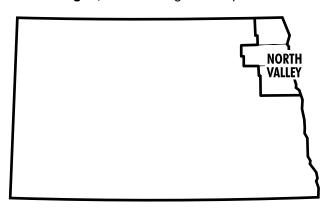


Projected 2012 Crop Budgets North Valley North Dakota

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The 2012 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 2012 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 \$11.75 per acre when averaged over all crop acreage. Counter-cylclical 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.

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 2004-2010, 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 - 30 lb

Phosphorus - 11 ppm

Potassium - 280 ppm

Fertilizer prices:

Nitrogen - .58/lb Phosphorus - .58/lb Potassium - .52/lb

Seed Prices:

Spring Wheat 12.75/bu Durum 14.00/bu Barley 12.00/bu

Corn grain RR/Bt 2.70/thou.kern.
Corn grain RR 2.37/thou.kern.
Soybean RR 345/thou.kern.

Dry Beans .92/lb

Oil Sunflower 1.35/thou.kern. Conf. Sunflower 2.30/thou.kern.

Canola 9.10/lb
Flax 18.00/bu
Field Peas 13.50/bu
Oats 5.75/bu
Mustard 1.60/lb
Winter Wheat 10.50/bu

Fuel prices:

Diesel 3.20/gal Gas 3.40/gal

Lubrication charge: 15% of fuel cost

Crop Insurance: Coverage levels are 70% on all insurable crops. Yield Protection or APH insurance estimates are used, except for Revenue Protection on all wheat, corn, soybeans, corn, canola and sunflowers.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 4.60% 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, \$3 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

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	50		44	
Market Price	7.48		8.59*	
MARKET INCOME	374.00		377.96	
DIRECT COSTS				
-Seed	25.50		28.00	
-Herbicides**	20.00		20.00	
-Fungicides***	5.50		5.50	
-Insecticides	0.00		0.00	
-Fertilizer	91.97		78.84	
-Crop Insurance	16.00		14.80	
-Fuel & Lubrication	22.27		21.81	
-Repairs	17.08		16.93	
-Drying	0.00		0.00	
-Miscellaneous	6.50		6.50	
-Operating Interest	4.71		4.42	
	======	=========	=======	=========
SUM OF LISTED DIRECT COSTS	209.53		196.81	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.92		6.82	
-Machinery Depreciation	19.45		19.18	
-Machinery Investment	11.51		11.37	
-Land Charge	72.20		72.20	
		========	=======	=========
SUM OF LISTED INDIRECT COSTS	110.09		109.57	
SUM OF ALL LISTED COSTS	319.61		306.38	
RETURN TO LABOR & MANAGEMENT	54.39		71.58	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	à.19		4.47	
-Indirect Costs	2.20		2.49	
-Total Costs	6.39		6.96	

Wheat notes:

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

^{**}Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide, which may not be warranted with good rotations, (\$2-\$4.50). Late season fungicides are often warranted in this region. For fusarium head blight (scab) control, prothioconazole or metconazole containing products are highly recommended when a more susceptable cultivar is grown and/or when conditions are favorable for infection.

^{***}Wheat midge and/or 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	64		114	
Market Price	6.12*		4.86	
MARKET INCOME	391.68		554.04	
DIRECT COSTS				
-Seed	24.00		76.39*	
-Herbicides	17.00		15.00	
-Fungicides**	5.50		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	68.74		108.10	
-Crop Insurance	14.30		33.60	
-Fuel & Lubrication	24.93		32.04	
-Repairs	18.30		20.55	
-Drying	0.00		22.80	
-Miscellaneous	6.50		6.50	
-Operating Interest	4.12		7.24	
	=======	========	=======	=========
SUM OF LISTED DIRECT COSTS	183.39		322.21	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.40		9.09	
-Machinery Depreciation	21.13		28.86	
-Machinery Investment	12.66		16.96	
-Land Charge	72.20		72.20	
-Land Onlinge	=======		=======	
SUM OF LISTED INDIRECT COSTS	113.38		127.11	
SUM OF ALL LISTED COSTS	296.77		449.32	
RETURN TO LABOR & MANAGEMENT	94.91		104.72	
LISTED COSTS PER BUDGET UNIT	(bu):		(bu):	
-Direct Costs	2.87		2.83	
-Indirect Costs	1.77		1.11	
-Total Costs	4.64		3.94	

Barley notes:

Corn notes:

*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.

^{*}On average, about 60% of production is feed quality. Use \$4.09 estimate for feed barley price.

^{**}Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50).

Soybeans

Drybeans*

		Your		Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	30		1440	
Market Price	11.02		0.37	
MARKET INCOME	330.60		532.80	
DIRECT COSTS				
-Seed	60.37*		46.00	
-Herbicides	15.00		40.00	
-Fungicides	0.00		18.00**	
-Insecticides	7.00**		0.00	
-Fertilizer	3.39		46.59	
-Crop Insurance	14.30		32.10	
-Fuel & Lubrication	18.53		24.39	
-Repairs	16.41		17.93	
-Drying	0.00		0.00	
-Miscellaneous	3.50		13.50	
-Operating Interest	3.19		5.49	
, ,	======		=======	=========
SUM OF LISTED DIRECT COSTS	141.69		244.00	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.53		7.64	
-Machinery Depreciation	18.44		22.88	
-Machinery Investment	10.84		14.61	
-Land Charge	72.20		72.20	
	=======	=========	=======	=========
SUM OF LISTED INDIRECT COSTS	108.02		117.33	
SUM OF ALL LISTED COSTS	249.71		361.33	
RETURN TO LABOR & MANAGEMENT	80.89		171.47	
LISTED COSTS PER BUDGET UNIT	(bu):		(lb):	
-Direct Costs	4.72		0.17	
-Indirect Costs	3.60		0.08	
-Total Costs	8.32		0.25	

Soybean notes:

Drybean notes:

^{*}RR2 (glyphosate) resistant soybeans. Insectide and fungicide seed treatment would cost about \$11 per acre.

^{**}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.

^{**}Fungicide for white mold. A second treatment may be necessary.

Oil Sunflower

Confectionery Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1340		1140	
Market Price	0.234		0.351	
MARKET INCOME	313.56		400.14	
DIRECT COSTS				
-Seed	32.40*		46.00*	
-Herbicides	24.70		26.70	
-Fungicides	0.00**		0.00**	
-Insecticides	7.00***		14.00***	
-Fertilizer	41.71		32.88	
-Crop Insurance	20.00		23.80	
-Fuel & Lubrication	21.90		21.42	
-Repairs	15.03		14.88	
-Drying	2.68		2.28	
-Miscellaneous	13.50		20.50	
-Operating Interest	4.12		4.66	
1 3	=======		=======	
SUM OF LISTED DIRECT COSTS	183.04		207.11	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.12		7.01	
-Machinery Depreciation	20.43		20.14	
-Machinery Investment	12.41		12.26	
-Land Charge	72.20		72.20	
	======	=======================================	=======	==========
SUM OF LISTED INDIRECT COSTS	112.16		111.61	-
SUM OF ALL LISTED COSTS	295.19		318.72	
RETURN TO LABOR & MANAGEMENT	18.37		81.42	
LISTED COSTS PER BUDGET UNIT	(lb):		(lb):	
-Direct Costs	0.14		0.18	
-Indirect Costs	0.08		0.10	
-Total Costs	0.22		0.28	

Oil Sunflower notes:

Confectionery Sunflower notes:

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

^{**}Fungicide for rust would cost \$4 plus application.

^{***}One spraying for head feeding insects (red seed weevil, lygus bug and banded moths). Custom application cost of \$7 is under "Miscellaneous."

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

^{**}Fungicide for rust would cost \$4 plus application.

^{***}Two sprayings for head feeding insects (red seed weevil, lygus bug and banded moths) at about \$7 per application. Each custom application cost of \$7 is under "Miscellaneous."

Canola

Flax

		Your		Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	1590		23	
Market Price	0.207		13.28	
MARKET INCOME	329.13		305.44	
DIRECT COSTS				
-Seed	45.50*		14.40	
-Herbicides	18.00		18.50	
-Fungicides	0.00**		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	85.31		42.26	
-Crop Insurance	18.00		13.20	
-Fuel & Lubrication	19.45		21.89	
-Repairs	16.09		17.72	
-Drying	0.00		0.00	
-Miscellaneous	6.50		1.50	
-Operating Interest	4.80		2.98	
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SUM OF LISTED DIRECT COSTS	213.66		132.44	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.53		6.86	
-Machinery Depreciation	18.37		19.56	
-Machinery Investment	10.85		12.16	
	72.20		72.20	
-Land Charge	_		_	
SUM OF LISTED INDIRECT COSTS	107.95	========	====== 110.79	========
SUM OF ALL LISTED COSTS	321.60		243.23	
RETURN TO LABOR & MANAGEMENT	7.53		62.21	
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.13		5.76	
-Indirect Costs	0.07		4.82	
-Total Costs	0.20		10.58	

Canola notes:

^{*}Cost includes insecticide seed treatment for flea beetles.

^{**}Fungicide for white mold would cost about \$18 plus application.

Field Peas

Oats

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	36		65	
Market Price	8.10*		3.19	
MARKET INCOME	291.60		207.35	
DIRECT COSTS				
-Seed	40.50		11.50	
-Herbicides	27.00		4.75	
-Fungicides	1.50		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	9.93		57.78	
-Crop Insurance	14.40		12.10	
-Fuel & Lubrication	21.40		25.01	
-Repairs	18.12		18.33	
-Drying	0.00		0.00	
-Miscellaneous	6.00		6.50	
-Operating Interest	3.19		3.13	
, -	=======	=========	=======	========
SUM OF LISTED DIRECT COSTS	142.05		139.09	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.93		7.41	
-Machinery Depreciation	20.60		21.17	
-Machinery Investment	11.99		12.68	
-Land Charge	72.20		72.20	
_aa oa.go	=======		=======	
SUM OF LISTED INDIRECT COSTS	111.73		113.47	
SUM OF ALL LISTED COSTS	253.78		252.56	
RETURN TO LABOR & MANAGEMENT	37.82		(45.21)	
LISTED COSTS PER BUDGET UNIT -Direct Costs -Indirect Costs -Total Costs	(bu): 3.95 3.10 7.05		(bu): 2.14 1.75 3.89	

Field Pea notes:

^{*}Food quality price. Feed quality peas would have a lower price.

Yellow Mustard

Winter Wheat

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1000		49*	
Market Price	0.353		6.25	
MARKET INCOME	353.00		306.25	
DIRECT COSTS				
-Seed	19.20		12.60	
-Herbicides	12.50		19.80	
-Fungicides	0.00		9.00	
-Insecticides	6.00*		0.00	
-Fertilizer	42.17		89.78	
-Crop Insurance	0.00**		16.00	
-Fuel & Lubrication	18.04		20.30	
-Repairs	15.66		16.47	
-Drying	0.00		0.00	
-Miscellaneous	1.50		6.50	
-Operating Interest	2.65		4.38	
1 3	======		======	
SUM OF LISTED DIRECT COSTS	117.71		194.83	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.29		6.72	
-Machinery Depreciation	17.59		18.77	
-Machinery Investment	10.42		10.89	
-Land Charge	72.20		72.20	
g	=======		=======	
SUM OF LISTED INDIRECT COSTS	106.51		108.59	
SUM OF ALL LISTED COSTS	224.22		303.42	
RETURN TO LABOR & MANAGEMENT	128.78		2.83	
LISTED COSTS PER BUDGET UNIT	(lb):		(bu):	
-Direct Costs	0.12		3.98	
-Indirect Costs	0.11		2.22	
-Total Costs	0.22		6.19	
				

Yellow Mustard notes:

Winter Wheat notes:

*Yield is per harvested acre, 2003-2009 acreage abandonment averaged 6%.

^{*}Insecticide seed treatment for flea beetles.

^{**}Crop insurance is not available in this region.

2012 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
2WD 100HP Tractor	64600	400hr	20	20830	5.47 /hr	4.81 /hr	6.58 /hr	
2WD 160HP Tractor	109900	500hr	15	32513	10.32 /hr	6.41 /hr	11.19 /hr	
4WD 330HP Tractor	190700	500hr	15	56409	17.91 /hr	11.12 /hr	11.09 /hr	
SP Combine (base unit)	241000	250hr	12	59947	60.35 /hr	27.09 /hr	39.12 /hr	
Tandem Truck (used)	34800	150hr	15	11100	10.53 /hr	6.89 /hr	6.93 /hr	
Semi & Trailer (used)	39100	150hr	10	11200	18.60 /hr	7.55 /hr	8.53 /hr	
Pick-up Truck	27500	300hr	10	5400	7.37 /hr	2.47 /hr	3.13 /hr	
Swather 25 ft	22000	1000ac	20	5198	0.84 /ac	0.61 /ac	0.38 /ac	12.1
Sprayer 90 ft	34800	5000ac	10	15792	0.32 /ac	0.23 /ac	0.45 /ac	42.5
Chisel Plow 38 ft	36100	3000ac	15	21108	0.33 /ac	0.43 /ac	0.80 /ac	19.6
Field Cultivator 48 ft	42000	3000ac	15	24535	0.39 /ac	0.50 /ac	0.74 /ac	24.7
Tandem Disk 28 ft	30800	800ac	20	8810	1.37 /ac	1.11 /ac	0.87 /ac	12.2
Heavy Harrow 70 ft	27800	2000ac	20	16234	0.29 /ac	0.50 /ac	0.31 /ac	39.7
Row-crop cultivator 12-30	13300	800ac	15	7351	0.50 /ac	0.58 /ac	0.50 /ac	11.6
Air Seeder 40 ft	162200	2400ac	12	76449	2.97 /ac	2.23 /ac	5.61 /ac	17.0
Planter 12-30	51100	800ac	20	17011	2.13 /ac	1.92 /ac	2.82 /ac	10.6
Bean cutter	12000	400ac	20	3398	1.08 /ac	0.87 /ac	0.65 /ac	6.5
Corn head	43900	600ac	20	4137	3.31 /ac	1.80 /ac	1.02 /ac	6.8
Grain head w/pu	14000	1200ac	10	4965	0.75 /ac	0.36 /ac	0.27 /ac	8.5
Grain str. cut 30 ft	23400	1000ac	15	4737	1.24 /ac	0.63 /ac	0.36 /ac	10.2
Head w/sunf pans 30 ft	28100	600ac	20	2871	2.10 /ac	1.16 /ac	0.43 /ac	10.2
Soybeans str. cut 30 ft	34600	1000ac	20	3174	1.57 /ac	0.85 /ac	0.53 /ac	10.2
Head w/drybean pickups	28100	400ac	20	2990	3.14 /ac	1.75 /ac	0.50 /ac	8.9
Grain Cart	28700	100hr	20	4900	11.90 /hr	7.56 /hr	7.20 /hr	
Grain auger	8700	50hr	20	630	8.07 /hr	4.20 /hr	4.30 /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	Field Cultivator	48	5.0	24.7	\$ 2.30	\$ 1.19
2	Plant	40	5.0	17.0	3.35	6.27
3	Spray (130%)	90	6.0	42.5	0.53	0.78
4	Combine	30	4.0	10.2	4.39	4.20
5	Chisel Plow	38	5.0	19.6	2.90	1.37
6	Chisel Plow	38	5.0	19.6	2.90	1.37
	Grain Cart*				1.31	0.34
	Trucks*				2.50	0.91
	Grain auger (pto))			0.23	0.09
	Pickup truck alloc	cation			1.86	0.56
		Total			22.27	17.08

^{*} Truck costs will vary between crops.

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