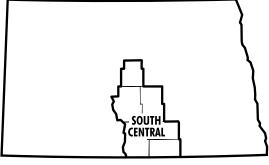


December 2014

Projected 2015 Crop Budgets



South Central North Dakota

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Note: This region consists of six counties: Burleigh, Emmons, Kidder, Logan, McIntosh and Sheridan.

The 2015 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 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

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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 years. (Crop prices, direct costs, and the land charge are best estimates for only the 2015 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.

The 2014 Farm Bill initiated the Price Loss Coverage (PLC) and Agricultural Risk Coverage (ARC) support programs, and elimanted the direct and countercyclical payment programs and the ACRE program. **PLC and ARC payments** have been omitted from the budgets because those payments, if any, are tied to historic farm program base acres, not to current crop selection or production.

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 2007-2013, 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 - .46/lb Phosphorus - .45/lb Potassium - .38/lb

Seed Prices:

Spring Wheat 11.00/bu
Durum 18.50/bu
Barley 9.00/bu
Corn grain RR/Bt 2.70/thou.kern.
Soybean RR2 .35/thou.kern.

Dry Beans .88/lb

Oil Sunflower 1.50/thou.kern. Conf. Sunflower 2.50/thou.kern.

Canola 10.25/lb Flax 18.00/bu Field Peas 12.75/bu Oats 6.00/bu Mustard 1.70/lb Buckwheat .62/lb .30/lb Millet Winter Wheat 10.50/bu 9.50/bu Rye

Fuel prices:

Diesel 2.65/gal Gas 2.60/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, barley, soybeans, corn, canola, sunflowers and dry beans.

Miscellaneous: soil testing, machinery rent and custom work.

Operating Interest: Direct costs charged 4.25% 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, \$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

		Your		Your
	Per Acre	Figures	Per Acre	Figures
Market Yield	38		39	
Market Price	6.02		7.02*	
MARKET INCOME	228.76		273.78	
DIRECT COSTS				
-Seed	17.60	·	33.30	
-Herbicides	25.20	·	25.20	
-Fungicides**	5.50	·	5.50	
-Insecticides***	0.00	·	0.00	
-Fertilizer	51.11		52.88	
-Crop Insurance	13.00	·	15.40	
-Fuel & Lubrication	12.43		12.49	
-Repairs	16.49		16.52	
-Drying	0.00		0.00	
-Miscellaneous	7.50		7.50	
-Operating Interest	3.16		3.59	
	=======	=========	=======	========
SUM OF LISTED DIRECT COSTS	151.99		172.38	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.78		6.80	
-Machinery Depreciation	19.17		19.22	
-Machinery Investment	10.85		10.88	
-Land Charge	60.00		60.00	
SUM OF LISTED INDIRECT COSTS	96.81	========	====== 96.90	========
SUM OF LISTED INDIRECT COSTS	90.01		96.90	
SUM OF ALL LISTED COSTS	248.80		269.28	
RETURN TO LABOR & MANAGEMENT	(20.04)		4.50	
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	4.00	·	4.42	
-Indirect Costs	2.55	·	2.48	
-Total Costs	6.55		6.90	

Wheat notes:

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

^{**}Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50). Although late season fungicides are often not warranted in this region, prothioconazole or metconazole containing products (about \$12) are highly recommended for fusarium head blight (scab) control when conditions are favorable for infection.

^{***}Cereal grain aphid insecticide would cost about \$6.

Malting Barley Corn Grain

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	60		97	
Market Price	4.69*		3.50	
MARKET INCOME	281.40		339.50	
DIRECT COSTS				
-Seed	14.40		76.95*	
-Herbicides	23.70		21.00	
-Fungicides	5.50**		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	49.48		70.76	
-Crop Insurance	16.50		33.00	
-Fuel & Lubrication	13.80		19.36	
-Repairs	17.08		20.97	
-Drying	0.00		20.37	
-Miscellaneous	7.50		7.50	
-Operating Interest	3.14		5.74	
	======	========	=======	========
SUM OF LISTED DIRECT COSTS	151.10		275.64	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.17		9.09	
-Machinery Depreciation	20.24		30.35	
-Machinery Investment	11.42		16.79	
-Land Charge	60.00		60.00	
-Land Onlarge	=======		======	
SUM OF LISTED INDIRECT COSTS	98.83		116.23	
SUM OF ALL LISTED COSTS	249.94		391.87	
COM OF ALL LIGHED COOLS	210.01	-	001.07	
RETURN TO LABOR & MANAGEMENT	31.46		(52.37)	
LISTED COSTS PER BUDGET UNIT	(bu)		(bu)	
-Direct Costs	2.52		2.84	
-Indirect Costs	1.65		1.20	
-Total Costs	4.17		4.04	
	••••			

Barley notes:

Corn notes:

*RR/Bt corn. Cost includes insecticide seed treatment for wireworm, rootworm, white grub and suppression of cutworm.

^{*}Use \$2.90 estimate for feed barley price.

^{**}Includes seed treatment (\$1.50-\$2.00) and early season foliar fungicide (\$2-\$4.50). Late season fungicides, prothioconazole or metconazole containing products, for fusarium head blight (scab) control are recommended when conditions are favorable for infection.

Soybeans

Drybeans

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	28		1450	
Market Price	8.95		0.25	
MARKET INCOME	250.60		362.50	
DIRECT COSTS				
-Seed	69.25*		44.00	
-Herbicides	20.00		45.80*	
-Fungicides	0.00		0.00**	
-Insecticides	7.00**		0.00	
-Fertilizer	4.75		36.25	
-Crop Insurance	15.20		20.10	
-Fuel & Lubrication	12.25		16.72	
-Repairs	16.86	- <u></u> -	21.27	
-Drying	0.00	·	0.00	
-Miscellaneous	4.75		12.75	
-Operating Interest	3.19		4.18	
	=======	========	=======	=========
SUM OF LISTED DIRECT COSTS	153.25		201.08	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.78		7.89	
-Machinery Depreciation	20.08		26.46	
-Machinery Investment	11.16		15.00	
-Land Charge	60.00		60.00	
SUM OF LISTED INDIRECT COSTS	98.01		109.35	
SUM OF ALL LISTED COSTS	251.27		310.43	
RETURN TO LABOR & MANAGEMENT	(0.67)		52.07	
LISTED COSTS PER BUDGET UNIT	(bu)		(lb)	
-Direct Costs	5.47		0.14	
-Indirect Costs	3.50		0.08	
-Total Costs	8.97		0.21	

Soybean notes:

Drybean notes:

^{*}RR2 (glyphosate) resistant soybeans. The cost includes \$8 for inoculant and fungicide treatment in addition to seed expense.

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

^{*}Includes dessicant prior to straight cutting.

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

Fungicide for rust at \$2-\$4.50 plus application maybe necessary.

Oil Sunflower

Confectionery Sunflower

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	1480		1450	
Market Price	0.179		0.251	
Market Filce	0.179		0.231	
MARKET INCOME	264.92		363.95	
DIRECT COSTS				
-Seed	33.00*		45.00*	
-Herbicides	33.20		35.30	
-Fungicides	0.00**		0.00**	
-Insecticides	7.00***		14.00***	
-Fertilizer	36.72		35.65	
-Crop Insurance	12.40		18.20	
-Fuel & Lubrication	14.17		14.11	
-Repairs	17.31		17.29	
-Drying	4.44		4.35	
-Miscellaneous	15.50		23.50	
-Operating Interest	3.69	= <u></u> -	4.41	
	======	=========	=======	=========
SUM OF LISTED DIRECT COSTS	177.44		211.81	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.43		7.42	
-Machinery Depreciation	21.73		21.69	
-Machinery Investment	12.75		12.72	
-Land Charge	60.00		60.00	
Ğ	=======	=========	=======	=========
SUM OF LISTED INDIRECT COSTS	101.91		101.83	
SUM OF ALL LISTED COSTS	279.35		313.63	
RETURN TO LABOR & MANAGEMENT	(14.43)		50.32	
LISTED COSTS PER BUDGET UNIT	(lb)		(lb)	
-Direct Costs	0.12		0.15	
-Indirect Costs	0.07		0.07	
-Total Costs	0.19		0.22	

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 \$8 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.

^{**}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 \$8 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	1460		17	
Market Price	0.169		11.57	
MARKET INCOME	246.74		196.69	
DIRECT COSTS				
-Seed	51.25*		14.40	
-Herbicides	20.70		28.50	
-Fungicides	0.00**		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	61.89		19.50	
-Crop Insurance	10.30		6.90	
-Fuel & Lubrication	12.23		11.34	
-Repairs	16.23		16.31	
-Drying	0.00		0.00	
-Miscellaneous	7.50		1.50	
-Operating Interest	3.83		2.09	
operating micross	=======		=======	=========
SUM OF LISTED DIRECT COSTS	183.93		100.55	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.75		6.48	
-Machinery Depreciation	19.09		18.47	
-Machinery Investment	11.09		10.55	
-Land Charge	60.00		60.00	
-Land Charge	======		======	
SUM OF LISTED INDIRECT COSTS	96.93		95.51	
SUM OF ALL LISTED COSTS	280.85		196.06	
RETURN TO LABOR & MANAGEMENT	(34.11)		0.63	
LISTED COSTS PER BUDGET UNIT	(lb)		(bu)	
-Direct Costs	0.13		5.91	
-Indirect Costs	0.07		5.62	
-Total Costs	0.19		11.53	-
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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	35		60	
Market Price	6.30*		2.46	
MARKET INCOME	220.50		147.60	
DIRECT COSTS				
-Seed	38.25**		12.00	
-Herbicides	31.75		9.80	
-Fungicides	1.50		0.00	
-Insecticides	0.00***		0.00	
-Fertilizer	8.85		40.20	
-Crop Insurance	6.90		10.00	
-Fuel & Lubrication	13.87		14.83	
-Repairs	18.42		17.88	
-Drying	0.00		0.00	
-Miscellaneous	9.25		7.50	
-Operating Interest	2.74		2.38	
1 3	=======		=======	
SUM OF LISTED DIRECT COSTS	131.53		114.60	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.10		7.56	
-Machinery Depreciation	22.08		21.38	
-Machinery Investment	12.01		12.72	
-Land Charge	60.00		60.00	
Lana Onargo	=======		======	
SUM OF LISTED INDIRECT COSTS	101.19		101.66	
SUM OF ALL LISTED COSTS	232.72		216.25	
RETURN TO LABOR & MANAGEMENT	(12.22)		(68.65)	
LISTED COSTS PER BUDGET UNIT -Direct Costs -Indirect Costs -Total Costs	(bu) 3.76 2.89 6.65		(bu) 1.91 1.69 3.60	

Field Pea notes:

^{*}Yellow pea food quality price. Use \$7.80 for green pea food quality and about \$4.00 for feed quality peas.

^{**}Yellow pea seed cost, use \$47 per acre for green peas.

^{**}Insecticide treatment for cutworms and/or pea aphids would cost about \$5 per acre plus application.

Yellow Mustard Buckwheat

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield	850		900	
Market Price	0.293		0.243	
MARKET INCOME	249.05		218.70	
DIRECT COSTS				
-Seed	20.40		31.00	
-Herbicides	20.10		18.10	
-Fungicides	0.00		0.00	
-Insecticides	0.00		0.00	
-Fertilizer	24.99		14.85	
-Crop Insurance	0.00*		10.50*	
-Fuel & Lubrication	12.05		11.74	
-Repairs	16.67		16.02	
-Drying	0.00		0.00	
-Miscellaneous	7.50		1.50	
-Operating Interest	2.16		2.20	
	=======	========	=======	=========
SUM OF LISTED DIRECT COSTS	103.88		105.92	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	6.77		6.62	
-Machinery Depreciation	19.20		18.70	
-Machinery Investment	11.56		10.89	
-Land Charge	60.00		60.00	
SUM OF LISTED INDIRECT COSTS	97.54		====== 96.21	
SUM OF ALL LISTED COSTS	201.41		202.13	
RETURN TO LABOR & MANAGEMENT	47.64		16.57	
LISTED COSTS PER BUDGET UNIT	(lb)		(lb)	
-Direct Costs	0.12		0.12	
-Indirect Costs	0.11		0.11	
-Total Costs	0.24	-	0.22	
	 .			

Yellow Mustard notes:

Buckwheat notes:

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

^{*}Crop insurance is not available in some counties of the region.

Millet Winter Wheat

	Per Acre	Your Figures	Per Acre	Your Figures
Market Yield Market Price	1500 0.075	·	46* 5.53	
Market Price	0.075		5.53	
MARKET INCOME	112.50	- <u></u> -	254.38	
DIRECT COSTS				
-Seed	7.50		11.55	
-Herbicides	9.70		22.40	
-Fungicides	0.00		9.00	
-Insecticides	0.00		0.00	
-Fertilizer	21.61		65.26	
-Crop Insurance	0.00		13.80	
-Fuel & Lubrication	12.97		12.28	
-Repairs	17.07		15.94	
-Drying	0.00		0.00	
-Miscellaneous	7.50		7.50	
-Operating Interest	1.62		3.35	
· · · · ·	======	=========	=======	========
SUM OF LISTED DIRECT COSTS	77.98	<u></u>	161.09	
INDIRECT (FIXED) COSTS				
-Misc. Overhead	7.03		6.70	
-Machinery Depreciation	19.92		18.68	
-Machinery Investment	11.95		10.30	
-Land Charge	60.00		60.00	
SUM OF LISTED INDIRECT COSTS	98.90		95.68	
SUM OF ALL LISTED COSTS	176.87		256.77	
RETURN TO LABOR & MANAGEMENT	(64.37)		(2.39)	
LISTED COSTS PER BUDGET UNIT	(lb)		(bu)	
-Direct Costs	0.05		3.50	
-Indirect Costs	0.07	-	2.08	
-Total Costs	0.12		5.58	
			-	

Winter Wheat notes:

^{*}Yield is per harvested acre. There is some risk of acreage abandonment in spring.

Rye

	Per Acre	Your Figures
		J
Market Yield	42	
Market Price	6.24	
MARKET INCOME	262.08	
DIRECT COSTS		
-Seed	11.40	
-Herbicides	6.50	
-Fungicides	0.00	
-Insecticides	0.00	
-Fertilizer	58.19	
-Crop Insurance	11.50	
-Fuel & Lubrication	12.24	
-Repairs	15.81	
-Drying	0.00	
-Miscellaneous	7.50	
-Operating Interest	2.62	
- p	=======	
SUM OF LISTED DIRECT COSTS	125.75	
INDIRECT (FIXED) COSTS		
-Misc. Overhead	6.71	
-Machinery Depreciation	18.73	
-Machinery Investment	10.48	
-Land Charge	60.00	
.	=======	
SUM OF LISTED INDIRECT COSTS	95.91	
SUM OF ALL LISTED COSTS	221.66	
RETURN TO LABOR & MANAGEMENT	40.42	
LISTED COSTS PER BUDGET UNIT -Direct Costs -Indirect Costs -Total Costs	(bu) 2.99 2.28 5.28	

2015 Machinery List

Machine	Purch. Price	Annual Use	Years to trade	Trade in	Deprec.	Invest.	Repairs	Ac/hr
FWA 140HP Tractor	128100	400 hr	20	40090	11.00 /hr	9.46 /hr	12.66 /hr	
FWA 180HP Tractor	173600	500 hr	15	49843	16.50 /hr	10.05 /hr	17.15 /hr	
4WD 340HP Tractor	228700	500 hr	15	65685	21.74 /hr	13.25 /hr	12.92 /hr	
SP Combine (base unit)	277800	250 hr	12	67068	70.24 /hr	31.04 /hr	43.77 /hr	
Tandem Truck (used)	37700	150 hr	15	12000	11.42 /hr	7.46 /hr	7.73 /hr	
Semi & Trailer (used)	42300	150 hr	10	12100	20.13 /hr	8.16 /hr	9.33 /hr	
Pick-up Truck	29800	300 hr	10	5900	7.97 /hr	2.68 /hr	3.50 /hr	
Swather 30 ft	30200	1000 ac	20	7152	1.15 /ac	0.84 /ac	0.49 /ac	13.1
Sprayer 90 ft	38200	5000 ac	10	19024	0.38 /ac	0.26 /ac	0.49 /ac	42.5
Heavy Harrow 70 ft	30600	2000 ac	20	17837	0.32 /ac	0.55 /ac	0.34 /ac	39.7
Air Seeder 40 ft	178100	2400 ac	10	91039	3.62 /ac	2.52 /ac	6.16 /ac	17.0
Planter 16-30	111100	1400 ac	15	46192	3.09 /ac	2.53 /ac	4.61 /ac	14.2
Corn head	57800	800 ac	12	16565	4.29 /ac	2.09 /ac	1.34 /ac	6.8
Grain head w/pu	15400	800 ac	20	1511	0.87 /ac	0.47 /ac	0.24 /ac	10.2
Grain str. cut 30 ft	25600	2000 ac	8	10336	0.95 /ac	0.40 /ac	0.40 /ac	10.2
Head w/sunf pans 30 ft	30800	600 ac	20	3148	2.30 /ac	1.27 /ac	0.48 /ac	10.2
Flex head 30 ft	38000	1000 ac	20	3486	1.72 /ac	0.93 /ac	0.59 /ac	10.2
Rock picker	22000	50 hr	20	7013	0.50 /ac	0.44 /ac	0.33 /ac	29.1
Grain Cart	30000	100 hr	20	5100	12.45 /hr	7.90 /hr	7.50 /hr	
Grain auger	12500	50 hr	20	725	11.78 /hr	5.95 /hr	4.70 /hr	

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