

TABLE 1. Acreage Summary, Roosevelt County,  
Actual 2014

BUDGET AREA.....	ROGERS-DORA AREA, ROOSEVELT COUNTY
FARM SIZE.....	1,280 ACRES
IRRIGATION TYPE.....	DRYLAND
NUMBER OF CROPS.....	2.....

  

ACREAGE SUMMARY:	LAND USE (ACRES)
GRAIN SORGHUM	420.00
ARP	0.00
FLEX IN WHEAT	74.10
WHEAT	420.00
ARP	0.00
FLEX IN WHEAT	74.10
SUMMER FALLOW	271.80
ROADS, HOMESTEAD	20.00
<b>TOTAL</b>	<b>1,280.00</b>

TABLE 2. Basic cost information for the Rogers-Dora area, Roosevelt County,  
Actual 2014

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$8.55
General & Irrigators	\$/hour	\$7.50
<b>Seed:</b>		
Wheat	\$/pound	\$0.45
Grain Sorghum	\$/pound	\$1.31
<b>Fuel:</b>		
Diesel fuel	\$/gallon	\$3.83
Gasoline	\$/gallon	\$2.55
Employee Liability Insurance	\$/ \$1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	5.50%
Land Interest Rate	percent	5.00%
Equipment Interest Rate	percent	5.50%
Real Interest Rate	percent	3.00%
Land Taxes	\$89.00 /acre (full value)	\$0.55
Personal Property Tax Rate	- NR \$/\$1,000 (Assessed)	\$18.44
	- R	\$18.13
Supervision Factor	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for the Rogers-Dora area, Roosevelt County,  
Actual 2014

Item		
Electricity (Domestic & Shop)	\$242.00 per month	\$2,904
Telephone	\$121.00 per month	\$1,452
Accounting & Legal		\$1,773
Misc. Supplies & Hand Tools		\$2,668
Pickup and Auto		
miles	31,158 @ \$0.500 per mile	\$15,579
<b>Insurance</b>		
- general liability (non-employee)		\$1,912
- fire/theft		\$1,513
<b>Property Taxes</b>		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$1,452
Dues, fees, publications		\$436
Farmstead Equipment		\$182
	<b>Total</b>	<b>\$35,879</b>
	<b>Total Per Planted Acre</b>	<b>\$36.31</b>

TABLE 4. Equipment summary for a 1,280 acre, dryland farm with above average management, Rogers-Dora area, Roosevelt County, Actual 2014

EQUIPMENT ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	VARIABLE COSTS					FIXED COSTS		
			TOTAL VALUE	FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR 95 HP	146	1	\$17,335	\$2,267	\$138	\$15.53	\$0.94	\$525	\$48	\$3.92
TRACTOR #8 HP	295	1	\$40,865	\$10,122	\$1,588	\$34.34	\$5.39	\$5,985	\$276	\$21.24
TRUCK 2 TON	138	1	\$23,000	\$3,366	\$891	\$24.33	\$6.44	\$4,600	\$141	\$34.27
PLANTER 8 ROW	50	1	\$5,500		\$153		\$3.04	\$1,100	\$34	\$22.50
CULTIVATOR 8 ROW	42	1	\$4,000		\$208		\$4.96	\$533	\$25	\$13.28
DISC 18 FT OFFSET	109	1	\$7,500		\$1,011		\$9.30	\$1,000	\$46	\$9.62
DRILL 40 FT	28	1	\$7,750		\$106		\$3.72	\$1,550	\$48	\$56.24
LISTER 8 ROW	38	1	\$3,200		\$150		\$3.97	\$427	\$20	\$11.81
STUBBLE MULCHER 20 FT	99	1	\$6,500		\$796		\$8.06	\$867	\$40	\$9.17
SPRAYER (MTD)	25	1	\$1,500		\$18		\$0.72	\$200	\$9	\$8.30
COMBINE #8 HP	138	1	\$51,677	\$4,425	\$368	\$31.99	\$2.66	\$8,864	\$409	\$67.02
GRAIN HEAD 22 FT	138	1	\$3,000		\$21		\$0.15	\$501	\$23	\$3.79
ROD WEEDEE 37 FT	49	1	\$1,150		\$70		\$1.43	\$153	\$7	\$3.25
			\$173,576	\$20,180	\$5,498			\$26,306	\$1,126	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL UNIT/HR	LUBE COEF	ACCUM HOURS	INTEREST AGE	EXPENSE
TRACTOR 95 HP	15735.00	17334.50	30.00	1.00	800.00	5.54	0.10	3358.23	23.00	432.71
TRACTOR #8 HP	89775.00	40864.50	15.00	1.00	800.00	8.15	0.10	3242.05	11.00	2468.81
TRUCK 2 TON	46000.00	23000.00	10.00	6.00	800.00	6.05	0.05	1798.52	13.00	1265.00
PLANTER 8 ROW	11000.00	5500.00	10.00	8.00	100.00			655.20	13.00	302.50
CULTIVATOR 8 ROW	8000.00	4000.00	15.00	3.00	300.00			672.00	16.00	220.00
DISC 18 FT OFFSET	15000.00	7500.00	15.00	3.00	300.00			1738.23	16.00	412.50
DRILL 40 FT	15500.00	7750.00	10.00	8.00	100.00			369.33	13.00	69.25
LISTER 8 ROW	6400.00	3200.00	15.00	3.00	300.00			604.80	16.00	176.00
STUBBLE MULCHER 20 FT	13000.00	6500.00	15.00	3.00	300.00			1482.30	15.00	357.50
SPRAYER (MTD)	3000.00	1500.00	15.00	8.00	150.00			378.00	15.00	82.50
COMBINE #8 HP	123965.00	51676.50	15.00	2.00	300.00	6.96	0.20	1798.52	13.00	3656.26
GRAIN HEAD 22 FT	7500.00	3600.00	15.00	2.00	300.00			1798.52	13.00	206.80
ROD WEEDEE 37 FT	2300.00	1150.00	15.00	3.00	300.00			741.15	15.00	63.25

GRAIN PER ACRE TOTALS

GRAIN SORGHUM	WHEAT	PER ACRE TOTALS
0.28	0.05	0.33
0.35	0.06	0.41
0.14	0.14	0.28
0.12	0.00	0.12
0.10	0.00	0.10
0.11	0.11	0.22
0.00	0.05	0.05
0.09	0.00	0.09
0.10	0.10	0.20
0.06	0.00	0.06
0.14	0.14	0.28
0.14	0.14	0.28
0.05	0.05	0.10

INTEREST PRORATION

GRAIN SORGHUM	WHEAT	PER ACRE TOTALS
0.83	0.15	0.98
2.93	2.18	5.11
1.28	1.28	2.56
0.72	0.00	0.72
0.52	0.00	0.52
0.42	0.42	0.84
0.00	0.75	0.75
0.42	0.00	0.42
0.36	0.36	0.72
0.20	0.00	0.20
3.70	3.70	7.40
0.21	0.21	0.42
0.06	0.06	0.12
11.65	9.11	20.76

GRAIN SORGHUM ACRES: 420 PUMP WATER:

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT		
			RATE	TOTAL	CUSTOM
DISC	165 HP	1.00	0.11	0.11	
STUBBLE MULCH	165 HP	1.00	0.10	0.10	
LISTER	165 HP	1.00	0.09	0.09	
ROD WEEDEE	165 HP	1.00	0.05	0.05	
PLANTER	93 HP	1.00	0.12	0.12	
CULTIVATOR	93 HP	1.00	0.10	0.10	
SPRAYER	93 HP	1.00	0.06	0.06	

COMBINE 22 FT 1.00 0.14 0.14

MACHINE	POWER UNIT	TIMES OVER	ACCOMPLISHMENT		
			RATE	TOTAL	CUSTOM
STUBBLE MULCH	165 HP	1.00	0.10	0.10	
DISC	165 HP	1.00	0.11	0.11	
ROD WEEDEE	165 HP	1.00	0.05	0.05	
DRILL	93 HP	1.00	0.05	0.05	

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
0	0.00006	0.00002	0.00062	0.00002	0.00008	0.00014	0.00004	0.00024	0.00020
50	0.00006	0.00002	0.00062	0.00002	0.00008	0.00014	0.00004	0.00024	0.00020
100	0.00006	0.00002	0.00050	0.00002	0.00014	0.00022	0.00010	0.00038	0.00030
200	0.00003	0.00003	0.00004	0.00018	0.00026	0.00011	0.00051	0.00026	
300	0.00003	0.00005	0.00039	0.00006	0.00023	0.00031	0.00014	0.00063	0.00040
400	0.00003	0.00006	0.00037	0.00009	0.00026	0.00034	0.00015	0.00071	0.00045
500	0.00003	0.00007	0.00036	0.00010	0.00028	0.00037	0.00017	0.00090	0.00063
600	0.00003	0.00009	0.00034	0.00012	0.00031	0.00039	0.00019	0.00096	0.00063
700	0.00003	0.00010	0.00034	0.00013	0.00033	0.00041	0.00020	0.00091	0.00066
800	0.00003	0.00011	0.00032	0.00015	0.00035	0.00043	0.00021	0.00098	0.00069
900	0.00003	0.00012	0.00032	0.00016	0.00037	0.00045	0.00023	0.00102	0.00069
1000	0.00005	0.00013	0.00031	0.00018	0.00038	0.00046	0.00023	0.00107	0.00063
1200	0.00005	0.00015	0.00031	0.00021	0.00041	0.00048	0.00025	0.00114	0.00071
1400	0.00005	0.00017	0.00030	0.00023	0.00044	0.00051	0.00041	0.00126	0.00077
1500	0.00015	0.00017	0.00030	0.00023	0.00044	0.00051	0.00041	0.00126	0.00077
1600	0.00015	0.00019	0.00029	0.00026	0.00047	0.00053	0.00014	0.00124	0.00081
1800	0.00008	0.00017	0.00029	0.00029	0.00049	0.00055	0.00030		
2000	0.00011	0.00027	0.00028	0.00031	0.00051	0.00057	0.00031		
2500	0.00006								
3000	0.00007								
3500	0.00008								
4000	0.00010								
4500	0.00011								
5000	0.00012								
5500	0.00014								
6000	0.00015								
6500	0.00016								
7000	0.00018								
7500	0.00019								
8000	0.00020								

Based on unpublished data of D. R. Hunt, Department of Agricultural Engineering, University of Illinois.

\*\* Based on "Agricultural Machinery Data" in Agricultural Engineers Yearbook, 1983.

Codes

- 1 tractors
- 2 balers, combines, forage harvesters, windrowers, pickups
- 3 rotary hoes, disks, moldboard plows, chisels, field cultivators
- 4 row cultivators, laser plane
- 4 harrows, wagons, floats, roto buck, drag, roller, water furrow, bed shaper
- 5 balerwagons, cotton pickers, cotton strippers, corn pickers
- 5 corn heads, forage equipment, rotary mowers, stalk choppers, feed wagons, farm trucks
- 6 rakes, cutterbar mower
- 7 baler w/ engine, manure spreader
- 8 planters, drills, seeding equipment, mounted sprayers
- 9 fertilizer distributing equipment

TABLE 5. Grain sorghum, dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Rogers-Dora area, Roosevelt County, Actual 2014

Planting Dates: May 15 - May 30

Harvest Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
GRAIN SORGHUM	\$7.06	15.00 CWT		\$105.96
DIRECT PAYMENT	\$0.00	15.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$5.00	1 ACRE		\$5.00
<b>TOTAL</b>				<b>\$110.96</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.31	3 LBS	\$3.93		\$3.93
INSECTICIDE	\$15.88	1 X/ACRE	\$15.88		\$15.88
CROP INSURANCE	\$0.12		\$0.12		\$0.12
<b>SUBTOTAL</b>			<b>\$19.93</b>		<b>\$19.93</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	165 HP	0.11 HR		\$0.94	\$3.78	\$1.62	\$3.40	\$9.73
STUBBLE MULCH	165 HP	0.10 HR		\$0.86	\$3.43	\$1.34	\$3.04	\$8.68
LISTER	165 HP	0.09 HR		\$0.77	\$3.09	\$0.84	\$2.97	\$7.68
ROD WEED	165 HP	0.05 HR		\$0.43	\$1.72	\$0.34	\$1.22	\$3.71
PLANTER	93 HP	0.12 HR		\$1.03	\$1.86	\$0.43	\$3.17	\$6.49
CULTIVATOR	93 HP	0.10 HR		\$0.86	\$1.55	\$0.59	\$1.72	\$4.72
SPRAYER	93 HP	0.06 HR		\$0.51	\$0.93	\$0.10	\$0.73	\$2.28
<b>SUBTOTAL</b>		<b>0.63 HR</b>		<b>\$5.39</b>	<b>\$16.37</b>	<b>\$5.26</b>	<b>\$16.26</b>	<b>\$43.28</b>

<b>HARVEST OPERATIONS</b>								
COMBINE		0.14 HR		\$1.20	\$4.48	\$0.39	\$9.91	\$15.98
HAUL	2 TON	0.14 HR		\$1.20	\$3.41	\$0.90	\$4.80	\$10.30
<b>SUBTOTAL</b>		<b>0.28 HR</b>		<b>\$2.39</b>	<b>\$7.88</b>	<b>\$1.29</b>	<b>\$14.71</b>	<b>\$26.29</b>

<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.12 HR		\$1.00				\$1.00
EMPLOYEE BENEFITS				\$1.40				\$1.40
INSURANCE				\$0.16				\$0.16
LAND TAXES							\$0.55	\$0.55
SUPERVISION AND MANAGEMENT				\$8.28				\$8.28
OTHER EXPENSES				\$36.31				\$36.31
<b>SUBTOTAL</b>		<b>0.12 HR</b>		<b>\$36.46</b>	<b>\$10.69</b>		<b>\$0.55</b>	<b>\$47.70</b>

TOTAL OPERATING EXPENSES 1.03 HR \$56.40 \$18.47 \$24.25 \$6.56 \$31.52 \$137.19

NET OPERATING PROFIT (\$26.23)

INTEREST ON OPERATING CAPITAL ( \$16.14 @ 5.50% ) \$0.89  
 INTEREST ON EQUIPMENT INVESTMENT \$11.65

RETURN TO LAND AND RISK (\$38.77)

**BUDGET SUMMARY**

GROSS RETURN		\$110.96	
VARIABLE OPERATING EXPENSES	\$87.21		
RETURN OVER VARIABLE EXPENSES		\$23.76	(GROSS MARGIN)
FIXED EXPENSES	\$31.52		
NET FARM INCOME		(\$7.76)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$18.47		
NET OPERATING PROFIT		(\$26.23)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$12.54		
RETURN TO LAND AND RISK		(\$38.77)	

TABLE 6. Wheat, dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Rogers-Dora area, Roosevelt County, Actual 2014  
 Planting dates: August 15 - September 15  
 Harvesting dates: June 1 - June 25

ITEM	PRICE	YIELD	BASE						TOTAL	
<b>GROSS RETURNS</b>										
WHEAT	\$7.00	18.00 BUSHELS							\$126.00	
DIRECT PAYMENT	\$0.00	18.00 BUSHEL	0.85						\$0.00	
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00	
GRAZING	\$10.00	1.00 ACRE							\$10.00	
<b>TOTAL</b>									<b>\$136.00</b>	
<b>PURCHASED INPUTS</b>										
	PRICE	QUANTITY	PURCHASED INPUTS						FIXED COST	TOTAL
SEED	\$0.45	30 LB	\$13.50							\$13.50
CROP INSURANCE	\$0.09		\$0.09							\$0.09
			\$13.59							\$13.59
<b>PREHARVEST OPERATIONS</b>										
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL		
STUBBLE MULCH	165 HP	0.10 HR		\$0.86	\$3.43	\$1.34	\$3.04	\$8.68		
DISC	165 HP	0.11 HR		\$0.94	\$3.78	\$1.62	\$3.40	\$9.74		
RODWEED	165 HP	0.05 HR		\$0.43	\$1.72	\$0.34	\$1.22	\$3.71		
DRILL	93 HP	0.05 HR		\$0.43	\$0.78	\$0.23	\$3.01	\$4.45		
<b>SUBTOTAL</b>		0.31 HR		\$2.65	\$9.71	\$3.53	\$10.67	\$26.56		
<b>HARVEST OPERATIONS</b>										
COMBINE		0.14 HR		\$1.20	\$4.48	\$0.39	\$9.91	\$15.98		
HAUL	2 TON	0.14 HR		\$1.20	\$3.41	\$0.90	\$4.80	\$10.30		
<b>SUBTOTAL</b>		0.28 HR		\$2.39	\$7.88	\$1.29	\$14.71	\$26.29		
<b>OVERHEAD EXPENSES</b>										
DOWNTIME		0.10 HR		\$0.86					\$0.86	
EMPLOYEE BENEFITS				\$0.91					\$0.91	
INSURANCE			\$0.10					\$0.10		
LAND TAXES								\$0.55		
SUPERVISION AND MANAGEMENT				\$9.68					\$9.68	
OTHER EXPENSES			\$36.31					\$36.31		
<b>SUBTOTAL</b>		0.10 HR	\$36.41	\$11.44				\$0.55	\$48.39	
<b>TOTAL OPERATING EXPENSES</b>		0.69 HR	\$49.91	\$16.48	\$17.59	\$4.83	\$25.93	\$114.74		
<b>NET OPERATING PROFIT</b>									\$21.26	
INTEREST ON OPERATING CAPITAL		( \$10.82 @ 5.50% )							\$0.60	
INTEREST ON EQUIPMENT INVESTMENT									\$9.11	
<b>RETURN TO LAND AND RISK</b>									\$11.56	
<b>BUDGET SUMMARY</b>										
GROSS RETURN			\$136.00							
VARIABLE OPERATING EXPENSES	\$72.33									
RETURN OVER VARIABLE EXPENSES		\$63.67	(GROSS MARGIN)							
FIXED EXPENSES	\$25.93									
NET FARM INCOME		\$37.74	(RETURN TO CAPITAL, LABOR, LAND & RISK)							
LABOR AND MANAGEMENT COST	\$16.48									
NET OPERATING PROFIT		\$21.26	(RETURN TO CAPITAL, LAND & RISK)							
CAPITAL COSTS	\$9.70									
RETURN TO LAND AND RISK			\$11.56							

TABLE 7. Summary of per acre costs and returns for a 1,280 acre farm, Roosevelt County,  
Actual 2014

	GRAIN SORGHUM	WHEAT
	CWT	BU
PRIMARY YIELD	15.00	18.00
PRIMARY PRICE	\$7.06	\$7.00
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$5.00	\$10.00
GROSS RETURN	\$110.96	\$136.00
CASH OPERATING EXPENSES		
SEED	\$3.93	\$13.50
FERTILIZER		
CHEMICALS	\$15.88	
CROP INSURANCE	\$0.12	\$0.09
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$24.25	\$17.59
FUEL-IRRIGATION		
REPAIRS	\$6.56	\$4.83
CUSTOM CHARGES	\$0.00	\$0.00
LAND TAXES	\$0.55	\$0.55
OTHER EXPENSES	\$36.46	\$36.41
TOTAL CASH EXPENSES	\$87.75	\$72.96
RETURN OVER CASH EXPENSES	\$23.21	\$63.04
FIXED EXPENSES	\$30.97	\$25.38
TOTAL EXPENSES	\$118.73	\$98.34
NET FARM INCOME	(\$7.76)	\$37.66
LABOR AND MANAGEMENT COSTS	\$18.47	\$16.48
NET OPERATING PROFIT	(\$26.23)	\$21.17
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$0.89	\$0.60
INTEREST ON EQUIPMENT INVESTMENT	\$11.65	\$9.11
TOTAL CAPITAL COSTS	\$12.54	\$9.70
RETURN TO LAND AND RISK	(\$38.77)	\$11.47

TABLE 8. Whole farm summary, Rogers-Dora area, Roosevelt County,  
Actual 2014

GROSS RETURNS		
GRAIN SORGHUM	420.00 ACRES	
CROP		\$44,505
GRAZING		\$2,100
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
WHEAT	568.20 ACRES	
CROP		\$71,593
GRAZING		\$5,682
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$123,880</u>
CASH OPERATING EXPENSES		
SEED		\$9,321
FERTILIZER		\$0
CHEMICALS		\$6,672
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$20,180
FUEL-IRRIGATION		\$0
REPAIRS		\$5,498
CUSTOM CHARGES		\$0
LAND TAXES		\$541
OTHER EXPENSES		\$36,002
TOTAL CASH EXPENSES		<u>\$78,314</u>
RETURN OVER CASH EXPENSES		\$45,567
FIXED EXPENSES		\$27,430
TOTAL EXPENSES		\$105,743
NET FARM INCOME		\$18,137
LABOR AND MANAGEMENT COSTS		\$17,122
NET OPERATING PROFIT		\$1,015
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$711
INTEREST ON EQUIPMENT INVESTMENT		\$10,070
TOTAL CAPITAL COSTS		<u>\$10,781</u>
RETURN TO LAND AND RISK		<u>(\$9,766)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$15,526)	0.28%
\$200 /ACRE	(\$17,446)	0.24%
\$250 /ACRE	(\$19,366)	0.21%
\$300 /ACRE	(\$21,286)	0.18%
\$350 /ACRE	(\$23,206)	0.16%
\$400 /ACRE	(\$25,126)	0.15%

\* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

\*\* NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)