Indirect Costs -Total Costs	(bu): 2.15 1.55 3.69	

notes:

2010 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
2WD 100HP Tractor	60300	400hr	20	19447	5.11 /hr	4.49 /hr	6.14 /hr	
2WD 160HP Tractor	102600	500hr	15	30365	9.63 /hr	5.98 /hr	10.45 /hr	
4WD 330HP Tractor	178000	500hr	15	52675	16.71 /hr	10.38 /hr	10.36 /hr	
SP Combine (base unit)	225000	250hr	12	55965	56.34 /hr	25.29 /hr	36.52 /hr	
Tandem Truck (used)	33000	150hr	15	10500	10.00 /hr	6.53 /hr	6.33 /hr	
Semi & Trailer (used)	37000	150hr	10	10600	17.60 /hr	7.14 /hr	8.00 /hr	
Pick-up Truck	21900	300hr	10	4500	5.80 /hr	1.98 /hr	2.93 /hr	
Swather 25 ft	20500	1000ac	20	4855	0.78 /ac	0.57 /ac	0.36 /ac	12.1
Sprayer 90 ft	32500	5000ac	10	14714	0.30 /ac	0.21 /ac	0.42 /ac	42.5
Heavy Harrow 70 ft	26000	2000ac	20	15164	0.27 /ac	0.46 /ac	0.29 /ac	39.7
Air Seeder 40 ft	140000	2200ac	10	65991	2.80 /ac	2.10 /ac	4.84 /ac	17.0
Planter 12-30	56100	800ac	20	15879	1.99 /ac	1.79 /ac	2.64 /ac	10.6
Corn head	41000	600ac	20	3860	3.09 /ac	1.68 /ac	0.95 /ac	6.8
Grain head w/pu	13100	800ac	15	2716	0.87 /ac	0.44 /ac	0.25 /ac	8.5
Grain str. cut 30 ft	21800	2000ac	8	8791	0.81 /ac	0.34 /ac	0.34 /ac	10.2
Head w/sunf pans 30 ft	26200	600ac	20	2680	1.96 /ac	1.08 /ac	0.41 /ac	10.2
Soybeans str. cut 30 ft	32300	1000ac	20	2963	1.46 /ac	0.79 /ac	0.50 /ac	10.2
Rock picker	18700	50hr	20	5976	0.42 /ac	0.37 /ac	0.28 /ac	29.1
Grain auger	7800	50hr	20	590	7.21 /hr	3.78 /hr	4.00 /hr	

Example Sequence of Operations

Field operations sequence for spring wheat and durum.

OP. NO.	DESCRIPTION	(FEET) WIDTH	(MPH) SPEED	(AC/HR) Fld Cap	(\$/AC) FUEL & LUBE	(\$/AC) EST. REPAIRS
1	Pick Rocks				0.43	0.49
2	Spray (burn-dowr	ո) 90	6.0	42.5	0.30	0.56
3	Plant	40	5.0	17.0	2.46	5.46
4	Spray	90	6.0	42.5	0.30	0.56
5	Combine	30	4.0	10.2	2.86	3.92
6	Heavy Harrow	70	5.5	39.7	0.51	0.55
	Trucks*				1.13	0.52
	Grain auger (pto)				0.17	0.08
	Pickup truck alloc	cation			1.56	0.53
		Total			9.72	12.68

^{*} Truck costs will vary between crops.

For more information on this and other topics, see: www.ag.ndsu.edu

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