

Table 8A. Income and Cash Operating Summary; Grain Sorghum (Late), 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Double Cropped
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Wheat, Durum DATE: 2/2/99

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)					31.70	_____
Tractor/Self Propelled				13.91		_____
Irrigation				17.55		_____
Other/ Contract				0.24		_____
Chemicals and Custom Applications					63.97	_____
Fertilizer				43.50		_____
Insecticide				13.63		_____
Herbicide				6.84		_____
Farm Machinery and Vehicles					15.86	_____
Diesel Fuel				6.16		_____
Repairs and Maintenance				9.69		_____
Irrigation Water (excluding labor)					10.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				10.05	10.05	_____
					-----	_____
					131.58	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					2.65	_____
Tractor/Self Propelled				2.65		_____
Farm Machinery and Vehicles					2.28	_____
Diesel Fuel				0.98		_____
Repairs and Maintenance				1.30		_____
Custom Harvest/Post Harvest					60.40	_____
					-----	_____
					65.33	_____
OPERATING OVERHEAD PICKUP USE						
					7.64	_____
OPERATING INTEREST AT 10.0%						
					7.35	_____
					-----	_____
					\$211.90	_____
TOTAL CASH OPERATING EXPENSES						
					-----	_____
RETURNS OVER CASH OPERATING EXPENSES						
					\$140.10	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 8B. Allocations of Ownership Costs; Grain Sorghum (Late), 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Double Cropped
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 AREA: Salt River Project YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Wheat, Durum DATE: 2/2/99

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	\$211.90		\$211.90	
RETURN OVER CASH OPERATING EXPENSES		\$140.10		\$140.10
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	2.27		2.27	
General and Office Overhead (5.0% of Total Operating Exp.)	10.60		10.60	
General Farm Maintenance (3.0% of Total Operating Exp.)	6.36		6.36	
Total Cash Overhead Expenses	19.23		19.23	
Total Cash Operating and Overhead Cost	231.13		231.13	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$120.87		\$120.87
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			12.65	
Interest on Equity, Machinery and Vehicles			5.51	
Total Capital Allocations			18.16	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$120.87		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$102.71
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	6.99		6.99	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			18.57	
Water Assessment	10.00		10.00	
Total Land Costs	16.99		35.56	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$103.88		
RETURNS TO MANAGEMENT AND RISK ----->				\$67.15
Management Services (8% of Total Operation Expenses)			16.95	
TOTAL OWNERSHIP COST	36.22		89.90	
TOTAL COST	\$248.12		\$301.80	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$103.88		
RETURNS TO RISK (PROFITS) ----->				\$50.20
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.07		\$0.07
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.08		\$0.09

Table 8C. Variable Operating Costs; Grain Sorghum (Late), 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Double Cropped
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 AREA: Salt River Project YIELD: 3,200.0 Lb / Acre PREVIOUS CROP: Wheat, Durum DATE: 2/2/99

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	0.170	0.189	2.71	1.84			4.55	2.0	9.10	L
2	Jul	List	0.158	0.175	1.78	1.71			3.49	1.0	3.49	L
3	Jul	Plant	0.225	0.250	3.18	2.44			5.62	1.0	5.62	L
4	Jul	Apply Insecticide/Air					4.23	9.40	13.63	1.0	13.63	G
5	Jul	Buck Rows	0.022	0.050	0.13	0.49			0.62	1.0	0.62	G
6	Jul	Irrigate/Run Fertilizer		0.600		5.85		43.50	49.35	1.0	49.35	G
7	Jul	Apply Herbicide/Ground	0.090	0.100	0.83	0.97		6.84	8.64	1.0	8.64	G
8	Jul	Cultivate	0.075	0.083	0.67	0.81			1.48	2.0	2.97	G
9	Aug	Irrigate		0.300		2.92		2.50	5.42	4.0	21.70	G
10	Oct	Prepare Ends	0.045	0.050	0.47	0.49			0.96	1.0	0.96	H
11	Oct	Combine Harvest					49.40		49.40	1.0	49.40	H
12	Oct	Haul, Custom 44 CW					11.00		11.00	1.0	11.00	H
13	Nov	Cut Stalks 44 CW	0.200	0.222	1.81	2.16			3.97	1.0	3.97	P
14	Nov	Disk Residue 44 CW	0.300	0.333	3.16	3.25			6.41	1.0	6.41	L
		Pickup Use30 Mi/Acre	1.000		7.64				7.64		7.64	
		Operating Interest at 10.0					7.35		7.35		7.35	
TOTAL CASH OPERATING EXPENSES (includes all times over):											211.90	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 \$10.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	34.67
Growing (G)	96.91
Harvest (H)	61.36
Post Harvest (P)	3.97
Marketing (M)	0.00
Operating Overhead (O)	14.99
Total (T)	\$211.90

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields			\$0.08	\$0.10	\$0.11	\$0.12	\$0.14	Break-even Price
- 25%	2,400.0	2.35	41.95	68.35	94.75	134.35		0.08
- 10%	2,880.0	32.15	79.67	111.35	143.03	190.55		0.07
Budgeted	3,200.0	52.02	104.82	140.02	175.22	228.02		0.07
+ 10%	3,520.0	71.89	129.97	168.69	207.41	265.49		0.06
+ 25%	4,000.0	101.69	167.69	211.69	255.69	321.69		0.06
Break-even Yield		2,362.10	1,866.14	1,636.99	1,457.97	1,252.50		

Table 8D. Resource and Cash Flow Requirements; Grain Sorghum (Late), 1998

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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			0.38		5.42	3.68				9.10
JUL C	1.0	12.0	1.34		7.28	13.07	59.74	10.05	4.23	94.37
AUG C	2.0	12.0	0.60			5.85				5.85
SEP C	2.0	12.0	0.60	10.00		5.85				15.85
OCT C			0.05		0.47	0.49			7.75	8.71
NOV C			0.56		4.97	5.41			52.65	63.03
Pickup Use30 Mi/Acre					7.64					7.64
Operating Interest at 10.0 Water Assessment				**					7.35	7.35
Total	5.0	36.0	3.52	10.00	25.78	34.35	59.74	10.05	71.98	211.90
%				4.72	12.17	16.21	28.19	4.74	33.97	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 152.2
 Total P 0.0
 Total K 0.0
 Total Labor 3.5
 Total Water 36.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 8.8 Gal
 Unleaded Gas 3.0 Gal
 All Direct Energy 1.6 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Directed Spray Rig, 16	0.09 Hr	Grain Drill, 14'	0.22 Hr	Lister, 7 Bottom	0.16 Hr
Offset Disk, 13.5'	0.35 Hr	Offset Disk, 18'	0.34 Hr	Pickup Truck, 1/2 Ton	1.00 Hr
Rolling Cultivator, 6 Rw	0.15 Hr	Rotary Stalk Cutter, 4 Row	0.20 Hr	Rowbuck, 10'	0.02 Hr
Tractor, 80 PTO HP,	0.02 Hr	Tractor, 100 PTO HP,	0.79 Hr	Tractor, 125 PTO HP,	0.38 Hr
Tractor, 150 PTO HP,	0.34 Hr				

MATERIALS REQUIREMENT (per Acre)

32-00-00, URAN 32, Lqd	43.00 Ga	Dicamba	0.50 Pt	Disulfoton	1.00 Pt
Grain Sorghum Sd	10.00 Lb	Water, District	36.00 Al		

LABOR REQUIREMENT (per Acre)

Irrigators	1.80 Hr	Other	0.03 Hr	Tractor	1.70 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

Table 8E. Schedule of Operations; Grain Sorghum (Late), 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Double Cropped
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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	2.0	Disk	150	Offset Disk, 18'	5.30					Tractor
2	Jul	1.0	List	125	Lister, 7 Bottom	5.70					Tractor
3	Jul	1.0	Plant	125	Grain Drill, 14'	4.00	Grain Sorghum Sd	10.00 Lb	95.00 CW		Tractor
4	Jul	1.0	Apply Insecticide/Air	CST	Air Spray, 3 Gal Mix		Disulfoton	1.00 Pt	71.08 Ga	4.23 Ac	
5	Jul	1.0	Buck Rows	80	Rowbuck, 10'	40.00					Tractor Other
6	Jul	1.0	Irrigate/Run Fertilizer			1.67	Water, District	12.00 Al	0.00 AF		Irrigators
							32-00-00, URAN 32,	43.00 Ga	173.00 Tn		
7	Jul	1.0	Apply Herbicide/Ground	100	Directed Spray Rig, 16	10.00	Dicamba	0.50 Pt	103.50 Ga		Tractor
8	Jul	2.0	Cultivate	100	Rolling Cultivator, 6 Rw	12.00					Tractor
9	Aug	4.0	Irrigate			3.33	Water, District	6.00 Al	5.00 AF		Irrigators
10	Oct	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00					Tractor
11	Oct	1.0	Combine Harvest	CST	Combine Grain Sorghum					37.50 Ac	
12	Oct	1.0	Haul, Custom	CST	Haul Grain					0.25 C	
13	Nov	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4 Row	4.50					Tractor
14	Nov	1.0	Disk Residue	100	Offset Disk, 13.5'	3.00					Tractor
			Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00					

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

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