

**Table 7A. Income and Cash Operating Summary; Grain Sorghum (Dbl. Crop), 1998**

COUNTY: Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Double Cropped  
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Watermelons DATE: 2/4/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Grain	Pound	3,200.00	\$0.11	\$352.00	\$352.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					52.24	_____
Tractor/Self Propelled				30.13		_____
Irrigation				22.12		_____
Chemicals and Custom Applications					43.29	_____
Fertilizer				25.08		_____
Insecticide				10.04		_____
Herbicide				8.16		_____
Farm Machinery and Vehicles					32.60	_____
Diesel Fuel				13.05		_____
Repairs and Maintenance				19.55		_____
Irrigation Water (excluding labor)					12.24	_____
Pump Energy - Electric				11.31		_____
Repairs and Maintenance				0.92		_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				10.02	10.02	_____
					-----	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					150.38	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					2.73	_____
Tractor/Self Propelled				2.73		_____
Farm Machinery and Vehicles					5.17	_____
Diesel Fuel				1.53		_____
Repairs and Maintenance				3.64		_____
Custom Harvest/Post Harvest					59.10	_____
					-----	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					67.00	_____
OPERATING OVERHEAD PICKUP USE					10.09	_____
OPERATING INTEREST AT 10.0%					8.45	_____
					-----	_____
TOTAL CASH OPERATING EXPENSES					\$235.93	_____
RETURNS OVER CASH OPERATING EXPENSES					\$116.07	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 7B. Allocations of Ownership Costs; Grain Sorghum (Dbl. Crop), 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Double Cropped  
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 AREA: Safford Valley YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Watermelons DATE: 2/4/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.11 / Lb	\$352.00		\$352.00	
TOTAL OPERATING EXPENSES	\$235.93		\$235.93	
RETURN OVER CASH OPERATING EXPENSES		\$116.07		\$116.07
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	4.09		4.09	
Wells and Irrigation System	4.41		4.41	
General and Office Overhead (5.0% of Total Operating Exp.)	11.80		11.80	
General Farm Maintenance (3.0% of Total Operating Exp.)	7.08		7.08	
Total Cash Overhead Expenses	27.37		27.37	
Total Cash Operating and Overhead Cost	263.30		263.30	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$88.70		\$88.70
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			22.98	
Wells and Irrigation System			8.31	
Interest on Equity, Machinery and Vehicles			9.78	
Wells and Irrigation System			3.01	
Total Capital Allocations			44.08	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$88.70		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$44.62
Land Cost / Ownership (100% Equity)				
Property Taxes (\$600.00 X 16.0% X 0.093)	4.46		4.46	
Opportunity Interest on Land (100% X 6.0 X \$600.00)			18.00	
Water Assessment	12.50		12.50	
Total Land Costs	16.96		34.96	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$71.73		
RETURNS TO MANAGEMENT AND RISK ----->				\$9.66
Management Services (8% of Total Operation Expenses)			18.87	
TOTAL OWNERSHIP COST	44.34		125.29	
TOTAL COST	\$280.27		\$361.22	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$71.73		
RETURNS TO RISK (PROFITS) ----->				(\$9.22)
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$0.07		\$0.07
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.04
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.09		\$0.11

**Table 7C. Variable Operating Costs; Grain Sorghum (Dbl. Crop), 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Double Cropped  
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 AREA: Safford Valley YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Watermelons DATE: 2/4/99

No.	First Month	Operation	--- Hours * ---		--- Operating Costs (\$/ACRE *) Per Operation ---					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Jun	Disk	0.300	0.333	4.47	2.73			7.19	1.0	7.19	L
2	Jun	List	0.225	0.250	1.92	2.05			3.97	1.0	3.97	L
3	Jun	Disk Ends	0.030	0.033	0.45	0.27			0.72	4.0	2.87	G
4	Jun	Buck Rows	0.030	0.033	0.22	0.27			0.49	3.0	1.47	G
5	Jun	Preirrigate		0.667		4.55			4.55	0.7	3.19	G
6	Jun	Preirrigate		1.000	11.12	6.82			17.95	0.3	5.38	G
7	Jul	Mulch	0.300	0.333	3.01	2.73			5.74	1.0	5.74	L
8	Jul	Plant	0.300	0.333	3.83	2.73		10.02	16.58	1.0	16.58	L
9	Jul	Remove Cap	0.180	0.200	1.27	1.64			2.91	1.0	2.91	G
10	Jul	Cultivate	0.450	0.500	3.71	4.09			7.80	2.0	15.61	G
11	Jul	Apply Fert/Ground	0.300	0.333	3.29	2.73		25.08	31.10	1.0	31.10	G
12	Jul	Irrigate		0.538		3.67			3.67	0.7	2.57	G
13	Jul	Irrigate		0.806	7.42	5.50			12.92	0.3	3.87	G
14	Jul	Apply Herbicide/Ground					4.23	3.93	8.16	1.0	8.16	G
15	Aug	Cultivate	0.300	0.333	2.47	2.73			5.20	2.0	10.40	G
16	Aug	Irrigate		0.403		2.75			2.75	2.8	7.70	G
17	Aug	Irrigate		0.606	5.56	4.14			9.70	1.2	11.64	G
18	Sep	Apply Insecticide/Air						10.04	10.04	1.0	10.04	G
19	Nov	Combine Harvest					50.10		50.10	1.0	50.10	H
20	Nov	Haul, Custom 36 CW					9.00		9.00	1.0	9.00	H
21	Dec	Cut Stalks 36 CW	0.300	0.333	5.17	2.73			7.90	1.0	7.90	P
		Pickup Use40 Mi/Acre	1.333		10.09						10.09	
		Operating Interest at 10.0					8.45				8.45	
TOTAL CASH OPERATING EXPENSES (includes all times over):												
=====												
235.93 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 \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price	
Land Preparation (L)	33.48	Yields							
Growing (G)	116.90		\$0.08	\$0.10	\$0.11	\$0.12	\$0.14		
Harvest (H)	59.10								
Post Harvest (P)	7.90	- 25%	2,400.0	-21.18	18.42	44.82	71.22	110.82	0.09
Marketing (M)	0.00	- 10%	2,880.0	8.37	55.89	87.57	119.25	166.77	0.08
Operating Overhead (O)	18.55	Budgeted	3,200.0	28.07	80.87	116.07	151.27	204.07	0.07
	=====	+ 10%	3,520.0	47.77	105.85	144.57	183.29	241.37	0.07
Total (T)	\$235.93	Break-even Yield		2,744.07	2,164.05	1,896.77	1,688.26	1,449.27	

**Table 7D. Resource and Cash Flow Requirements; Grain Sorghum (Dbl. Crop), 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Double Cropped  
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Watermelons DATE: 2/4/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JUN C	1.0	12.0	1.45		10.84	10.82				21.66
JUL C	1.0	8.0	2.88		21.71	22.77	29.01	10.02	4.23	87.74
AUG C	2.0	12.0	1.63		8.50	12.06				20.56
SEP C	2.0	12.0	0.93		3.34	6.33	10.04			19.71
OCT C			0.03		0.45	0.27				0.72
NOV C									59.10	46.50
DEC C			0.33		5.17	2.73				7.90
Pickup Use40 Mi/Acre					10.09					10.09
Operating Interest at 10.0									8.45	8.45
Water Assessment				**						
<b>Total</b>	<b>6.0</b>	<b>44.0</b>	<b>7.25</b>		<b>60.10</b>	<b>54.97</b>	<b>39.06</b>	<b>10.02</b>	<b>71.78</b>	<b>235.93</b>
<b>%</b>					<b>25.47</b>	<b>23.30</b>	<b>16.56</b>	<b>4.25</b>	<b>30.42</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS ( per Acre)

Total N 123.0  
 Total P 0.0  
 Total K 0.0  
 Total Labor 7.3  
 Total Water 44.0

TOTAL ENERGY REQUIREMENTS ( per Acre)

Diesel Fuel 19.1 Gal  
 Unleaded Gas 4.0 Gal  
 Electric / Pumping 146.0 KWH  
 All Direct Energy 3.7 M BTU

EQUIPMENT REQUIREMENTS ( per Acre)

Cultivator, Sweep, 4 Rw	1.50 Hr	Fertilizer Injector, 4 Row	0.30 Hr	Lister, 5 Bottom	0.22 Hr
Offset Disk, 13.5'	0.72 Hr	Pickup Truck, 1/2 Ton	1.33 Hr	Planter, Drill Type, 4 Row	0.30 Hr
Power Mulcher, 4 Rw	0.30 Hr	Rotary Stalk Cutter, 4 Row	0.30 Hr	Rowbuck, 10'	0.09 Hr
Section Harrow, 3 Section	0.18 Hr	Tractor, 100 PTO HP,	2.89 Hr	Tractor, 125 PTO HP	0.72 Hr

MATERIALS REQUIREMENT ( per Acre)

82-00-00, Anhyd.	150.00 Lb	Atrazine	1.25 Lb	Carbaryl	2.00 Lb
Grain Sorghum Sd	10.00 Lb	Water, District	30.80 Al	Water, Pump	13.20 Al

LABOR REQUIREMENT ( per Acre)

Irrigators	3.24 Hr	Tractor	4.01 Hr
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\*NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

**Table 7E. Schedule of Operations; Grain Sorghum (Dbl. Crop), 1998**

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Double Cropped  
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Watermelons DATE: 2/4/99

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
1	Jun	1.0	Disk	125	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	125	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	Al	0.00	AF	Irrigators
6	Jun	0.3	Preirrigate			0.99	Water, Pump	12.00	Al	11.12	AF	Irrigators
7	Jul	1.0	Mulch	100	Power Mulcher, 4 Rw	3.00						Tractor
8	Jul	1.0	Plant	100	Planter, Drill Type, 4 Row	3.00	Grain Sorghum Sd	10.00	Lb	95.00	CW	Tractor
9	Jul	1.0	Remove Cap	100	Section Harrow, 3 Section	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 Row	3.00	82-00-00, Anhyd.	150.00	Lb	317.00	Tn	Tractor
12	Jul	0.7	Irrigate			1.86	Water, District	8.00	Al	0.00	AF	Irrigators
13	Jul	0.3	Irrigate			1.24	Water, Pump	8.00	Al	11.12	AF	Irrigators
14	Jul	1.0	Apply Herbicide/Ground	CST	Air Spray, 3 Gal Mix		Atrazine	1.25	Lb	2.98	Lb	4.23 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	Al	0.00	AF	Irrigators
17	Aug	1.2	Irrigate			1.65	Water, Pump	6.00	Al	11.12	AF	Irrigators
18	Sep	1.0	Apply Insecticide/Air				Carbaryl	2.00	Lb	4.76	Lb	
19	Nov	1.0	Combine Harvest	CST	Combine Grain Sorghum							37.50 Ac
20	Nov	1.0	Haul, Custom	CST	Haul Grain							0.25 C
21	Dec	1.0	Cut Stalks	125	Rotary Stalk Cutter, 4 Row	3.00						Tractor
			Pickup use 40 Mi/Ac		Pickup Truck, 1/2 Ton	0.75						

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