

Table 10A. Income and Cash Operating Cost Summary, Grain Sorghum (Dbl. Crop), 1996

COUNTY: Graham FARM: Graham County Farm WATER SOURCE: Both TILLAGE: Double Cropped  
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Barley DATE: 10/14/96

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)					56.45	
Tractor/Self Propelled				33.74		
Irrigation				22.71		
Chemicals & Custom Applications					44.60	
Fertilizers				27.17		
Insecticides				8.57		
Herbicides				8.86		
Farm Machinery and Vehicles					39.53	
Diesel Fuel				19.49		
Repairs & Maint.				20.03		
Irrigation (excluding labor)					15.41	
Pump Energy - Elect.				14.48		
Repairs & Maint.				0.92		
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					9.45	
Seed/Transplants				9.45		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					165.44	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					2.80	
Tractor/Self Propelled				2.80		
Farm Machinery and Vehicles					3.10	
Diesel Fuel				1.62		
Repairs & Maint.				1.48		
Custom Harvest/Post Harvest					39.10	
TOTAL HARVEST AND POST HARVEST EXPENSE					45.00	
OPERATING OVERHEAD->PICKUP USE					9.91	
OPERATING INTEREST AT 8.0%					2.65	
TOTAL CASH OPERATING EXPENSES					\$223.00	
RETURNS OVER CASH OPERATING EXPENSES					\$22.52	

Notes: The above figures do not include ownership costs, see Table 10B on Next Page for detailed cost allocation.

\*\* A water assessment charge of \$17.50/Acre is included in the ownership costs of Table 10B.



Table 10C. Variable Operating Costs; Grain Sorghum (Dbl. Crop), 1996

COUNTY: Graham FARM: Graham County Farm WATER SOURCE: Both TILLAGE: Double Cropped  
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 AREA: Safford Valley YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Barley DATE: 10/14/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)					Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total			Times
1	Jun	Disk	0.300	0.333	3.59	2.80			6.39	1.0	6.39	L
2	Jun	List	0.225	0.250	2.35	2.10			4.45	1.0	4.45	L
3	Jun	Disk Ends	0.030	0.033	0.36	0.28			0.64	4.0	2.56	G
4	Jun	Buck Rows	0.030	0.033	0.26	0.28			0.54	3.0	1.62	G
5	Jun	Preirrigate		0.667		4.67			4.67	0.7	3.27	G
6	Jun	Preirrigate		1.000	14.01	7.01			21.02	0.3	6.31	G
7	Jul	Mulch	0.300	0.333	3.51	2.80			6.31	1.0	6.31	L
8	Jul	Plant	0.300	0.333	4.00	2.80		9.45	16.25	1.0	16.25	L
9	Jul	Remove Cap	0.180	0.200	1.54	1.68			3.22	1.0	3.22	G
10	Jul	Cultivate	0.450	0.500	4.50	4.20			8.70	2.0	17.41	G
11	Jul	Apply Fert/Ground	0.300	0.333	3.70	2.80		27.17	33.67	1.0	33.67	G
12	Jul	Irrigate		0.538		3.77			3.77	0.7	2.64	G
13	Jul	Irrigate		0.806	9.34	5.65			14.99	0.3	4.50	G
14	Jul	Apply Herbicide/Ground					6.00	2.86	8.86	1.0	8.86	G
15	Aug	Cultivate	0.300	0.333	3.00	2.80			5.80	2.0	11.61	G
16	Aug	Irrigate		0.403		2.82			2.82	2.8	7.90	G
17	Aug	Irrigate		0.606	7.00	4.25			11.25	1.2	13.50	G
18	Sep	Apply Insecticide/Air						8.57	8.57	1.0	8.57	G
19	Nov	Combine Harvest					30.10		30.10	1.0	30.10	H
20	Nov	Haul, Custom 36.0 CW					9.00		9.00	1.0	9.00	H
21	Dec	Cut Stalks	0.300	0.333	3.10	2.80			5.90	1.0	5.90	P
22	Dec	Disk Residue	0.300	0.333	3.59	2.80			6.39	1.0	6.39	L
		Pickup Use 40 Mi/Ac	1.330		9.90						9.90	O
		Operating Interest at 8.00%						2.92			2.92	O
TOTAL CASH OPERATING EXPENSES:					\$67.94	\$59.24	\$48.02	\$48.05			\$223.25	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. A water assessment charge of \$17.50/Acre included as ownership cost in Table 10B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$39.79								
Growing (G)	125.62								
Harvest (H)	39.10	Yields		\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	Break-even
Post Harvest (P)	5.90								
Marketing (M)	0.00	-25%	2,700.0	-73.89	-46.27	-27.86	-9.44	18.17	0.07
Operating Overhead (O)	12.82	-10%	3,240.0	-53.02	-19.87	2.21	24.31	57.45	0.06
		Budgeted	3,600.0	-39.11	-2.28	22.26	46.82	83.64	0.06
Total (T)	\$223.25	+10%	3,960.0	-25.19	15.31	42.32	69.32	109.83	0.05
		+25%	4,500.0	-4.32	41.70	72.39	103.08	149.12	0.05
		Break-even Yield		4,611.91	3,646.69	3,200.18	2,851.09	2,450.17	

Table 10D. Resource and Cash Flow Requirements; Grain Sorghum (Dbl. Crop), 1996

COUNTY: Graham FARM: Graham County Farm WATER SOURCE: Both TILLAGE: Double Cropped  
 CROP: Sorghum (Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Barley DATE: 10/14/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUN C	1.0	12.0	1.44		11.12	11.11				22.23
JUL C	1.0	8.0	2.88		25.19	23.38	30.03	9.45	6.00	94.05
AUG C	2.0	12.0	1.62		10.47	12.38				22.85
SEP C	2.0	12.0	0.92		4.20	6.50	8.57			19.27
OCT C			0.03		0.36	0.28				0.64
NOV C									26.50	26.50
DEC C			0.66		6.69	5.60				12.29
Pickup Use 40 Mi/Ac					9.90					9.90
Operating Interest at 8.0% Water Assessment				**					2.91	2.91
<b>Total</b>	<b>6.0</b>	<b>44.0</b>	<b>7.58</b>		<b>67.94</b>	<b>59.25</b>	<b>38.60</b>	<b>9.45</b>	<b>35.41</b>	<b>210.65</b>
%					32.25	28.12	18.32	4.48	16.80	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	123.0 lbs	Diesel Fuel	19.3 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	4.0 Gal
Total Labor	7.5 Hrs	Electricity/Pumping	146.0 KWH
Total Water	44.0 AI	All Direct Energy	3.6 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 100 PTO HP, MFWD	3.92 Hrs	Offset Disk, 13.5'	0.72 Hrs Lister, 5 Bottom 0.23 Hrs
Rowbuck, 10'	0.09 Hrs	Power Mulcher, 4 Rw	0.30 Hrs Planter, 4 Row 0.30 Hrs
Section Harrow, 3 Section	0.18 Hrs	Cultivator, Sweep, 4 Rw	1.50 Hrs Fertilizer Injector, 4 Row 0.30 Hrs
Rotary Stalk Cutter, 4 Row	0.30 Hrs	Pickup Truck, 1/2 Ton	1.33 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Water, District	30.80 AI	Water, Pump	13.20 AI Grain Sorghum Sd 10.00 Lb
82-00-00, Anhyd. Ammonia	150.00 Lb	Atrazine	1.25 Lb Carbaryl 2.00 Lb

LABOR REQUIREMENTS (/Acre)			
Tractor	4.35 Hrs	Irrigators	3.24 Hrs

\* NOTE: P = Previous Year C = Current Year N = Next Year  
 \*\* A water assessment charge of \$17.50/Acre included as ownership cost in Table 10B.

Table 10E Schedule of Operations; Grain Sorghum (Dbl. Crop), 1996

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 AREA: Safford Valley YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Barley DATE: 10/14/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor \$/Unit	Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit			
1	Jun	1.0	Disk	100	Offset Disk, 13.5'	3.00						Tractor
2	Jun	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
3	Jun	4.0	Disk Ends	100	Offset Disk, 13.5'	30.00						Tractor
4	Jun	3.0	Buck Rows	100	Rowbuck, 10'	30.00						Tractor
5	Jun	0.7	Preirrigate			1.50	Water, District	12.00 AI	0.00 AF			Irrigator
6	Jun	0.3	Preirrigate			0.99	Water, Pump	12.00 AI	14.00 AF			Irrigator
7	Jul	1.0	Mulch	100	Power Mulcher, 4 Rw	3.00						Tractor
8	Jul	1.0	Plant	100	Planter, 4 Row	3.00	Grain Sorghum Sd	10.00 Lb	90.00 CW			Tractor
9	Jul	1.0	Remove Cap	100	Section Harrow, 3 Secti	5.00						Tractor
10	Jul	2.0	Cultivate	100	Cultivator, Sweep, 4 Rw	2.00						Tractor
11	Jul	1.0	Apply Fert/Ground	100	Fertilizer Injector, 4	3.00	82-00-00, Anhyd. A	150.00 Lb	345.00 Tn			Tractor
12	Jul	0.7	Irrigate			1.86	Water, District	8.00 AI	0.00 AF			Irrigator
13	Jul	0.3	Irrigate			1.24	Water, Pump	8.00 AI	14.00 AF			Irrigator
14	Jul	1.0	Apply Herbicide/Groun		CST Air Spray, 3 Gal Mi		Atrazine	1.25 Lb	2.18 Lb	6.00 Ac		
15	Aug	2.0	Cultivate	100	Cultivator, Sweep, 4 Rw	3.00						Tractor
16	Aug	2.8	Irrigate			2.48	Water, District	6.00 AI	0.00 AF			Irrigator
17	Aug	1.2	Irrigate			1.65	Water, Pump	6.00 AI	14.00 AF			Irrigator
18	Sep	1.0	Apply Insecticide/Air				Carbaryl	2.00 Lb	4.08 Lb			
19	Nov	1.0	Combine Harvest		CST Combine Grain Sorgh					17.50 Ac		
20	Nov	1.0	Haul, Custom		CST Haul Grain					0.25 CW		
21	Dec	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4	3.00						Tractor
22	Dec	1.0	Disk Residue	100	Offset Disk, 13.5'	3.00						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.

\*\* A water assessment charge of \$17.50/Acre included as ownership cost in Table 10B.