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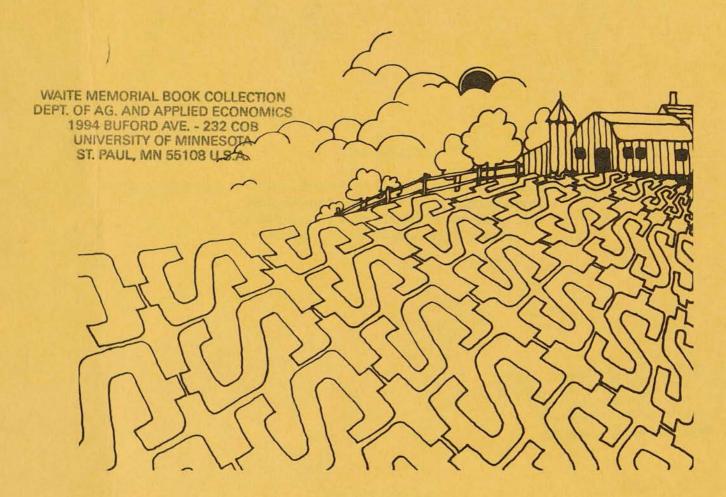
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Comparative Crop Budgets

FOR PLANNING A CROPPING PROGRAM

in South Dakota



finpack

planning for tomorrow...today

COMPUTERIZED FARM FINANCIAL PLANNING AND ANALYSIS

Comparative Crop Budgets

FOR PLANNING A CROPPING PROGRAM

in South Dakota

Revised 1989

by Curtis Hoyt, Lawrence Madsen, Ralph Matz, and LeRoy Lamp, Area Farm Management Specialists with assistance from Steven Gylling, Microcomputer Specialist, Burton Pflueger, Farm Financial Management Specialist, and Ron Thaden, Extension Agent

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NOTE TO READERS

EMC 864 is designed as both an analytical and eductional tool to help you better manage the money you spend on crop production. The 1989 edition of EMC 864 updates the October 1985 printing with a new format and additional sections to make it more informative and useful.

EMC 864 will not be released annually. Small adjustments in average or standard prices and input can be incorporated easily. A revision will be printed when conditions change sufficiently to warrant a new publication.

Comparative Crop Budgets

This comparative crop budget guide can be used to plan your yearly cropping program. Price and yield expectations are subject to change depending on your exact location and local markets. Variations in either estimated selling price or estimated grain yield will affect projected returns and break-even prices.

The quantities produced assume timely planting and harvesting. Government crop program price estimates are included but may vary in your county. The production indicated in the budget reflects what a producer should realize using approved Extension practices.

Land values used in the budget reflect typical relationships between land costs and cash rental values and may need to be adjusted for your rental or ownership situation.

Direct costs include the out-of-the-pocket expenses associated with the crop being produced and occur only with the planting and production of that crop. Adjustments to individual farm conditions may be necessary with varying fertility situations, chemical use, and planting practices.

FINPACK Data Bank Information

FINPACK data bank information is included in the results section. It can be used directly in the crop data banks with FINFLO, FINTRAN, or FINLRB projections. Your local Extension agent can help you utilize these computer programs.

Computer Spreadsheet Templates

This comparative crop budget is available on a template to be used with LOTUS 1-2-3 or VP-PLANNER spreadsheet. If you would like to purchase a copy, contact your county Extension agent.

DISCLAIMER

The authors and distributors of this publication assume no liability for the use or misuse of this publication or the decisions that result.

You can use this publication to compare the profitability of producing different crops. The figures and calculations are correct for crops grown in each area. The "Other" column can be used for crops, fallow or set-aside costs not listed.

The budgets are based on a number of assumptions about crop production practices. Average cost figures are given for each crop production area. Adjustment values also are included to correct cost differences between different production methods.

Crops

Winter wheat is assumed to be grown on fallow. Fallow operation costs are listed.

Alfalfa hay is assumed to be used as a hay crop for 2.7 to 5 years before being broken up (see "Seed Costs").

Other crops are assumed to be grown following a regular, annual rotation.

If **set-aside** acres are included in the cropping program, additional costs for maintaining the set-aside must be calculated with that crop or in the "Other" column.

Estimated Yields

Yields are based on the five-year average of the most commonly grown crops in the area. If you are an above-average producer, increase the estimates by five to 10 percent. The averages are from the Crop and Livestock Reporting Service and are based on the most recent five-year period data is available. Use your own yield averages if they are available.

Yields are listed in bushels for corn, soybeans, sorghum, and small grains; pounds for sunflowers; and tons for hay. Use different units if you want, such as hundredweights for soybeans.

Estimated Selling Price

This price will vary with local demand and transportation costs. (The listed prices were based on the 1988 expected local market prices.) For crops under government loans, use the loan value instead of the listed price.

Seed Costs

Seed units per acre are listed in 1,000s of kernels for corn; bushels for small grains; and pounds for sunflowers, sorghum, soybeans and alfalfa. The seed cost per unit is the average of the expected range of prices. Include the cost of any seed treatments, like inoculation or fungicide, in the seed cost.

Soybean seeding rate should be about 150,000 seeds per acre (PLS). Different varieties have different seed sizes so do not substitute 60 pounds, or one bushel, here for the 150,000 seeds per acre.

Sorghum should be seeded at a rate of 50,000 seeds per acre in drier areas and up to 100,000 seeds per acre for wetter areas. There are about 16,000 seeds per pound, so a seeding rate of 3.2 to 6.2 pounds per acre should be adequate.

Alfalfa. Because it is a perennial, seeding costs must be averaged out over the stand's life. To determine the seeding cost per year, divide the seeding rate by the number of years the crop is left standing. The average seeding rate is 10 pounds per acre.

Stand life varies from area to area. It is 2.7 years in Area 9; 2.9 in Area 8; 3.0 in Area 1; 4.0 in Areas 2, 3, 6 and 7; and 5 in Areas 4 and 5.

Fertilizer Costs

Costs are listed in pounds per acre and cost per pound for each separate application. If it was applied by a custom operator, include the application cost with the material cost or list as a separate cost, such as Fertilizer Application. The fertilizer units are the average amounts of one ingredient or a combination of ingredients needed to produce the estimated yields. If a soil test recommendation is available, use it instead.

Herbicide Costs

Costs are listed in pounds per acre and cost per pound for each separate application. Include custom operation costs with the material cost or list separately under Herbicide Application. The listed herbicide units and cost estimates are an average of several possible products, not one specific product. Follow university recomendations to determine the actual amount of material needed.

Insecticide Costs

Costs are listed in pounds per acre and cost per pound for one or more applications. Include the application cost with the material cost or list separately under Insecticide Application. The units per acre and cost per unit listed are an average of several possible products, not just one. Follow university recommendations to determine the amount of material needed.

Crop Insurance

Cost is listed in dollars per acre. Crop insurance will vary depending on yield, coverage level, price and the premium coefficient for each area.

Storage

Grain storage costs are listed in dollars per unit. The value given is an estimate of the storage structure's fixed cost. For a crop stored in a round, steel bin for six months, the storage cost per month is estimated at \$0.015 per bushel.

Shrinkage losses and insecticide costs are not included in this value. Expect shrinkage losses of about 0.5 percent of the amount stored, and insecticide costs of \$0.005 to \$0.025 per bushel during storage. The lower insecticide cost is for treating the structure, only before filling. The other cost is for treatments lasting at least 18 to 24 months.

Hay storage costs also are listed in dollars per unit. The given value is the fixed cost of storing large, round bales in a pole-type covered shed. If you do not have covered hay storage available, use the minimum expected loss because of reduced hay quality. Depending how long the hay is stored, quality can deteriorate 10 to 20 percent. Estimate the minimum expected loss by taking a percentage of the gross income from the hay.

Drying

Drying costs are listed as a cost per unit value. This usually equals fuel costs or the custom rate if the drying was done on a custom basis. Operating cost estimates are \$0.007 to \$0.009 per percent moisture removed per bushel. Estimate drying at a total cost of \$0.016 to \$0.024 per percent moisture removed per bushel.

Overhead

The value listed is the amount of general operating costs each specific crop enterprise is allocated. Overhead expense estimates, according to operation size and primary source of income, are listed in EC 744, Management Guide for Planning a Farm or Ranch Business.

Hired Labor

This cost applies if you hire labor or if you consider your own labor a cash cost instead of a fixed cost. The rate per hour should include the actual wage rate plus 15 to 25 percent of the wage rate for the cost of benefits such as social security and insurance. If you list hired labor, adjust the amount in Operator Labor to compensate for it.

Custom Machine Hire

Use this cost value when machine operations are hired out on a custom basis. If the operation is not hired out regularly, adjust the values for Fuel and Lubrication and Machine Repairs to ensure that these values are accurate.

Reduce the **Fuel and Lubrication** cost value by 15 percent of the custom rate for tillage, 6.5 percent for planting, and 7 percent for harvesting.

Reduce the Machine Repairs cost value by 12.5 percent of the custom rate for tillage and 17.5 percent for both planting and harvesting.

Fuel and Lubrication

The listed value is the direct cost of fuel, oil, and grease for all field operations related to producing each crop. The given values are based on conventional tillage practices and other full-use machine operations. The cost of diesel fuel was assumed to be \$0.95 per gallon.

Reduce these values for nontraditional cropping practices. Suggested adjustment values are 28 to 35 percent for reduced- or minimum-till of row crops, 5 to 10 percent for reduced- or minimum-till of small grains, 50 to 60 percent for ridge-till or no-till of row crops, and 15 to 20 percent for no-till of small grains.

EC 744 lists fuel and lubrication cost estimates for separate machine operations that you can use instead of the given values. Make your own estimates by multiplying your fuel use by the actual price per gallon. Add fifteen percent to this cost for oil and grease.

If you used a custom service, lower this cost by 15 percent of the custom rate for tillage, 6.5 percent for planting, and 7.0 percent for harvesting.

Machinery Repairs

Repair cost is the direct cost of fixing any equipment used in producing each crop. The given values are based on conventional tillage and other full-use machine operations. EC 744 also lists repair cost estimates for different machine operations that you can use instead.

Lower the values for nontraditional cropping practices. Suggested adjustments are 30 to 40 percent for reduced-or minimum-till of row crops, 1 to 3 percent for reduced- or minimum-till of small grains, 50 to 55 percent for ridge-till or no-till of row crops, and 8 to 10 percent for ridge-till or no-till of small grains.

If you used a custom service, reduce machine repairs cost by 12.5 percent of the custom rate for tillage and 17.5 percent for both planting and harvesting.

Capital Costs

These costs include the amount of the crop operating loan, the annual interest percentage rate, and the length of time the money is borrowed. These are all direct values based on the producer's actual figures.

Average Fixed Costs

Interest on Machine Investment

This is an annual cost based on purchasing equipment. It is equal to about 10 percent of the average machinery investment. It can be either the actual amount of interest paid or the opportunity cost of not making a different investment. The lender will determine this cost for borrowed money. If you use your own funds, you will have to determine the opportunity cost. Since most producers have a limited amount of capital, the interest rate for machine investment will be between the current market interest rate and the expected return of alternate investments.

Inflation reduces the real cost of investing capital in farm machinery. Adjust the interest rate to correct this by subtracting the expected inflation rate from the current interest rate. This is the interest cost in terms of current dollars.

Average Machinery Investments

The value listed is the average value of crop machinery including tractors and other power units. The value may be a little higher or lower for some crops if special equipment is required. Estimate the average value from a financial statement or use the values listed in EC 744.

The estimate for winter wheat includes an additional investment for fallow operations. The average investment figure for alfalfa hay and set-aside includes special equipment used and a portion of the power source.

Depreciation on Machinery and Equipment

The value listed is the average annual decrease in the equipment's value because of use, age, and new technology. The given values are based on a rate of 8 percent of the purchase price, with a 20 percent salvage value and a 10-year useful life. The purchase price is estimated at 167 percent of the average machinery investment.

Machinery Housing and Insurance

The value listed is an allocated cost equal to about 1.5 percent of the average machinery investment.

Calculate **Housing** costs, even if housing is not actually provided. Machinery becomes less reliable and trade-in values decrease without housing, and these costs must be reflected. Estimate housing costs at 1.0 percent of the average machinery investment.

Insurance is a cost to lower the risk of possible loss because of disaster or destruction. Estimate insurance rates at 0.5 percent of the average machinery investment.

Operator Labor

This is the estimated time required to perform all the machine operations in crop production. It also includes time spent preparing machinery, planning business, keeping records, purchasing supplies, and marketing. Labor requirement estimates for different crops are listed in EC 744.

Reduce these values for nontraditional cropping practices. Suggested adjustments are 25 to 30 percent for reduced- or minimum-till of row crops, 12 to 15 percent for reduced- or minimum-till of small grains, 45 to 55 percent for ridge-till or no-till of row crops, and 22 to 25 percent for no-till of small grains.

Cost per hour should be at least the wage rate that would be paid if labor had to be hired. Include another 15 percent of this cost to cover the cost of benefits such as social security and insurance.

Real Estate Taxes

This value is based on the actual taxes paid. Estimate it by using 1 to 2 percent of the current land value. The averages were calculated at 1.25 percent of current, estimated land-value averages. If the land is rented, leave this value blank.

Land Charges

These are the cash rent paid, a share of the total income if rented on shares, or a percentage of the current land value. A suggested percentage is 7 to 9 percent. The given values are based on results of a May 1986 SDSU land-rental survey of owners and operators in South Dakota (Economics Newsletter No. 242).

COMPARATIVE CROP BUDGETS FOR AREA 1

	Corn	0ats	Barley	S.Wheat	Soybean	Sunflower	Alf.Hay	
INPUT SUMMARY								
RECEIPTS:								
Estimated grain yield (units/ac.)	65	70	45	32	25	1300	2.5	0
Estimated selling price or value (\$/unit) GOVERNMENT PAYMENT:	\$1.89	\$1.85	\$1.90	\$3.75	\$6.50	\$.10	\$50.00	\$.00
Base yield (units/ac.)	60	65	40	27	. 0	0	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.00	\$.00	\$.00	\$.00
I. Total income per acre	\$176.25	\$129.50	\$106.70	\$133.50	\$162.50	\$130.00	\$125.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$13.65	\$7.50	\$5.00	\$7.19	\$7.80	\$7.88	\$9.38	\$.00
Fertilizer (\$/ac.)	\$15.46	\$14.30	\$13.80	\$16.10	\$6.00	\$12.10	\$7.50	\$.00
Fertilizer application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$7.45	\$1.50	\$1.50	\$1.50	\$3.00	\$13.50	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$6.00	\$.00	\$.00	\$.00	\$.00	\$15.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$5.00	\$3.20	\$3.20	\$3.20	\$5.00	\$5.00	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$:09	\$.09	\$.00	\$4.00	\$.00
Storage (\$/ac.)	\$5.85	\$6.30	\$4.05	\$2.88	\$2.25	\$2.93	\$10.00	\$.00
Drying (\$/unit)	\$.13	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$8.45	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$5.50	\$5.00	\$5.00	\$5.00	\$5.50	\$5.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$8.75	\$7.20	\$7.15	\$7.15	\$7.40	\$6.30	\$7.15	\$.00
Machinery repair (\$/ac.)	\$13.10	\$9.65	\$9.60	\$9.50	\$10.40	\$9.90	\$11.20	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR (%)	12.00%	12.00%	12.00%		12.00%			.00%
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$4.89	\$2.89	\$2.62	\$2.78	\$2.52	\$3.69	\$2.63	\$.00
II. Total direct operating costs	\$98.10	\$59.54	\$53.92	\$57.30	\$51.87	\$85.79	\$51.36	\$.00
Income over direct costs (I minus II)	\$78.15	\$69.96	\$52.78	\$76.20	\$110.63	\$44.21	\$73.64	\$.00
Breakeven price per unit (direct costs)	\$1.51	\$.85	\$1.20	\$1.79	\$2.07	\$.07	\$20.54	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$65,000	\$57,800	\$57,800	\$57,800	\$62,500	\$62,500	\$14,500	\$0
Total acres machinery investment used (ac.).	470	470	470	470	470	470	80	0
Interest on machine investment (\$/ac.)	\$13.83	\$12.30	\$12.30	\$12.30	\$13.30	\$13.30	\$18.13	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$18.48	\$16.43	\$16.43	\$16.43	\$17.77	\$17.77	\$24.22	\$.00
Machinery housing and insurance (\$/ac.)	\$2.07	\$1.84	\$1.84	\$1.84	\$1.99	\$1.99	\$2.72	\$.00
Operator Labor (hrs./ac.)	3.00	2.20	2.10	2.10	2.00	1.90	3.10	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$15.00	\$11.00	\$10.50	\$10.50				
Real estate taxes (\$/ac.)	\$4.25	\$4.25			\$10.00	\$9.50	\$15.50	\$.00
Near estate taxes (4/ac./	₩4. 2 3	#4.CJ	\$4.25	\$4.25	\$4.25	\$4.25	\$4.00	\$.00
Total fixed costs	\$53.63	\$45.82	\$45.32	\$45.32	\$47.31	\$46.81	\$64.56	\$.00

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Labor hours.....

	RESULTS SECTION	Corn	Oats	Barley	S.Wheat	Soybean	Sunflower	Alf.Hay	
Production	costs (\$/unit)	\$2.33	\$1.51	\$2.21	\$3.21	\$3.97	\$. 10	\$46.37	\$.00
ri oddc cion	COSCS (4) (III C)	42.33	Φ1. 3 1	₽2.21	\$3.21	43.9 7	3.10	\$40.37	\$.00
Production	costs (\$/ac., excluding land)	\$151.73	\$105.36	\$99.24	\$102.62	\$99.18	\$132.60	\$115.92	\$.00
Land charge	es (\$/ac.)	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$32.50	\$30.00	\$.00
	Total cost (\$/ac.)	\$184.23	\$137.86	\$131.74	\$135.12	\$131.68	\$165.10	\$145.92	\$.00
÷	Breakeven price (\$/unit) (to recover total cost)	\$2.83	\$1.97	\$2.93	\$4.22	\$5.27	\$.13	\$58.37	\$.00
	Breakeven yield (units/ac.) (at selling price)	97.5	74.5	69.3	36.0	20.3	1651.0	2.9	.0
Income over	r all costs (\$/unit)	(\$.12)	(\$.12)	(\$.56)	(\$.05)	\$1.23	(\$.03)	(\$8.37)	\$.00
	FINPACK DATA BANK INF	ORMATION							
	Crop code	Corn	0ats	Barley	S.Wheat	Soybean	Sunflower	Alf. Hay	
	Yield per acre	65	70	45	32	25	1300	2.5	0
	Price per unit		1.85	1.90	3.75	6.50	.10	50.00	.00
	Seed expense	13.65	7.50	5.00	7.19	7.80	7.88	9.38	.00
	Fertilizer	17.46	14.30	13.80	16.10	6.00	12.10	7.50	.00
	Chemicals	15.45	3.50	3.50	3.50	5.00	32.50	.00	.00
	Crop Insurance		3.20	3.20	3.20	5.00	5.00	.00	.00
	Drying fuel		.00	.00	.00	.00	.00	.00	.00
	Irrigation energy.		.00	.00	.00	.00	.00	.00	.00
	Custom hire		.00	.00	.00	.00	.00	.00	.00
	-•	00	00			00	00		•
	Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00
	Direct crop labor. Interest	4.89	2.89	2.62	.00 2.78	2.52		.00 2.63	.00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 1 (Clark, Codington, Day, Deuel, Grant, Hamlin, Marshall, and Roberts counties).

2.20

2.10

2.10

2.00

1.90

3.10

.00

3.00

	Corn	Oats	Barley	S.Wheat	W.Wheat	Sunflower	Alf.Hay	
INPUT SUMMARY								
RECEIPTS:								
Estimated grain yield (units/ac.)	55	60	42	26	35	1200	2.1	0
Estimated selling price or value (\$/unit)	\$1.89	\$1.85	\$1.90	\$3.75	\$3.60	\$.10	\$50.00	\$.00
GOVERNMENT PAYMENT: Base yield (units/ac.)	50	55	35	21	30	0	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.50	\$.00	\$.00	\$.00
beriefley payment (4) diffey	Ψ.υ,	4.00	7.50					
I. Total income per acre	\$148.45	\$111.00	\$98.35	\$108.00	\$141.00	\$120.00	\$105.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$11.00	\$7.50	\$5.00	\$7.19	\$7.81	\$7.88	\$7.00	\$.00
Fertilizer (\$/ac.)	\$12.21	\$11.00	\$11.50	\$12.65	\$6.60	\$11.00	\$6.25	\$.00
Fertilizer application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$7.45	\$1.50	\$1.50	\$1.50	\$3.00	\$13.50	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$6.00	\$.00	\$.00	\$.00	\$.00	\$15.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$4.00	\$2.50	\$2.50	\$2.50	\$2.75	\$4.00	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.00	\$4.00	\$.00
Storage (\$/ac.)	\$4.95	\$5.40	\$3.78	\$2.34	\$3.15	\$2.70	\$8.40	\$.00
Drying (\$/unit)	\$.13	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$7.15	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$5.00	\$5.00	\$5.00	\$5.00	\$8.00	\$5.00	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$8.90	\$7.00	\$7.10	\$6.75	\$8.20	\$7.20	\$5.20	\$.00
Machinery repair (\$/ac.)	\$12.10	\$8.40	\$8.00	\$7.90	\$9.00	\$9.90	\$10.20	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$4.24	\$2.57	\$2.37	\$2.44	\$2.58	\$3.61	\$2.19	\$.00
II. Total direct operating costs	\$85.00	\$52.87	\$48.75	\$50.27	\$53.09	\$83.78	\$42.74	\$.00
Income over direct costs (I minus II)	\$63.45	\$58.13	\$49.60	\$57. <i>7</i> 3	\$87.91	\$36.22	\$62.26	\$.00
Breakeven price per unit (direct costs)	\$1.55	\$.88	\$1.16	\$1.93	\$1.52	\$.07	\$20.35	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$91,250	\$82,125	\$75,900	\$74,500	\$95,000	\$85,800	\$14,500	\$0
Total acres machinery investment used (ac.).	730	730	730	730	730	730	175	0
Interest on machine investment (\$/ac.)	\$12.50	\$11.25	\$10.40	\$10.21	\$13.01	\$11.75	\$8.29	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$16.70	\$15.03	\$13.89	\$13.63	\$17.39	\$15.70	\$11.07	\$.00
Machinery housing and insurance (\$/ac.)	\$1.88	\$1.69	\$1.56	\$1.53	\$1.95	\$1.76	\$1.24	\$.00
Operator Labor (hrs./ac.)	2.50	1.70	1.60	1.50	1.75	1.90	2.25	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$12.50	\$8.50	\$8.00	\$7.50	\$8.75	\$9.50	\$11.25	\$.00
Real estate taxes (\$/ac.)	\$3.50	\$3.50	\$3.50	\$3.50	\$7.00	\$3.50	\$3.00	\$.00
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Total fixed costs	\$47.08	\$39.97	\$37.35	\$36.37	\$48.10	\$42.22	\$34.85	\$.00

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Labor hours.....

2.50

1.70

1.60

	RESULTS SECTION								
		Corn	Oats	Barley			Sunflower	Alf.Hay	
						(fallow)			
Production	costs (\$/unit)	\$2.40	\$1.55	\$2.05	\$3.33	\$2.89	\$.11	\$36.95	\$.00
Production	costs (\$/ac., excluding land)	\$132.07	\$92.83	\$86.09	\$86.64	\$101.19	\$126.00	\$77.59	\$.00
Land charge	es (\$/ac.)	\$22.00	\$22.00	\$22.00	\$22.00	\$44.00	\$22.00	\$18.00	\$.00
	Total cost (\$/ac.)	\$154.07	\$114.83	\$108.09	\$108.64	\$145.19	\$148.00	\$95.59	\$.00
	Breakeven price (\$/unit) (to recover total cost)	\$2.80	\$1.91	\$2.57	\$4.18	\$4.15	\$.12	\$45.52	\$.00
	Breakeven yield (units/ac.) (at selling price)	81.5	62.1	56.9	29.0	40.3	1480.0	1.9	.0
Income over	r all costs (\$/unit)	(\$.10)	(\$.06)	(\$.23)	(\$.02)	(\$.12)	(\$.02)	\$4.48	\$.00
	FINPACK DATA BANK INF	ORMATION							
	Crop code	Corn	0ats	Barley	S.Wheat	t W.Wheat	Sunflower	Alf. Hay	
	Yield per acre	55	60	42	26	35	1200	2.1	0
	Price per unit	1.89	1.85	1.90	3.75	3.60	.10	50.00	.00
	Seed expense	11.00	7.50	5.00	7.19	7.81	7.88	7.00	.00
	Fertilizer	12.21	11.00	11.50	12.65	6.60	11.00	6.25	.00
	Chemicals	15.45	3.50	3.50	3.50	5.00	32.50	.00	.00
	Crop Insurance	4.00	2.50	2.50	2.50	2.75	4.00	.00	.00
	Drying fuel		.00	.00	.00			.00	.00
	Irrigation energy.		.00	.00	.00		.00	.00	.00
	Custom hire		.00	.00	.00			.00	.00
	Direct Crop Labor.		.00	.00	.00		.00	.00	.00
	Interest		2.57	2.37	2.44	2.58	3.61	2.19	.00
			4	4 40	4 50	4 75	4 00	2 25	00

1.50

1.75 1.90 2.25 .00

	Corn	Oats	Barley	S.Wheat	W.Wheat	Sunflower	Alf.Hay	
INPUT SUMMARY			•					
RECEIPTS:								
Estimated grain yield (units/ac.)	45	50	40	26	33	1000	1.7	0
Estimated selling price or value (\$/unit)	\$1.89	\$1.85	\$1.90	\$3.75	\$3.60	\$.10	\$50.00	\$.00
GOVERNMENT PAYMENT:					20	_	•	•
Base yield (units/ac.)	40	45	35	20	28	0	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.50	\$.00	\$.00	\$.00
I. Total income per acre	\$120.65	\$92.50	\$94.55	\$107.50	\$132.80	\$100.00	\$85.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$9.98	\$7.50	\$5.00	\$7.19	\$7.81	\$7.88	\$7.00	\$.00
Fertilizer (\$/ac.)	\$11.10	\$11.00	\$10.35	\$12.65	\$6.60	\$9.60	\$5.00	\$.00
Fertilizer application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$5.95	\$1.50	\$1.50	\$1.50	\$3.00	\$13.50	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$15.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$4.00	\$2.25	\$2.25	\$2.50	\$2.75	\$4.00	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.00	\$4.00	\$.00
Storage (\$/ac.)	\$4.05	\$4.50	\$3.60	\$2.34	\$2.97	\$2.25	\$6.80	\$.00
Drying (\$/unit)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$5.00	\$5.00	\$5.00	\$5.00	\$8.00	\$5.00	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00			
Fuel and lubrication (\$/ac.)						\$.00	\$.00 */ /5	\$.00
	\$8.70	\$7.15	\$6.85	\$6.75	\$8.05	\$7.20	\$4.45	\$.00
Machinery repair (\$/ac.)	\$11.50 7	\$8.10	\$7.95	\$7.85	\$8.80	\$9.80	\$8.50	\$.00
Crop operating loan borrowed (months) Interest APR(%)		12.00	12.00	43.00	42.00	6	9	0
• • •	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$3.16	\$2.50	\$2.27	\$2.44	\$2.55	\$3.52	\$1.90	\$.00
II. Total direct operating costs	\$63.45	\$51.50	\$46.77	\$50.21	\$52.53	\$81.75	\$37.15	\$.00
Income over direct costs (I minus II)	\$57.20	\$41.00	\$47.78	\$57.29	\$80.27	\$18.25	\$47.85	\$.00
Breakeven price per unit (direct costs)	\$1.41	\$1.03	\$1.17	\$1.93	\$1.59	\$.08	\$21.86	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)\$	100,900	\$86,750	\$88,500	\$90,250	\$108,400	\$92,000	\$16,400	\$0
Total acres machinery investment used (ac.).	885	885	885	885	885	885	275	0
Interest on machine investment (\$/ac.)	\$11.40	\$9.80	\$10.00	\$10.20	\$12.25	\$10.40	\$5.96	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$15.23	\$13.10	\$13.36	\$13.62	\$16.36	\$13.89	\$7.97	\$.00
Machinery housing and insurance (\$/ac.)	\$1.71	\$1.47	\$1.50	\$1.53	\$1.84	\$13.69	\$.89	\$.00
Operator Labor (hrs./ac.)	2.05	1.50	1.50	1.50	1.75	1.75	2.00	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00			
Operator Labor cost (\$/ac.)	\$10.25	\$7.50	\$7.50	\$7.50		\$5.00	\$5.00	\$.00
Real estate taxes (\$/ac.)	\$3.00	\$7.50			\$8.75	\$8.75	\$10.00	\$.00 • 00
real estate taxes (#/dC.)	Φ3.UU	33. 00	\$3.00	\$3.00	\$6.00	\$3.00	\$2.60	\$.00
Total fixed costs	\$41.59	\$34.87	\$35.36	\$35.85	\$45.20	\$37.59	\$27.43	\$.00

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Labor hours.....

	RESULTS SECTION								
		Corn	Oats	Barley		W.Wheat (fallow)	Sunflower	Alf.Hay	MAN TO THE PARTY OF THE PARTY O
Production	costs (\$/unit)	\$2.33	\$1.73	\$2.05	\$3.31	\$2.96	\$.12	\$37.99	\$.00
Production	costs (\$/ac., excluding land)	\$105.04	\$86.37	\$82.13	\$86.07	\$97.73	\$119.34	\$64.58	\$.00
Land charge	s (\$/ac.)	\$18.00	\$18.00	\$18.00	\$18.00	\$36.00	\$18.00	\$16.00	\$.00
	Total cost (\$/ac.)	\$123.04	\$104.37	\$100.13	\$104.07	\$133.73	\$137.34	\$80.58	\$.00
3)	Breakeven price (\$/unit) (to recover total cost)	\$2.73	\$2.09	\$2.50	\$4.00	\$4.05	\$.14	\$47.40	\$.00
•	Breakeven yield (units/ac.) (at selling price)	65.1	56.4	52.7	27.8	37.1	1373.4	1.6	.0
Income over	all costs (\$/unit)	(\$.05)	(\$.24)	(\$.14)	\$.13	(\$.03)	(\$.04)	\$2.60	\$.00
	FINPACK DATA BANK INF	ORMATION							
	Crop code	Corn	Oats	Barley	S.Wheat	W.Wheat	Sunflower	Alf. Hay	
	Yield per acre	45	50	40	26	33	1000	1.7	0
	Price per unit	1.89	1.85	1.90	3.75	3.60	.10	50.00	.00
	Seed expense	9.98	7.50	5.00	7.19	7.81	7.88	7.00	.00
	Fertilizer	11.10	11.00	10.35	12.65	6.60	9.60	5.00	.00
	Chemicals	5.95	3.50	3.50	3.50	5.00	32.50	.00	.00
	Crop Insurance	4.00	2.25	2.25	2.50	2.75	4.00	.00	.00
	Drying fuel	.00	.00	.00	.00	.00	.00	.00	.00
	Irrigation energy.	.00	.00	.00	.00	.00	.00	.00	.00
	Custom hire	.00	.00	.00	.00	.00	.00	.00	.00
	Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00
	Interest	3.16	2.50	2.27	2.44	2.55	3.52	1.90	.00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 3 (Campbell, Hughes, Hyde, Potter, Sully, Walworth, and the western 1/3 of Edmunds, Faulk, and McPherson counties).

1.50

1.50

1.50

1.75

1.75

2.00

.00

2.05

	Corn	Oats	Barley	S.Wheat	W.Wheat	Sunflower	Alf.Hay	
INPUT SUMMARY								
RECEIPTS:								
Estimated grain yield (units/ac.)	40	50	40	22	35	900	1.5	0
Estimated selling price or value (\$/unit)	\$1.95	\$1.80	\$1.90	\$3.75	\$3.60	\$.10	\$50.00	\$.00
GOVERNMENT PAYMENT								
Base yield (units/ac.)	35	45	35	18	30	0	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.50	\$.00	\$.00	\$.00
I. Total income per acre	\$109.15	\$90.00	\$94.55	\$91.50	\$141.00	\$90.00	\$75.00	\$.00
·								
DIRECT COSTS:								
Seed (\$/ac.)	\$7.02	\$6.00	\$4.00	\$5.75	\$7.81	\$4.50	\$5.60	\$.00
Fertilizer (\$/ac.)	\$11.10	\$12.10	\$10.35	\$12.65	\$6.60	\$9.60	\$5.00	\$.00
Fertilizer application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$5.95	\$1.50	\$1.50	\$1.50	\$1.50	\$13.50	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$15.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.25	\$2.25	\$2.25	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.00	\$4.00	\$.00
Storage (\$/ac.)	\$3.60	\$4.50	\$3.60	\$1.98	\$3.15	\$2.03	\$6.00	\$.00
Drying (\$/unit)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$4.50	\$4.50	\$4.50	\$4.50	\$8.00	\$4.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$7.20	\$6.10	\$6.10	\$6.10	\$8.20	\$5.85	\$2.20	\$.00
Machinery repair (\$/ac.)	\$7.15	\$6.90	\$6.90	\$6.50	\$8.60	\$6.60	\$4.10	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$2.44	\$2.33	\$2.09	\$2.20	\$2.45	\$3.05	\$1.43	\$.00
II. Total direct operating costs	\$48.96	\$47.93	\$43.04	\$45.43	\$50.57	\$70.88	\$27.83	\$.00
Income over direct costs (I minus II)	\$60.19	\$42.07	\$51.51	\$46.07	\$90.43	\$19.12	\$47.17	\$.00
Breakeven price per unit (direct costs)	\$1.22	\$.96	\$1.08	\$2.07	\$1.44	\$.08	\$18.55	\$.00
						• -		
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$68,320	\$60,390	\$63,440	\$63,440	\$79,300	\$59,475	\$16,400	\$0
Total acres machinery investment used (ac.).	610	610	610	610	610	610	200	0
Interest on machine investment (\$/ac.)	\$11.20	\$9.90	\$10.40	\$10.40	\$13.00	\$9.75	\$8.20	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$14.96	\$13.23	\$13.89	\$13.89	\$17.37	\$13.03	\$10.96	\$.00
Machinery housing and insurance (\$/ac.)	\$1.68	\$1.49	\$1.56	\$1.56	\$1.95	\$1.46	\$1.23	\$.00
Operator Labor (hrs./ac.)	2.00	1.50	1.50	1.50	2.20	1.70	1.90	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$10.00	\$7.50	\$7.50	\$7.50	\$11.00	\$8.50	\$9.50	\$.00
Real estate taxes (\$/ac.)	\$1.90	\$1.90	\$1.90	\$1.90	\$3.80	\$1.90	\$1.50	\$.00
Total fixed costs	\$39.74	\$34.01	\$35.25	\$35.25	\$47.12	\$34.64	\$31.39	\$.00

RES	ш.	TS.	SE	CT	TON

Labor hours.....

RESULTS SECTION								
	Corn	0ats	Barley	S.Wheat	W.Wheat	Sunflower	Alf.Hay	
					(fallow)			
Production costs (\$/unit)	\$2.22	\$1.64	\$1.96	\$3.67	\$2.79	\$.12	\$39.47	\$.00
Production costs (\$/ac., excluding land)	\$88.71	\$81.94	\$78.29	\$80.69	\$97.68	\$105.52	\$59.21	\$.00
Land charges (\$/ac.)	\$11.00	\$11.00	\$11.00	\$11.00	\$22.00	\$11.00	\$10.20	\$.00
Total cost (\$/ac.)	\$99.71	\$92.94	\$89.29	\$91.69	\$119.68	\$116.52	\$69.41	\$.00
Breakeven price (\$/unit) (to recover total cost)	\$2.49	\$1.86	\$2.23	\$4.17	\$3.42	\$.13	\$46.27	\$.00
Breakeven yield (units/ac.) (at selling price)	51.1	51.6	47.0	24.5	33.2	1165.2	1.4	.0
Income over all costs (\$/unit)	\$.24	(\$.06)	\$.13	(\$.01)	\$.61	(\$.03)	\$3.73	\$.00
FINPACK DATA BANK INFO	RMATION							
Crop code	Corn	Oats	Barley	S.Wheat	: W.Wheat	Sunflower	Alf. Hay	
Yield per acre	40	50	40	22	35	900	1.5	0
Price per unit	1.95	1.80	1.90	3.75	3.60	.10	50.00	.00
Seed expense	7.02	6.00	4.00	5.75	7.81	4.50	5.60	.00
Fertilizer	11.10	12.10	10.35	12.65	6.60	9.60	5.00	.00
Chemicals	5.95	3.50	3.50	3.50	3.50	32.50	.00	.00
Crop Insurance	.00	2.00	2.00	2.25	2.25	2.25	.00	.00
Drying fuel	.00	.00	.00	.00	.00	.00	.00	.00
Irrigation energy.	.00	.00	.00	.00	.00		.00	.00
Custom hire	.00	.00	.00	.00	.00	.00	.00	.00
Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00
Interest	2.44	2.33	2.09	2.20	2.45	3.05	1.43	.00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 4 (Butte, Corson, Dewey, Harding, Perkins, Ziebach and the northern 2/3 of Meade counties).

1.50

1.50

1.50

2.20

1.70

1.90

.00

2.00

	Corn	Oats	Barley	S.Wheat	W.Wheat	Grain	Alf.Hay	
INPUT SUMMARY			•				·	
RECEIPTS:								
Estimated grain yield (units/ac.)	40	50	40	25	40	45	1.5	0
Estimated selling price or value (\$/unit) GOVERNMENT PAYMENT:	\$1.95	\$1.80	\$1.90	\$3.75	\$3.60	\$1.80	\$50.00	\$.00
Base yield (units/ac.)	35	45	35	20	35	40	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.50	\$.90	\$.00	\$.00
I. Total income per acre	\$109.15	\$90.00	\$94.55	\$103.75	\$161.50	\$117.00	\$75.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$7.02	\$6.00	\$4.00	\$5.75	\$7.81	\$4.50	\$5.60	\$.00
Fertilizer (\$/ac.)	\$11.10	\$12.10	\$10.35	\$13.80	\$8.80	\$13.20	\$5.00	\$.00
Fertilizer application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$5.95	\$1.50	\$1.50	\$1.50	\$1.50	\$5.95	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00	\$.00
Insecticide (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$1.20	\$3.00	\$1.35	\$.00
Insecticide application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$2.00	\$.00
Crop insurance (\$/ac.)	\$.00	\$.00	\$2.25	\$2.25	\$3.00	\$2.50	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.09	\$4.00	\$.00
Storage (\$/ac.)	\$3.60	\$4.50	\$3.60	\$2.25	\$3.60	\$4.05	\$6.00	\$.00
Drying (\$/unit)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$4.50	\$4.50	\$4.50	\$4.50	\$8.00	\$4.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$7.20	\$6.20	\$5.90	\$6.10	\$8.80	\$8.10	\$3.00	\$.00
Machinery repair (\$/ac.)	\$7.15	\$7.00	\$6.70	\$6.90	\$9,40	\$10.85	\$5.15	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$2.44	\$2.23	\$2.08	\$2.30	\$2.76	\$2.64	\$1.71	\$.00
II. Total direct operating costs	\$48.96	\$46.03	\$42.88	\$47.35	\$56.87	\$61.29	\$33.31	\$.00
Income over direct costs (I minus II)	\$60.19	\$43.97	\$51.67	\$56.40	\$104.63	\$55.71	\$41.69	\$.00
Breakeven price per unit (direct costs)	\$1.22	\$.92	\$1.07	\$1.89	\$1.42	\$1.36	\$22.20	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr)	\$68,320	\$52,500	\$55,100	\$55,100	\$70,500	\$59,475	\$18,500	\$0
Total acres machinery investment used (ac.).	530	530	530	530	530	530	200	0
Interest on machine investment (\$/ac.)	\$12.89	\$9.91	\$10.40	\$10.40	\$13.30	\$11.22	\$9.25	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$17.22	\$13.23	\$13.89	\$13.89	\$17.77	\$14.99	\$12.36	\$.00
Machinery housing and insurance (\$/ac.)	\$1.93	\$1.49	\$1.56	\$1.56	\$2.00	\$1.68	\$1.39	\$.00
Operator labor (hrs./ac.)	2.00	1.50	1.40	1.50	1.70	1.70	1.90	.00
Operator labor cost (\$/hr)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator labor cost (\$/ac.)	\$10.00	\$7.50	\$7.00	\$7.50	\$8.50	\$8.50	\$9.50	\$.00
Real estate taxes (\$/ac.)	\$1.60	\$1.60	\$1.60	\$1.60	\$3.20	\$1.60	\$1.60	\$.00
coluit taxes (#/del/11111111111111111111111111111111111	₩1.00	₩1.00	41.00	₽1.UU	ΦJ. 2U	Φ1.OU	⊅1. 00	₽.00
Total fixed costs	\$41.71	\$32.24	\$32.89	\$33.39	\$42.77	\$36.31	\$32.71	\$.00

RESU	2T I	SE	CT	I ON
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	RESULTS SECTION								
		Corn	Oats	Barley	S.Wheat	W.Wheat	Grain	Alf.Hay	
						(fallow)	Sorghum		
Production	costs (\$/unit)	\$2.27	\$1.57	\$1.89	\$3.23	\$2.49	\$2.17	\$44.01	\$.00
Production	costs (\$/ac., excluding land)	\$90.67	\$78.27	\$75.77	\$80.73	\$99.65	\$97.60	\$66.01	\$.00
Land charge	es (\$/ac.)	\$11.00	\$11.00	\$11.00	\$11.00	\$22.00	\$11.00	\$11.00	\$.00
	Total cost (\$/ac.)	\$101.67	\$89.27	\$86.77	\$91.73	\$121.65	\$108.60	\$77.01	\$.00
	Breakeven price (\$/unit) (to recover total cost)	\$2.54	\$1.79	\$2.17	\$3.67	\$3.04	\$2.41	\$51.34	\$.00
И	Breakeven yield (units/ac.) (at selling price)	52.1	49.6	45.7	24.5	33.8	60.3	1.5	.0
Income over	all costs (\$/unit)	\$.19	\$.01	\$.19	\$.48	\$1.00	\$.19	(\$1.34)	\$.00
	FINPACK DATA BANK INF	ORMATION							
	Crop code	Corn	Oats	Barley	S.Wheat	t W.Wheat	Sorghun	n Alf. Hay	
	Yield per acre	40	50	40	25	40	45	1.5	0
	Price per unit	1.95	1.80	1.90	3.75	3.60	1.80	50.00	.00
	Seed expense	7.02	6.00	4.00	5.75	7.81	4.50	5.60	.00
	Fertilizer	11.10	12.10	10.35	13.80	8.80	13.20	5.00	.00
	Chemicals	5.95	3.50	3.50	3.50	4.70	10.95	3.35	.00
	Crop Insurance	.00	.00	2.25	2.25	3.00	2.50	.00	.00
	Drying fuel	.00	.00	.00	.00	.00	.00	.00	.00
	Irrigation energy.	.00	.00	.00	.00	.00	.00	.00	.00
	Custom hire	.00	.00	.00	.00	.00	.00	.00	.00
	Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00
	Interest	2.44	2.23	2.08	2.30	2.76	2.64	1.71	.00
	Labor hours	2.00	1.50	1.40	1.50	1.70	1.70	1.90	.00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 5 (Bennett, Custer, Fall River, Haakon, Jackson, Lawrence, Pennington, the southern 1/3 of Meade and the western 1/2 of Mellette and Todd counties.)

	Corn	Oats	Barley	S.Wheat	W.Wheat	Grain	Alf.Hay	
INPUT SUMMARY								
RECEIPTS:								
Estimated grain yield (units/ac.)	48	50	40	26	40	48	1.75	0
Estimated selling price or value (\$/unit) GOVERNMENT PAYMENT:	\$1.95	\$1.80	\$1.90	\$3.75	\$3.60	\$1.80	\$50.00	\$.00
Base yield (units/ac.)	35	45	35	20	35	40	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.50	\$.90	\$.00	\$.00
I. Total income per acre	\$124.75	\$90.00	\$94.55	\$107.50	\$161.50	\$122.40	\$87.50	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$9.36	\$6.00	\$5.00	\$5.75	\$7.81	\$2.88	\$7.00	\$.00
Fertilizer (\$/ac.)	\$12.21	\$8.80	\$9.20	\$14.95	\$7.70	\$12.10	\$5.00	\$.00
Fertilizer application (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Herbicide (\$/ac.)	\$5.95	\$1.50	\$1.50	\$1.85	\$3.00	\$5.95	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00	\$.00
Insecticide (\$/ac.)	\$9.05	\$.00	\$.00	\$1.20	\$1.20	\$3.00	\$1.35	\$.00
Insecticide application (\$/ac.)	\$.00	\$.00	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00
Crop insurance (\$/ac.)	\$2.50	\$2.25	\$2.25	\$2.25	\$2.50	\$2.50	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$4.09	\$.09	\$.09	\$4.00	\$.00
Storage (\$/ac.)	\$4.32	\$4.50	\$3.60	\$2.34	\$3.60	\$4.32	\$7.00	\$.00
Drying (\$/unit)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$4.50	\$4.50	\$4.50	\$4.50	\$8.00	\$4.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$7.50	\$6.20	\$5.90	\$5.70	\$8.50	\$8.25	\$3.20	\$.00
Machinery repair (\$/ac.)	\$7.70	\$7.00	\$6.70	\$6.70	\$9.10	\$11.00	\$5.25	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$3.31	\$2.18	\$2.07	\$2.51	\$2.83	\$2.54	\$1.85	\$.00
II. Total direct operating costs	\$66.40	\$44.93	\$42.72	\$51.75	\$58.24	\$59.04	\$36.15	\$.00
Income over direct costs (I minus II)	\$58.35	\$45.07	\$51.83	\$55.75	\$103.26	\$63.36	\$51.35	\$.00
Breakeven price per unit (direct costs)	\$1.38	\$.90	\$1.07	\$1.99	\$1.46	\$1.23	\$20.66	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$78.900	\$67,300	\$70,700	\$70,700	\$88,400	\$77,500	\$18,500	\$0
Total acres machinery investment used (ac.).	680	680	680	680	680	680	200	0
Interest on machine investment (\$/ac.)	\$11.60	\$9.90	\$10.40	\$10.40	\$13.00	\$11.40	\$9.25	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$15.50	\$13.22	\$13.89	\$13.89	\$17.37	\$17.40	\$12.36	\$.00
Machinery housing and insurance (\$/ac.)	\$13.74	\$13.22	\$13.69	\$1.56	\$17.37 \$1.95	\$1.71	\$1.39	\$.00 \$.00
Operator Labor (hrs./ac.)	2.10	1.50	1.50	1.50	1.70	1.80	2.00	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00						
Operator Labor cost (\$/ac.)			\$5.00	\$5.00 \$7.50	\$5.00	\$5.00	\$5.00	\$.00
·	\$10.50	\$7.50	\$7.50	\$7.50	\$8.50	\$9.00	\$10.00	\$.00
Real estate taxes (\$/ac.)	\$2.50	\$2.50	\$2.50	\$2.50	\$5.00	\$2.50	\$2.50	\$.00
Total fixed costs	\$40.10	\$33.12	\$34.29	\$34.29	\$43.87	\$38.12	\$34.11	\$.00

RESULTS SECTION

RESULTS SECTION								
	Çorn	Oats	Barley	S.Wheat	W.Wheat	Grain	Alf.Hay	Name of the Control o
	for grain				(fallow)	Sorghum		
Production costs (\$/unit)	\$2.22	\$1.56	\$1.93	\$3.31	\$2.55	\$2.02	\$40.15	\$.00
Production costs (\$/ac., excluding land)	\$106.50	\$78.05	\$77.01	\$86.04	\$102.11	\$97.17	\$70.26	\$.00
Land charges (\$/ac.)	\$14.00	\$14.00	\$14.00	\$14.00	\$28.00	\$14.00	\$14.00	\$.00
Total cost (\$/ac.)	\$120.50	\$92.05	\$91.01	\$100.04	\$130.11	\$111.17	\$84.26	\$.00
Breakeven price (\$/unit) (to recover total cost)	\$2.51	\$1.84	\$2.28	\$3.85	\$3.25	\$2.32	\$48.15	\$.00
Breakeven yield (units/ac.) (at selling price)	61.8	51.1	47.9	26.7	36.1	61.8	1.7	.0
Income over all costs (\$/unit)	\$.09	(\$.04)	\$.09	\$.29	\$.78	\$.23	\$1.85	\$.00
FINPACK DATA BANK INF	ORMATION							
FINPACK DATA BANK INF		Oats	Barley	S.Wheat	: W.Wheat	Sorghum	ı Alf. Hay	
	Corn	Oats 50	Barley 40	S.Wheat 26	: W.Wheat 40	Sorghum 48	ı Alf. Hay 1.75	0
Crop code	Corn 48		•					
Crop code Yield per acre	Corn 48 1.95	50	40	26	40	48	1.75	0
Crop code Yield per acre Price per unit	Corn 48 1.95 9.36	50 1.80	40 1.90	26 3.75	40 3.60	48 1.80	1.75 50.00	.00
Crop code Yield per acre Price per unit Seed expense	Corn 48 1.95 9.36 12.21	50 1.80 6.00	40 1.90 5.00	26 3.75 5.75	40 3.60 7.81	48 1.80 2.88	1.75 50.00 7.00	.00
Crop code Yield per acre Price per unit Seed expense Fertilizer	Corn 48 1.95 9.36 12.21 15.00	50 1.80 6.00 8.80	40 1.90 5.00 9.20	26 3.75 5.75 14.95	40 3.60 7.81 7.70	48 1.80 2.88 12.10	1.75 50.00 7.00 5.00	.00
Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals	Corn 48 1.95 9.36 12.21 15.00 2.50	50 1.80 6.00 8.80 3.50	40 1.90 5.00 9.20 3.50	26 3.75 5.75 14.95 7.05	40 3.60 7.81 7.70 8.20	48 1.80 2.88 12.10 10.95	1.75 50.00 7.00 5.00 3.35	.00
Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance	Corn 48 1.95 9.36 12.21 15.00 2.50	50 1.80 6.00 8.80 3.50 2.25	40 1.90 5.00 9.20 3.50 2.25	26 3.75 5.75 14.95 7.05 2.25	40 3.60 7.81 7.70 8.20 2.50	48 1.80 2.88 12.10 10.95 2.50	1.75 50.00 7.00 5.00 3.35 .00	.00
Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel	Corn 48 1.95 9.36 12.21 15.00 2.50 .00	50 1.80 6.00 8.80 3.50 2.25	40 1.90 5.00 9.20 3.50 2.25	26 3.75 5.75 14.95 7.05 2.25 .00	40 3.60 7.81 7.70 8.20 2.50	48 1.80 2.88 12.10 10.95 2.50 .00	1.75 50.00 7.00 5.00 3.35 .00	.00
Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel Irrigation energy.	Corn 48 1.95 9.36 12.21 15.00 2.50 .00 .00	50 1.80 6.00 8.80 3.50 2.25 .00	40 1.90 5.00 9.20 3.50 2.25 .00	26 3.75 5.75 14.95 7.05 2.25 .00	40 3.60 7.81 7.70 8.20 2.50 .00	48 1.80 2.88 12.10 10.95 2.50 .00	1.75 50.00 7.00 5.00 3.35 .00 .00	0 .00 .00 .00 .00 .00
Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel Irrigation energy.	Corn 48 1.95 9.36 12.21 15.00 2.50 .00 .00	50 1.80 6.00 8.80 3.50 2.25 .00 .00	40 1.90 5.00 9.20 3.50 2.25 .00 .00	26 3.75 5.75 14.95 7.05 2.25 .00 .00	40 3.60 7.81 7.70 8.20 2.50 .00	48 1.80 2.88 12.10 10.95 2.50 .00	1.75 50.00 7.00 5.00 3.35 .00 .00	0 .00 .00 .00 .00 .00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 6 (Gregory, Jones, Lyman, Stanly, Tripp, and the east 1/2 of Mellette and Todd counties).

COMPARATIVE CROP BUDGETS FOR AREA 7

	Corn	0ats	Barley	S.Wheat	Soybeans	Sorghum	Alf.Hay	_
INPUT SUMMARY			·					
RECEIPTS:								
Estimated grain yield (units/ac.)	55	60	40	26	25	50	2.2	0
Estimated selling price or value (\$/unit)	\$1.95	\$1.80	\$1.90	\$3.75	\$6.50	\$1.80	\$50.00	\$.00
GOVERNMENT PAYMENT:								
Base yield (units/ac.)	50	55	35	21	0	45	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.00	\$.90	\$.00	\$.00
I. Total income per acre	\$151.75	\$108.00	\$94.55	\$108.00	\$162.50	\$130.50	\$110.00	\$.00
1. Total Mosine per del estimation				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
DIRECT COSTS:								
Seed (\$/ac.)	\$12.09	\$7.50	\$5.00	\$7.20	\$7.80	\$3.00	\$7.00	\$.00
Fertilizer (\$/ac.)	\$12.44	\$11.00	\$11.50	\$12.15	\$6.00	\$12.40	\$5.00	\$.00
Fertilizer application (\$/ac.)	\$2.00	\$.00	\$.00	\$2.00	\$.00	\$2.00	\$.00	\$.00
Herbicide (\$/ac.)	\$12.60	\$1.50	°\$1.50	\$1.50	\$9.50	\$12.25	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$6.00	\$.00	\$.00	\$.00	\$.00	\$5.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$2.50	\$2.25	\$2.25	\$2.25	\$2.50	\$2.50	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$:09	\$.09	\$.09	\$4.00	\$.00
Storage (\$/ac.)	\$4.95	\$5.40	\$3.60	\$2.34	\$2.25	\$4.50	\$8.80	\$.00
Drying (\$/unit)	\$.13	\$.00	\$.00	\$.00	\$.00	\$.13	\$.00	\$.00
Drying (\$/ac.)	\$7.15	\$.00	\$.00	\$.00	\$.00	\$6.50	\$.00	\$.00
Overhead (\$/ac.):	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	0	0	0	0	0	0	0	0
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$8.90	\$6.25	\$6.25	\$6.25	\$7.15	\$8.65	\$4.80	\$.00
Machinery repair (\$/ac.)	\$11.40	\$8.05	\$8.05	\$7.15	\$9.65	\$10.10	\$10.00	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$4.57	\$2.50	\$2.30	\$2.44	\$2.64	\$3.42	\$2.11	\$.00
II. Total direct operating costs	\$91.60	\$51.45	\$47.45	\$50.28	\$54.49	\$79.32	\$41.21	\$.00
Income over direct costs (I minus II)	\$60.15	\$56.55	\$47.10	\$57.72	\$108.01	\$51.18	\$68.79	\$.00
Breakeven price per unit (direct costs)	\$1.67	\$.86	\$1.19	\$1.93	\$2.18	\$1.59	\$18.73	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$60,000	\$54,000	\$54,000	\$52,800	\$54,000	\$56,400	\$7,500	\$0
Total acres machinery investment used (ac.).	480	480	480	480	480	480	70	0
Interest on machine investment (\$/ac.)	\$12.50	\$11.25	\$11.25	\$11.00	\$11.25	\$11.75	\$10.71	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$16.70	\$15.03	\$15.03	\$14.70	\$15.03	\$15.70	\$14.31	\$.00
Machinery housing and insurance (\$/ac.)	\$1.88	\$1.69	\$1.69	\$1.65	\$1.69	\$1.76	\$1.61	\$.00
Operator Labor (hrs./ac.)	2.60	1.85	1.80	1.80	1.90	1.90	2.30	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$13.00	\$9.25	\$9.00	\$9.00	\$9.50	\$9.50	\$11.50	\$.00
Real estate taxes (\$/ac.)	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$.00
The social takes (1) doi:)!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	45.00	\$3.00	45.00	45.00	43. 00	45.00	43.00	₽.00
Total fixed costs	\$47.08	\$40.22	\$39.97	\$39.35	\$40.47	\$41.71	\$41.14	\$.00

	Çorn	Oats	Barley	S.Wheat	Soybeans	Sorghum	Alf.Hay	
Production costs (\$/unit)	\$2.52	\$1.53	\$2.19	\$3.45	\$3.80	\$2.42	\$37.43	\$.00
Production costs (\$/ac., excluding land)	\$138.67	\$91.66	\$87.42	\$89.63	\$94.96	\$121.03	\$82.35	\$.00
Land charges (\$/ac.)	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$20.00	\$19.00	\$.00
Total cost (\$/ac.)	\$158.67	\$111.66	\$107.42	\$109.63	\$114.96	\$141.03	\$101.35	\$.00
Breakeven price (\$/unit) (to recover total cost)	\$2.88	\$1.86	\$2.69	\$4.22	\$4.60	\$2.82	\$46.07	\$.00

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* Breakeven yield (units/ac.)....

Income over all costs (\$/unit)..... (\$.13)

(at selling price)

RESULTS SECTION

Crop code	Corn	0ats	Barley	S.Wheat	Soybean	Sorghum	Alf. Hay	
Yield per acre	55	60	40	26	25	50	2.2	0
Price per unit	1.95	1.80	1.90	3.75	6.50	1.80	50.00	.00
Seed expense	12.09	7.50	5.00	7.20	7.80	3.00	7.00	.00
Fertilizer	14.44	11.00	11.50	14.15	6.00	14.40	5.00	.00
Chemicals	20.60	3.50	3.50	3.50	11.50	21.25	.00	.00
Crop Insurance	2.50	2.25	2.25	2.25	2.50	2.50	.00	.00
Drying fuel	7.15	.00	.00	.00	.00	6.50	.00	.00
Irrigation energy.	.00	.00	.00	.00	.00	.00	.00	.00
Custom hire	.00	.00	.00	.00	.00	.00	.00	.00
Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00
Interest	4.57	2.50	2.30	2.44	2.64	3.42	2.11	.00
Labor hours	2.60	1.85	1.80	1.80	1.90	1.90	2.30	.00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 7 (Aurora, Buffalo, Brule, Charles Mix, Davison, Douglas, Hanson, Jerauld, and Sanborn counties).

INPUT SUMMARY	Corn	Oats	Barley	S.Wheat	Soybeans	Sunflower	Alf.Hay	
RECEIPTS:	75	75	45	35	31	1300	2.8	0
Estimated grain yield (units/ac.)	\$1.90	\$1.76	\$1.90	\$3.75	\$6.50	\$.10	\$50.00	\$.00
Estimated selling price or value (\$/unit) GOVERNMENT PAYMENT:	\$1.90	\$1.70						\$.00
Base yield (units/ac.)	65	65	40	30	0	0	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.00	\$.00	\$.00	\$.00
I. Total income per acre	\$200.35	\$132.00	\$106.70	\$146.25	\$201.50	\$130.00	\$140.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$14.04	\$7.50	\$5.00	\$7.19	\$7.80	\$7.88	\$9.66	\$.00
Fertilizer (\$/ac.)	\$17.06	\$15.40	\$13.80	\$16.50	\$8.40	\$12.80	\$8.75	\$.00
Fertilizer application (\$/ac.)	\$2.00	\$.00	\$.00	\$2.00	\$.00	\$2.00	\$.00	\$.00
Herbicide (\$/ac.)	\$12.60	\$1.50	\$1.50	\$1.50	\$9.50	\$10.69	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$6.00	\$.00	\$.00	\$.00	\$.00	\$15.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$5.00	\$3.20	\$3.20	\$3.20	\$5.00	\$5.00	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.00	\$4.00	\$.00
Storage (\$/ac.)	\$6.75	\$6.75	\$4.05	\$3.15	\$2.79	\$2.93	\$11.20	\$.00
Drying (\$/unit)	\$.13	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Drying (\$/ac.)	\$9.75	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Overhead (\$/ac.)	\$5.50	\$5.00	\$5.00	\$5.00	\$5.50	\$5.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$9.05	\$7.25	\$7.15	\$7.15	\$7.50	\$6.35	\$4.30	\$.00
	\$13.35	\$9.70	\$9.60	\$9.55	\$11.00	\$9.90		
Machinery repair (\$/ac.)	7	59.70 6	39.00	19. 55	311.00		\$11.95 9	\$.00 0
Crop operating loan borrowed (months)	12.00					42.00		
Interest APR(%)		12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85 #3.07	85	85	85 \$7,07	75 #7 (0	60	0
Interest on direct costs (\$/ac.)	\$5.41	\$2.97	\$2.62	\$2.92	\$3.03	\$3.69	\$2.67	\$.00
II. Total direct operating costs	\$108.51	\$61.27	\$53.92	\$60.16	\$62.52	\$85.73	\$52.03	\$.00
Income over direct costs (I minus II)	\$91.84	\$70.73	\$52.78	\$86.09	\$138.98	\$44.27	\$87.97	\$.00
Breakeven price per unit (direct costs)	\$1.45	\$.82	\$1.20	\$1.72	\$2.02	\$.07	\$18.58	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$52 000	\$47,900	\$47,900	\$47,900	\$50,500	\$50,500	\$12,500	\$0
Total acres machinery investment used (ac.).	380	380	380	380	380	380	50	0
Interest on machine investment (\$/ac.)	\$13.68	\$12.61	\$12.61	\$12.61	\$13.29	\$13.29	\$25.00	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$18.28	\$16.84	\$16.84	\$16.84	\$17.75	\$17.75	\$33.40	\$.00
Machinery housing and insurance (\$/ac.)	\$2.05	\$1.89	\$1.89	\$1.89	\$1.99	\$1.99	\$3.75	\$.00
Operator Labor (hrs./ac.)	3.00	2.20	2.10	2.20	2.00	1.90	3.10	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$15.00	\$11.00	\$10.50	\$11.00	\$10.00	\$9.50	\$15.50	\$.00
•								
Real estate taxes (\$/ac.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$4.50	\$.00
Total fixed costs	\$54.02	\$47.34	\$46.84	\$47.34	\$48.04	\$47.54	\$82.15	\$.00

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	RESOLIS SECTION	Corn	Oats	Barley	S.Wheat	Soybeans	Sunflower	Alf.Hay	
Production	costs (\$/unit)	\$2.17	\$1.45	\$2.24	\$3.07	\$3.57	\$.10	\$47.92	\$.00
Production	costs (\$/ac., excluding land)	\$162.53	\$108.61	\$100.75	\$107.49	\$110.56	\$133.27	\$134.18	\$.00
Land charge	es (\$/ac.)	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$30.00	\$.00
	Total cost (\$/ac.)	\$197.53	\$143.61	\$135.75	\$142.49	\$145.56	\$168.27	\$164.18	\$.00
	Breakeven price (\$/unit) (to recover total cost)	\$2.63	\$1.91	\$3.02	\$4.07	\$4.70	\$.13	\$58.63	\$.00
is.	Breakeven yield (units/ac.) (at selling price)	104.0	81.6	71.4	38.0	22.4	1682.7	3.3	.0
Income over	r all costs (\$/unit)	\$.04	(\$.15)	(\$.65)	\$.11	\$1.80	(\$.03)	(\$8.63)	\$.00
	FINPACK DATA BANK INF	ORMATION							
	FINPACK DATA BANK INF	ORMATION Corn	Oats	Barley	S.Wheat	Soybean	Sunflower	Alf. Hay	
			0ats 75	Barley 45	S.Wheat	: Soybean 31	Sunflower 1300	Alf. Hay	0
	Crop code	Corn		•					
	Crop code Yield per acre	Corn 75	75	45	35	31	1300	2.8	0
	Crop code Yield per acre Price per unit	Corn 75 1.90	75 1.76	45 1.90	35 3.75	31 6.50	1300 .10	2.8 50.00	.00
	Crop code Yield per acre Price per unit Seed expense	Corn 75 1.90	75 1.76 7.50	45 1.90 5.00	35 3.75 7.19	31 6.50 7.80	1300 .10 7.88	2.8 50.00 9.66	.00
	Crop code Yield per acre Price per unit Seed expense Fertilizer	Corn 75 1.90 14.04 19.06 20.60	75 1.76 7.50 15.40	45 1.90 5.00 13.80	35 3.75 7.19 18.50	31 6.50 7.80 8.40	1300 .10 7.88 14.80	2.8 50.00 9.66 8.75	.00 .00
	Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals	Corn 75 1.90 14.04 19.06 20.60	75 1.76 7.50 15.40 3.50	45 1.90 5.00 13.80 3.50	35 3.75 7.19 18.50 3.50	31 6.50 7.80 8.40 11.50	1300 .10 7.88 14.80 29.69	2.8 50.00 9.66 8.75	.00 .00 .00
	Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance	Corn 75 1.90 14.04 19.06 20.60 5.00	75 1.76 7.50 15.40 3.50 3.20	45 1.90 5.00 13.80 3.50 3.20	35 3.75 7.19 18.50 3.50 3.20	31 6.50 7.80 8.40 11.50 5.00	1300 .10 7.88 14.80 29.69 5.00	2.8 50.00 9.66 8.75 .00	.00 .00 .00 .00
	Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel	Corn 75 1.90 14.04 19.06 20.60 5.00 9.75	75 1.76 7.50 15.40 3.50 3.20	45 1.90 5.00 13.80 3.50 3.20	35 3.75 7.19 18.50 3.50 3.20	31 6.50 7.80 8.40 11.50 5.00	1300 .10 7.88 14.80 29.69 5.00	2.8 50.00 9.66 8.75 .00 .00	.00 .00 .00 .00 .00
	Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel Irrigation energy.	Corn 75 1.90 14.04 19.06 20.60 5.00 9.75	75 1.76 7.50 15.40 3.50 3.20 .00	45 1.90 5.00 13.80 3.50 3.20 .00	35 3.75 7.19 18.50 3.50 3.20 .00	31 6.50 7.80 8.40 11.50 5.00 .00	1300 .10 7.88 14.80 29.69 5.00 .00	2.8 50.00 9.66 8.75 .00 .00	.00 .00 .00 .00 .00 .00
	Crop code Yield per acre Price per unit Seed expense Fertilizer Chemicals Crop Insurance Drying fuel Irrigation energy. Custom hire	Corn 75 1.90 14.04 19.06 20.60 5.00 9.75 .00	75 1.76 7.50 15.40 3.50 3.20 .00 .00	45 1.90 5.00 13.80 3.50 3.20 .00 .00	35 3.75 7.19 18.50 3.50 3.20 .00	31 6.50 7.80 8.40 11.50 5.00 .00	1300 .10 7.88 14.80 29.69 5.00 .00	2.8 50.00 9.66 8.75 .00 .00 .00	.00 .00 .00 .00 .00 .00

This spreadsheet is a decision aid for crop producers that provides a comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 8 (Brookings, Kingsbury, Lake, McCook, Miner, Minnehaha, and Moody counties).

	Corn	0ats	Barley	S.Wheat	Soybeans	Sorghum	Alf.Hay	ATT-11
INPUT SUMMARY								
RECEIPTS:								
Estimated grain yield (units/ac.)	85	80	50	35	35	60	3.5	0
Estimated selling price or value (\$/unit) GOVERNMENT PAYMENT:	\$1.94	\$1.80	\$1.90	\$3.75	\$6.50	\$1.80	\$50.00	\$.00
Base yield (units/ac.)	80	75	45	30	0	55	0	0
Deficiency payment (\$/unit)	\$.89	\$.00	\$.53	\$.50	\$.00	\$.90	\$.00	\$.00
I. Total income per acre	\$236.10	\$144.00	\$118.85	\$146.25	\$227.50	\$157.50	\$175.00	\$.00
DIRECT COSTS:								
Seed (\$/ac.)	\$15.99	\$9.00	\$5.00	\$7.50	\$7.80	\$3.00	\$10.50	\$.00
Fertilizer (\$/ac.)	\$27.10	\$16.50	\$16.10	\$17.65	\$8.40	\$14.00	\$10.00	\$.00
Fertilizer application (\$/ac.)	\$2.00	\$.00	\$.00	\$2.00	\$.00	\$2.00	\$.00	\$.00
Herbicide (\$/ac.)	\$12.60	\$1.50	\$1.50	\$1.50	\$9.50	\$12.25	\$.00	\$.00
Herbicide application (\$/ac.)	\$.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$.00	\$.00
Insecticide (\$/ac.)	\$6.00	\$.00	\$.00	\$.00	\$.00	\$5.00	\$.00	\$.00
Insecticide application (\$/ac.)	\$2.00	\$.00	\$.00	\$.00	\$.00	\$2.00	\$.00	\$.00
Crop insurance (\$/ac.)	\$5.50	\$3.20	\$3.20	\$3.20	\$5.50	\$5.00	\$.00	\$.00
Storage (\$/unit)	\$.09	\$.09	\$.09	\$.09	\$.09	\$.09	\$4.00	\$.00
Storage (\$/ac.)	\$7.65	\$7.20	\$4.50	\$3.15	\$3.15	\$5.40	\$14.00	\$.00
Drying (\$/unit)	\$.13	\$.00	\$.00	\$.00	\$.00	\$.13	\$.00	\$.00
Drying (\$/ac.)	\$11.05	\$.00	\$.00	\$.00	\$.00	\$7.80	\$.00	\$.00
Overhead (\$/ac.)	\$5.50	\$5.00	\$5.00	\$5.00	\$5.50	\$5.50	\$3.50	\$.00
Hired labor (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Irrigation (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Custom machine hire (\$/ac.)	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00	\$.00
Fuel and lubrication (\$/ac.)	\$9.75	\$7.25	\$7.15	\$7.15	\$8.50	\$8.75	\$5.75	\$.00
Machinery repair (\$/ac.)	\$12.50	\$9.15	\$9.15	\$9.55	\$11.20	\$11.70	\$13.50	\$.00
Crop operating loan borrowed (months)	7	6	6	6	6	6	9	0
Interest APR(%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	.00
Crop direct costs borrowed (%)	75	85	85	85	85	75	60	0
Interest on direct costs (\$/ac.)	\$6.18	\$3.10	\$2.73	\$2.99	\$3.14	\$3.80	\$3.09	\$.00
II. Total direct operating costs	\$123.82	\$63.90	\$56.33	\$61.69	\$64.69	\$88.20	\$60.34	\$.00
Income over direct costs (I minus II)	\$112.28	\$80.10	\$62.52	\$84.56	\$162.81	\$69.30	\$114.66	\$.00
Breakeven price per unit (direct costs)	\$1.46	\$.80	\$1.13	\$1.76	\$1.85	\$1.47	\$17.24	\$.00
FIXED COSTS:								
Average machinery investment (total \$/yr.)	\$42,600	\$37,200	\$37,200	\$37,200	\$42,000	\$41.000	\$6,500	\$0
Total acres machinery investment used (ac.).	310	310	310	310	310	310	40	0
Interest on machine investment (\$/ac.)	\$13.74	\$12.00	\$12.00	\$12.00	\$13.55	\$13.23	\$16.25	\$.00
Deprec. on machinery and equipment (\$/ac.)	\$18.36	\$16.03	\$16.03	\$16.03	\$18.10	\$17.67	\$21.71	\$.00
Machinery housing and insurance (\$/ac.)	\$2.06	\$1.80	\$1.80	\$1.80	\$2.03	\$1.98	\$2.44	\$.00
Operator Labor (hrs./ac.)	2.65	1.75	1.70	1.70	2.40	1.80	3.10	.00
Operator Labor cost (\$/hr.)	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$.00
Operator Labor cost (\$/ac.)	\$13.25	\$8.75	\$8.50	\$8.50	\$12.00	\$9.00	\$15.50	\$.00
Real estate taxes (\$/ac.)	\$6.25	\$6.25	\$6.25	\$6.25	\$6.25	\$6.25	\$6.25	\$.00
		-0,25	-0.63	40,65	70.67	70.23	40.25	+.00
Total fixed costs	\$53.66	\$44.83	\$44.58	\$44.58	\$51.93	\$48.13	\$62.15	\$.00

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Interest.....

Labor hours.....

RESULTS SECTION	Corn	Oats	Barley	S.Wheat	Soybeans	Sorghum	Alf.Hay	
Production costs (\$/unit)	\$2.09	\$1.36	\$2.02	\$3.04	\$3.33	\$2.27	\$35.00	\$.00
Production costs (\$/ac., excluding land)	\$177.48	\$108.73	\$100.92	\$106.28	\$116.62	\$136.33	\$122.49	\$.00
Land charges (\$/ac.)	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$42.00	\$.00
Total cost (\$/ac.)	\$219.48	\$150.73	\$142.92	\$148.28	\$158.62	\$178.33	\$164.49	\$.00
Breakeven price (\$/unit) (to recover total cost)	\$2.58	\$1.88	\$2.86	\$4.24	\$4.53	\$2.97	\$47.00	\$.00
<pre>Breakeven yield (units/ac.) (at selling price)</pre>	113.1	83.7	75.2	39.5	24.4	99.1	3.3	.0
Income over all costs (\$/unit)	\$.20	(\$.08)	(\$.48)	(\$.06)	\$1.97	(\$.35)	\$3.00	\$.00
FINPACK DATA BANK INFORMATION								
Crop code	Corn	0ats	Barley	S.Wheat	Soybean	Sorghum	Alf. Hay	
Yield per acre	85	80	50	35	35	60	3.5	0
Price per unit	1.94	1.80	1.90	3.75	6.50	1.80	50.00	.00
Seed expense	15.99	9.00	5.00	7.50	7.80	3.00	10.50	.00
Fertilizer	29.10	16.50	16.10	19.65	8.40	16.00	10.00	.00
Chemicals	20.60	3.50	3.50	3.50	11.50	21.25	.00	.00
Crop Insurance	5.50	3.20	3.20	3.20	5.50	5.00	.00	.00
Drying fuel	11.05	.00	.00	.00	.00	7.80	.00	.00
Irrigation energy.	.00	.00	.00	.00	.00	.00	.00	.00
Custom hire	.00	.00	.00	.00	.00	.00	.00	.00
Direct crop labor.	.00	.00	.00	.00	.00	.00	.00	.00

This spreadsheet is a decision aid for crop producers that provides comparison of the profitability of resources committed to various crops. The figures and calculations in this spreadsheet are appropriate for Management Area 9 (Bon Homme, Clay, Hutchinson, Lincoln, Turner, Union, and Yankton counties).

3.10

1.75

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