

TABLE 1. Acreage Summary, Roosevelt County,
Projected 2017

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
TOTAL	1,280.00

TABLE 2. Basic cost information for the Rogers-Dora area, Roosevelt County,
Projected 2017

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$8.55
General & Irrigators	\$/hour	\$7.50
Seed:		
Wheat	\$/pound	\$0.44
Grain Sorghum	\$/pound	\$1.70
Fuel:		
Diesel fuel	\$/gallon	\$2.35
Gasoline	\$/gallon	\$2.10
Employee Liability Insurance	\$/ \$1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
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)	\$0.60
Personal Property Tax Rate	- NR \$/\$1,000 (Assessed)	\$20.21
	- R	\$20.00
Supervision Factor	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for the Rogers-Dora area, Roosevelt County,
Projected 2017

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
Insurance		
- general liability (non-employee)		\$1,912
- fire/theft		\$1,513
Property Taxes		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$1,452
Dues, fees, publications		\$436
Farmstead Equipment		\$182
	Total	\$35,879
	Total Per Planted Acre	\$36.31

TABLE 4. Equipment summary for a 1,280 acre, dryland farm with above average management, Rogers-Dora area, Roosevelt County, Projected 2017

EQUIPMENT ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS			FIXED COSTS				
				FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR	
TRACTOR	95 HP	146	1	\$17,335	\$1,867	\$138	\$12.79	\$0.94	\$525	\$53	\$3.96
TRACTOR	# HP	295	1	\$40,865	\$6,210	\$1,688	\$21.07	\$5.39	\$5,985	\$302	\$21.33
TRUCK	2 TON	136	1	\$23,000	\$2,065	\$891	\$14.93	\$6.64	\$4,600	\$155	\$34.37
PLANTER	8 ROW	50	1	\$5,500		\$133		\$2.64	\$1,100	\$37	\$22.56
CULTIVATOR	8 ROW	42	1	\$4,000		\$208		\$4.96	\$533	\$27	\$13.34
DISC	18 FT OFFSET	28	1	\$7,500		\$1,011		\$36.30	\$1,000	\$51	\$50.66
DRILL	40 FT	28	1	\$7,750		\$1,016		\$37.72	\$1,550	\$82	\$56.40
LISTER	8 ROW	35	1	\$3,200		\$150		\$3.97	\$427	\$22	\$11.86
STUBBLE MULCHER	20 FT	99	1	\$6,500		\$796		\$8.06	\$867	\$44	\$9.21
SPRAYER (MTD)	# HP	28	1	\$1,500		\$18		\$0.72	\$200	\$10	\$8.34
COMBINE	# HP	138	1	\$51,677	\$2,715	\$368	\$19.63	\$2.66	\$8,864	\$448	\$67.30
GRAIN HEAD	22 FT	138	1	\$3,000		\$21		\$0.15	\$501	\$25	\$3.81
ROD WEEDER	37 FT	49	1	\$1,150		\$70		\$1.43	\$153	\$8	\$3.26
				\$173,576	\$12,858	\$6,498			\$26,305	\$1,233	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL UNIT/HR	LUBE COEF	ACCUM HOURS	AGE	INTEREST 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	# HP	89775.00	49864.50	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	352.50
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			1739.23	16.00	412.50
DRILL	40 FT	15500.00	7750.00	10.00	8.00	100.00			369.33	13.00	429.25
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)	# HP	3000.00	1500.00	15.00	8.00	150.00			378.00	15.00	62.50
COMBINE	# HP	132855.00	51676.50	15.00	2.00	300.00	6.96	0.20	1798.52	13.00	3656.26
GRAIN HEAD	22 FT	7500.00	3800.00	15.00	2.00	300.00			1798.52	13.00	208.80
ROD WEEDER	37 FT	2300.00	1150.00	15.00	3.00	300.00			741.15	15.00	63.25

GRAIN PER ACRE

GRAIN	WHEAT	TOTALS
----- per acre -----		
0.28	0.05	0.33
0.35	0.26	0.61
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	WHEAT	TOTALS
----- dollars per acre -----		
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	0.00	0.42
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	ACCOMPLISHMENT			
		TIMES OVER	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 WEED	165 HP	1.00	0.05	0.05	
PLANTER	83 HP	1.00	0.12	0.12	
CULTIVATOR	83 HP	1.00	0.10	0.10	
SPRAYER	83 HP	1.00	0.06	0.06	

WHEAT ACRES: 568.2 PUMP WATER:

MACHINE	POWER UNIT	ACCOMPLISHMENT			
		TIMES OVER	RATE	TOTAL	CUSTOM
STUBBLE MULCH	165 HP	1.00	0.10	0.10	
DISC	165 HP	1.00	0.11	0.11	
RODWEED	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	0.00060	0.00002	0.00014	0.00022	0.00010	0.00038	0.00030
200	0.00003	0.00003	0.00043	0.00018	0.00026	0.00018	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	0.00035	0.00010	0.00028	0.00037	0.00017	0.00080	0.00053
600	0.00003	0.00009	0.00034	0.00012	0.00031	0.00039	0.00019	0.00086	0.00053
700	0.00003	0.00010	0.00034	0.00013	0.00033	0.00041	0.00020	0.00091	0.00056
800	0.00003	0.00011	0.00032	0.00015	0.00035	0.00043	0.00021	0.00096	0.00056
900	0.00003	0.00012	0.00032	0.00016	0.00037	0.00045	0.00023	0.00102	0.00060
1000	0.00009	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 hoe, disks, moldboard plows, chisels, field cultivators
- row cultivators, laser plane
- 4 harrows, wagons, floats, roto buck, drag, roller, water furrow, bed shaper
- 5 balewagons, cotton pickers, cotton strippers, corn pickers
- corn heads, forage equipment, rotary mowers, stalk choppers,
- feed wagons, farm trucks
- 6 rakes, cuttler mowers
- 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, Projected 2017
 Planting Dates: May 15 - May 30
 Harvest Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
GRAIN SORGHUM	\$5.91	15.00 CWT		\$88.71
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
TOTAL				\$93.71

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.70	3 LBS	\$5.10		\$5.10
INSECTICIDE	\$15.88	1 X/ACRE	\$15.88		\$15.88
CROP INSURANCE	\$0.12		\$0.12		\$0.12
SUBTOTAL			\$21.10		\$21.10

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	165 HP	0.11 HR		\$0.94	\$2.32	\$1.62	\$3.41	\$8.28
STUBBLE MULCH	165 HP	0.10 HR		\$0.86	\$2.11	\$1.34	\$3.05	\$7.36
LISTER	165 HP	0.09 HR		\$0.77	\$1.90	\$0.84	\$2.99	\$6.49
ROD WEED	165 HP	0.05 HR		\$0.43	\$1.05	\$0.34	\$1.23	\$3.05
PLANTER	93 HP	0.12 HR		\$1.03	\$1.53	\$0.43	\$3.18	\$6.17
CULTIVATOR	93 HP	0.10 HR		\$0.86	\$1.28	\$0.59	\$1.73	\$4.45
SPRAYER	93 HP	0.06 HR		\$0.51	\$0.77	\$0.10	\$0.74	\$2.12
SUBTOTAL		0.63 HR		\$5.39	\$10.96	\$5.26	\$16.33	\$37.94

HARVEST OPERATIONS								
COMBINE		0.14 HR		\$1.20	\$2.75	\$0.39	\$9.96	\$14.29
HAUL	2 TON	0.14 HR		\$1.20	\$2.09	\$0.90	\$4.81	\$9.00
SUBTOTAL		0.28 HR		\$2.39	\$4.84	\$1.29	\$14.77	\$23.29

OVERHEAD EXPENSES								
DOWNTIME		0.12 HR		\$1.00				\$1.00
EMPLOYEE BENEFITS				\$1.40				\$1.40
INSURANCE				\$0.16				\$0.16
LAND TAXES							\$0.60	\$0.60
SUPERVISION AND MANAGEMENT				\$7.08				\$7.08
OTHER EXPENSES				\$36.31				\$36.31
SUBTOTAL		0.12 HR		\$36.46	\$9.48		\$0.60	\$46.54

TOTAL OPERATING EXPENSES 1.03 HR \$57.57 \$17.26 \$15.79 \$6.56 \$31.70 \$128.88

NET OPERATING PROFIT (\$35.16)

INTEREST ON OPERATING CAPITAL (\$15.12 @ 5.50%) \$0.83
 INTEREST ON EQUIPMENT INVESTMENT \$11.65

RETURN TO LAND AND RISK (\$47.65)

BUDGET SUMMARY

GROSS RETURN		\$93.71	
VARIABLE OPERATING EXPENSES	\$79.92		
RETURN OVER VARIABLE EXPENSES		\$13.80	(GROSS MARGIN)
FIXED EXPENSES	\$31.70		
NET FARM INCOME		(\$17.90)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$17.26		
NET OPERATING PROFIT		(\$35.16)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$12.49		
RETURN TO LAND AND RISK		(\$47.65)	

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, Projected 2017
 Planting dates: August 15 - September 15
 Harvesting dates: June 1 - June 25

ITEM	PRICE	YIELD	BASE						TOTAL
GROSS RETURNS									
WHEAT	\$4.20	18.00 BUSHELS							\$75.60
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
TOTAL									\$85.60
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
SEED	\$0.44	30 LB	\$13.20					\$13.20	
CROP INSURANCE	\$0.09		\$0.09					\$0.09	
			\$13.29					\$13.29	
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
STUBBLE MULCH	165 HP	0.10 HR		\$0.86	\$2.11	\$1.34	\$3.05	\$7.36	
DISC	165 HP	0.11 HR		\$0.94	\$2.32	\$1.62	\$3.41	\$8.28	
RODWEED	165 HP	0.05 HR		\$0.43	\$1.05	\$0.34	\$1.23	\$3.05	
DRILL	93 HP	0.05 HR		\$0.43	\$0.64	\$0.23	\$3.02	\$4.32	
SUBTOTAL		0.31 HR		\$2.65	\$6.12	\$3.53	\$10.71	\$23.01	
HARVEST OPERATIONS									
COMBINE		0.14 HR		\$1.20	\$2.75	\$0.39	\$9.96	\$14.29	
HAUL	2 TON	0.14 HR		\$1.20	\$2.09	\$0.90	\$4.81	\$9.00	
SUBTOTAL		0.28 HR		\$2.39	\$4.84	\$1.29	\$14.77	\$23.29	
OVERHEAD EXPENSES									
DOWNTIME		0.10 HR		\$0.86				\$0.86	
EMPLOYEE BENEFITS				\$0.91				\$0.91	
INSURANCE			\$0.10					\$0.10	
LAND TAXES							\$0.60	\$0.60	
SUPERVISION AND MANAGEMENT				\$6.15				\$6.15	
OTHER EXPENSES			\$36.31					\$36.31	
SUBTOTAL		0.10 HR	\$36.41	\$7.91			\$0.60	\$44.92	
TOTAL OPERATING EXPENSES		0.69 HR	\$49.61	\$12.95	\$10.96	\$4.83	\$26.08	\$104.43	
NET OPERATING PROFIT									(\$18.83)
INTEREST ON OPERATING CAPITAL		(\$9.52 @	5.50%)					\$0.52
INTEREST ON EQUIPMENT INVESTMENT									\$9.11
RETURN TO LAND AND RISK									(\$28.46)
BUDGET SUMMARY									
GROSS RETURN		\$85.60							
VARIABLE OPERATING EXPENSES	\$65.39								
RETURN OVER VARIABLE EXPENSES	\$20.21	(GROSS MARGIN)							
FIXED EXPENSES	\$26.08								
NET FARM INCOME		(\$5.87)	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$12.95								
NET OPERATING PROFIT		(\$18.83)	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$9.63								
RETURN TO LAND AND RISK		(\$28.46)							

TABLE 7. Summary of per acre costs and returns for a 1,280 acre farm, Roosevelt County,
Projected 2017

	GRAIN SORGHUM	WHEAT
	CWT	BU
PRIMARY YIELD	15.00	18.00
PRIMARY PRICE	\$5.91	\$4.20
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$5.00	\$10.00
GROSS RETURN	\$93.71	\$85.60
CASH OPERATING EXPENSES		
SEED	\$5.10	\$13.20
FERTILIZER		
CHEMICALS	\$15.88	
CROP INSURANCE	\$0.12	\$0.09
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$15.79	\$10.96
FUEL-IRRIGATION		
REPAIRS	\$6.56	\$4.83
CUSTOM CHARGES	\$0.00	\$0.00
LAND TAXES	\$0.60	\$0.60
OTHER EXPENSES	\$36.46	\$36.41
TOTAL CASH EXPENSES	\$80.52	\$66.08
RETURN OVER CASH EXPENSES	\$13.20	\$19.52
FIXED EXPENSES	\$31.10	\$25.48
TOTAL EXPENSES	\$111.62	\$91.56
NET FARM INCOME	(\$17.90)	(\$5.96)
LABOR AND MANAGEMENT COSTS	\$17.26	\$12.95
NET OPERATING PROFIT	(\$35.16)	(\$18.91)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$0.83	\$0.52
INTEREST ON EQUIPMENT INVESTMENT	\$11.65	\$9.11
TOTAL CAPITAL COSTS	\$12.49	\$9.63
RETURN TO LAND AND RISK	(\$47.65)	(\$28.55)

TABLE 8. Whole farm summary, Rogers-Dora area, Roosevelt County,
Projected 2017

GROSS RETURNS		
GRAIN SORGHUM	420.00 ACRES	
CROP		\$37,260
GRAZING		\$2,100
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
WHEAT	568.20 ACRES	
CROP		\$42,956
GRAZING		\$5,682
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$87,998</u>
CASH OPERATING EXPENSES		
SEED		\$9,642
FERTILIZER		\$0
CHEMICALS		\$6,672
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$12,858
FUEL-IRRIGATION		\$0
REPAIRS		\$5,498
CUSTOM CHARGES		\$0
LAND TAXES		\$592
OTHER EXPENSES		\$36,002
TOTAL CASH EXPENSES		<u>\$71,364</u>
RETURN OVER CASH EXPENSES		\$16,634
FIXED EXPENSES		\$27,538
TOTAL EXPENSES		\$98,902
NET FARM INCOME		(\$10,904)
LABOR AND MANAGEMENT COSTS		\$14,610
NET OPERATING PROFIT		(\$25,515)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$647
INTEREST ON EQUIPMENT INVESTMENT		\$10,070
TOTAL CAPITAL COSTS		<u>\$10,717</u>
RETURN TO LAND AND RISK		<u>(\$36,231)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$41,991)	-6.98%
\$200 /ACRE	(\$43,911)	-5.94%
\$250 /ACRE	(\$45,831)	-5.17%
\$300 /ACRE	(\$47,751)	-4.58%
\$350 /ACRE	(\$49,671)	-4.10%
\$400 /ACRE	(\$51,591)	-3.72%

* 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)