

Table 8A. Income and Cash Operating Cost Summary, Grain Sorghum, 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: Ks NG TILLAGE: Conventional
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Sorghum(Milo), G DATE: 10/08/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Grain	Pound	3,600.00	\$0.0682	\$245.52	\$245.52	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					44.91	
Tractor/Self Propelled				24.34		
Irrigation				20.58		
Chemicals & Custom Applications					58.26	
Fertilizers				14.49		
Insecticides				31.79		
Herbicides				11.98		
Farm Machinery and Vehicles					29.73	
Diesel Fuel				13.12		
Repairs & Maint.				16.61		
Irrigation (excluding labor)					150.48	
Natural Gas/Pumping				129.03		
Repairs & Maint.				21.45		
Other Purchased Inputs & Services					7.56	
Seed/Transplants				7.56		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					290.94	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					3.43	
Tractor/Self Propelled				3.43		
Farm Machinery and Vehicles					3.50	
Diesel Fuel				1.63		
Repairs & Maint.				1.87		
Custom Harvest/Post Harvest					39.10	
TOTAL HARVEST AND POST HARVEST EXPENSE					46.03	
OPERATING OVERHEAD->PICKUP USE					10.57	
OPERATING INTEREST AT 8.0%					5.23	
TOTAL CASH OPERATING EXPENSES					\$352.78	
RETURNS OVER CASH OPERATING EXPENSES					(\$107.26)	

Notes: The above figures do not include ownership costs, see Table 8B on Next Page for detailed cost allocation.

Table 8B. Allocation of Ownership Costs; Grain Sorghum, 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: Ks NG TILLAGE: Conventional
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Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 0.0682/Lb	\$245.52		\$245.52	
TOTAL OPERATING EXPENSES	352.77		352.77	
RETURN OVER CASH OPERATING EXPENSES		(\$107.25)		(\$107.25)
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	3.71		3.71	
Wells & Irrig. System	11.47		11.47	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	17.63		17.63	
General Farm Maint. (3% of Tot. Oper. Exp.)	10.58		10.58	
Total Cash Overhead Expenses	<u>43.39</u>		<u>43.39</u>	
Total Cash Oper. & Over. Cost	396.17		396.17	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		(150.65)		(150.65)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			20.19	
Wells & Irrig. System			43.73	
Interest on Equity, Machinery & Vehicles			11.13	
Wells & Irrig. System			21.99	
Total Capital Allocations			<u>97.04</u>	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		(150.65)		
RETURNS TO LAND, MANAGEMENT & RISK				(247.70)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$260 X 16% X .14112)	5.87		5.87	
Opport. Inter. on Land (100% X 6.0% X \$260)			<u>15.60</u>	
Total Land Costs	<u>5.87</u>		<u>21.47</u>	
RETURNS TO MANAGEMENT, CAPITAL & RISK		(156.52)		
RETURNS TO MANAGEMENT & RISK				(269.17)
Management Services (8% of Tot. Oper. Exp.)			28.22	
TOTAL OWNERSHIP COST	<u>49.26</u>		<u>190.13</u>	
TOTAL COST	<u>\$402.04</u>		<u>\$542.91</u>	
RETURN TO MANAGEMENT, CAPITAL & RISK		(\$156.52)		
RETURN TO RISK (PROFITS)				(\$297.39)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.0979		\$0.0979
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0136		\$0.0528
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.1116		\$0.1508

Table 8C. Variable Operating Costs; Grain Sorghum, 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: Ks NG TILLAGE: Conventional
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 AREA: Kansas Settlement YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Sorghum(Milo), G DATE: 10/08/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)					Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total			
1	Nov	Plow	0.360	0.400	4.65	3.36			8.01	1.0	8.01	L
2	Nov	Disk	0.129	0.143	1.80	1.20			3.00	1.0	3.00	L
3	Feb	Landplane	0.900	1.000	10.04	8.41			18.45	1.0	18.45	L
4	Mar	List	0.225	0.250	3.06	2.10		11.98	17.14	1.0	17.14	L
5	Apr	Apply Fert/Inject	0.150	0.167	1.71	1.40		14.49	17.60	1.0	17.60	G
6	Apr	Buck Rows	0.022	0.025	0.17	0.21			0.38	1.0	0.38	G
7	Apr	Preirrigate		0.704	35.83	4.93			40.76	1.0	40.76	G
8	Apr	Mulch	0.150	0.167	1.14	1.40			2.54	1.0	2.54	L
9	Apr	Plant	0.225	0.250	2.79	2.10		7.56	12.45	1.0	12.45	L
10	May	Remove Cap	0.150	0.167	1.14	1.40			2.54	1.0	2.54	G
11	Jun	Irrigate		0.279	14.33	1.96			16.29	8.0	130.32	G
12	Jun	Apply Insecticide/Air						7.34	12.66	1.0	20.00	G
13	Jul	Cultivate	0.164	0.182	1.42	1.53			2.95	1.0	2.95	G
14	Jul	Apply Insecticide/Air						6.00	5.79	1.0	11.79	G
15	Oct	Prepare Ends	0.022	0.025	0.26	0.21			0.47	1.0	0.47	H
16	Oct	Combine Harvest						30.10		1.0	30.10	H
17	Oct	Field Transport	0.180	0.200	1.70	1.68			3.38	1.0	3.38	H
18	Oct	Haul 5 MI						9.00		1.0	9.00	H
19	Nov	Cut Stalks	0.164	0.183	1.54	1.54			3.08	1.0	3.08	P
20	Nov	Disk Residue	0.129	0.143	1.80	1.20			3.00	1.0	3.00	L
		Pickup Use 40 Mi/Ac	1.330		10.57						10.57	O
		Operating Interest at 8.00%						8.76			8.76	O
TOTAL CASH OPERATING EXPENSES:					\$194.27	\$48.35	\$61.20	\$52.48			\$356.30	T

* NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The 'Tot. Cash Expense' column and the 'TOTAL CASH OPERATING EXPENSES:' row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$64.59								
Growing (G)	226.34								
Harvest (H)	42.95	Yields		\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	Break-even
Post Harvest (P)	3.08								
Marketing (M)	0.00	-25%	2,700.0	-206.69	-179.07	-160.65	-142.24	-114.62	0.12
Operating Overhead (O)	19.33	-10%	3,240.0	-185.97	-152.83	-130.73	-108.63	-75.49	0.10
		Budgeted	3,600.0	-172.16	-135.33	-110.78	-86.23	-49.40	0.09
		+10%	3,960.0	-158.35	-117.84	-90.83	-63.82	-23.31	0.09
		+25%	4,500.0	-137.63	-91.60	-60.91	-30.22	15.81	0.08
Total (T)	\$356.30	Break-even Yield		8,087.79	6,385.11	5,599.26	4,985.64	4,281.79	

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 AREA: Kansas Settlement YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Sorghum(Milo), G DATE: 10/08/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P			0.27		3.23	2.28				5.51
DEC P			0.27		3.23	2.28				5.51
FEB C			1.00		10.04	8.41				18.45
MAR C			0.25		3.06	2.10	11.98			17.14
APR C	1.0	10.0	1.18		40.25	9.00	14.49	3.78		67.52
MAY C			0.29		2.54	2.46		3.78		8.77
JUN C	2.0	8.0	0.55		28.66	3.91	12.66		5.50	50.73
JUL C	3.0	12.0	1.01		44.41	7.40	5.79		6.00	63.59
AUG C	2.0	8.0	0.55		28.66	3.91				32.57
SEP C	1.0	4.0	0.27		14.33	1.96				16.29
OCT C			0.14		1.28	1.22			15.50	18.00
NOV C			0.40		4.03	3.41			11.00	18.44
Pickup Use 40 Mi/Ac					10.57					10.57
Operating Interest at 8.0%									8.72	8.72
Total	9.0	42.0	6.23		194.27	48.35	44.92	7.56	46.72	341.82
%					56.83	14.14	13.14	2.21	13.66	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	65.6 lbs	Diesel Fuel	16.3 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	4.0 Gal
Total Labor	6.2 Hrs		
Total Water	42.0 AI	Natural Gas/Pumping	339.6 Therms
		All Direct Energy	36.7 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 100 PTO HP, MFWD	1.59 Hrs	Moldboard Plow, 4-16 2 Way	0.36 Hrs
Offset Disk, 16.5'	0.28 Hrs	Landplane 12'X 45'	0.90 Hrs
Saddle Tk Sprayer, 2 Tk 8 Row	0.23 Hrs	Fertilizer Injector, 4 Row	0.15 Hrs
Section Harrow, 3 Section	0.30 Hrs	Planter, 4 Row	0.23 Hrs
Grain Cart, 400 BU	0.18 Hrs	Rotary Stalk Cutter, 4 Row	0.16 Hrs
		Tractor, 125 PTO HP, MFWD	1.38 Hrs
		Lister, 5 Bottom	0.23 Hrs
		Rowbuck, 10'	0.02 Hrs
		Rolling Cultivator, 4 Rw	0.16 Hrs
		Pickup Truck, 1/2 Ton	1.33 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Metolachlor	1.50 Pt	82-00-00, Anhyd. Ammonia	80.00 Lb
Grain Sorghum Sd	8.00 Lb	Phorate	6.66 Lb
		Water, Pump	42.00 AI
		Malathion	1.50 Pt

LABOR REQUIREMENTS (/Acre)			
Tractor	3.30 Hrs	Irrigators	2.94 Hrs

* NOTE: P = Previous Year C = Current Year N = Next Year

Table 8E Schedule of Operations; Grain Sorghum, 1996

COUNTY: Cochise FARM: Cochise County Farm WATER SOURCE: Ks NG TILLAGE: Conventional
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Sorghum(Milo), G DATE: 10/08/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Name	Material Use & Cost		Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.			Appl. Rate	\$/Unit		
1	Nov	1.0	Plow	100	Moldboard Plow, 4-16 2	2.50					Tractor
2	Nov	1.0	Disk	125	Offset Disk, 16.5'	7.00					Tractor
3	Feb	1.0	Landplane	125	Landplane 12'X 45'	1.00					Tractor
4	Mar	1.0	List	125	Lister, 5 Bottom Saddle Tk Sprayer, 2 Tk	4.00	Metolachlor	1.50 Pt	60.84 Ga		Tractor
5	Apr	1.0	Apply Fert/Inject	100	Fertilizer Injector, 4	6.00	82-00-00, Anhyd. A	80.00 Lb	345.00 Tn		Tractor
6	Apr	1.0	Buck Rows	100	Rowbuck, 10'	40.00					Tractor
7	Apr	1.0	Preirrigate			1.42	Water, Pump	10.00 AI	42.99 AF		Irrigator
8	Apr	1.0	Mulch	100	Section Harrow, 3 Secti	6.00					Tractor
9	Apr	1.0	Plant	100	Planter, 4 Row	4.00	Grain Sorghum Sd	8.00 Lb	90.00 CW		Tractor
10	May	1.0	Remove Cap	100	Section Harrow, 3 Secti	6.00					Tractor
11	Jun	8.0	Irrigate			3.58	Water, Pump	4.00 AI	42.99 AF		Irrigator
12	Jun	1.0	Apply Insecticide/Air		CST Air Apply Granules		Phorate	6.66 Lb	1.81 Lb	5.50 Ac	
13	Jul	1.0	Cultivate	100	Rolling Cultivator, 4 R	5.50					Tractor
14	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Malathion	1.50 Pt	29.42 Ga	6.00 Ac	
15	Oct	1.0	Prepare Ends	100	Offset Disk, 16.5'	40.00					Tractor
16	Oct	1.0	Combine Harvest		CST Combine Grain Sorgh					17.50 Ac	
17	Oct	1.0	Field Transport	100	Grain Cart, 400 BU	5.00					Tractor
18	Oct	1.0	Haul		CST Haul Grain					0.25 CW	
19	Nov	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4	5.50					Tractor
20	Nov	1.0	Disk Residue	125	Offset Disk, 16.5'	7.00					Tractor
			Pickup Use 40 Mi/Ac		Pickup Truck, 1/2 Ton	0.75					

* NOTE: Machine times, labor times, and material rates are for one time over the designated acreage.