

Table 9A. Income and Cash Operating Cost Summary, Grain Sorghum, 1996

COUNTY: Pima FARM: Pima County Farm WATER SOURCE: C-MID TILLAGE: Conventional
 CROP: Sorghum(Milo), Grain ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Wheat, Winter 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)					27.03	
Tractor/Self Propelled				14.06		
Irrigation				12.97		
Chemicals & Custom Applications					46.45	
Fertilizers				35.71		
Herbicides				10.74		
Farm Machinery and Vehicles					16.92	
Diesel Fuel				7.19		
Repairs & Maint.				9.73		
Irrigation Water (excluding labor)					82.50	
Other Purchased Inputs & Services					11.34	
Seed/Transplants				11.34		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					184.25	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					1.79	
Tractor/Self Propelled				1.79		
Farm Machinery and Vehicles					2.43	
Diesel Fuel				1.22		
Repairs & Maint.				1.21		
Custom Harvest/Post Harvest					44.70	
TOTAL HARVEST AND POST HARVEST EXPENSE					48.92	
OPERATING OVERHEAD->PICKUP USE					7.53	
OPERATING INTEREST AT 9.0%					3.78	
TOTAL CASH OPERATING EXPENSES					\$244.49	
RETURNS OVER CASH OPERATING EXPENSES					\$1.03	

Notes: The above figures do not include ownership costs, see Table 9B on Next Page for detailed cost allocation.

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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	244.48		244.48	
RETURN OVER CASH OPERATING EXPENSES		\$1.03		\$1.03
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	2.19		2.19	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	12.22		12.22	
General Farm Maint. (3% of Tot. Oper. Exp.)	7.33		7.33	
Total Cash Overhead Expenses	21.74		21.74	
Total Cash Oper. & Over. Cost	266.23		266.23	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		(20.71)		(20.71)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			12.25	
Interest on Equity, Machinery & Vehicles			5.96	
Total Capital Allocations			18.21	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		(20.71)		
RETURNS TO LAND, MANAGEMENT & RISK				(38.92)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$540 X 16% X .14778)	12.76		12.76	
Opport. Inter. on Land (100% X 6.0% X \$540)			32.40	
Total Land Costs	12.76		45.16	
RETURNS TO MANAGEMENT, CAPITAL & RISK		(33.47)		
RETURNS TO MANAGEMENT & RISK				(84.09)
Management Services (8% of Tot. Oper. Exp.)			19.55	
TOTAL OWNERSHIP COST	34.51		104.68	
TOTAL COST	\$278.99		\$349.17	
RETURN TO MANAGEMENT, CAPITAL & RISK		(\$33.47)		
RETURN TO RISK (PROFITS)				(\$103.65)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.0679		\$0.0679
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0095		\$0.0290
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.0774		\$0.0969

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No.	First Month	Operation	Hours * -		Operating Costs (\$/Acre*)				Total	Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				
1	Jun	Disk	0.225	0.250	3.21	2.10			5.31	1.0	5.31	L
2	Jun	List	0.180	0.200	2.36	1.68			4.04	1.0	4.04	L
3	Jun	Plant	0.225	0.250	2.65	2.10		11.34	16.09	1.0	16.09	L
4	Jun	Disk Ends	0.022	0.025	0.31	0.21			0.52	3.0	1.57	G
5	Jun	Buck Rows	0.022	0.050	0.09	0.39			0.48	3.0	1.44	G
6	Jun	Apply Herbicide/Ground	0.113	0.125	0.96	1.05		10.74	12.75	1.0	12.75	G
7	Jun	Irrigate		0.294		2.06		13.75	15.81	4.0	63.24	G
8	Jul	Cultivate	0.164	0.182	1.12	1.53			2.65	2.0	5.30	G
9	Jul	Irrigate/Run Fertilizer		0.300		2.10		31.60	33.70	2.0	67.40	G
10	Oct	Prepare Ends	0.011	0.013	0.16	0.11			0.27	1.0	0.27	H
11	Oct	Combine Harvest						32.20	32.20	1.0	32.20	H
12	Oct	Haul, Custom 50.0 CW						12.50	12.50	1.0	12.50	H
13	Nov	Cut Stalks	0.180	0.200	2.28	1.68			3.96	1.0	3.96	P
14	Dec	Disk Residue	0.300	0.333	4.28	2.80			7.08	1.0	7.08	L
		Pickup Use 30 Mi/Ac	1.000		7.53						7.53	O
		Operating Interest at 9.00%						3.78			3.78	O
TOTAL CASH OPERATING EXPENSES:					\$26.88	\$28.82	\$48.48	\$140.28			\$244.46	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)	\$32.53								
Growing (G)	151.69								
Harvest (H)	44.96	Yields		\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	Break-even
Post Harvest (P)	3.95								
Marketing (M)	0.00	-25%	2,700.0	-94.12	-66.50	-48.09	-29.68	-2.05	0.08
Operating Overhead (O)	11.31	-10%	3,240.0	-73.84	-40.70	-18.60	3.49	36.63	0.07
		Budgeted	3,600.0	-60.32	-23.49	1.05	25.60	62.43	0.06
Total (T)	\$244.46	+10%	3,960.0	-46.80	-6.29	20.71	47.72	88.23	0.06
		+25%	4,500.0	-26.52	19.51	50.20	80.89	126.92	0.05
		Break-even Yield		5,206.08	4,091.66	3,580.68	3,183.15	2,728.73	

Table 9D. Resource and Cash Flow Requirements; Grain Sorghum, 1996

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Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						Total
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	
JUN C	1.0	5.0	1.19	13.75	9.59	9.59	10.74	11.34	55.01	
JUL C	2.0	10.0	1.03	27.50	2.64	7.82	17.85		55.81	
AUG C	2.0	10.0	0.66	27.50	0.40	4.76	17.85		50.51	
SEP C	1.0	5.0	0.29	13.75		2.06			15.81	
OCT C			0.01		0.16	0.11		15.00	15.27	
NOV C			0.10		1.14	0.84		15.00	16.98	
DEC C			0.43		5.42	3.64			9.06	
Pickup Use 30 Mi/Ac					7.53				7.53	
Operating Interest at 9.0%								3.78	3.78	
Total	6.0	30.0	3.73	82.50	26.88	28.82	46.44	11.34	33.78	229.77
%				35.90	11.70	12.54	20.21	4.93	14.70	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	106.2 lbs	Diesel Fuel	9.7 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	3.0 Gal
Total Labor	3.7 Hrs		
Total Water	30.0 AI	All Direct Energy	1.7 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 150 PTO HP, MFWD	0.96 Hrs	Offset Disk, 13.5'	0.60 Hrs
Tractor, 70 PTO HP, MFWD	0.55 Hrs	Planter, 6 Row	0.23 Hrs
Rowbuck, 10'	0.07 Hrs	Tractor, 100 PTO HP, MFWD	0.11 Hrs
Rolling Cultivator, 6 Rw	0.33 Hrs	Rotary Stalk Cutter, 4 Row	0.18 Hrs
		Lister, 7 Bottom	0.18 Hrs
		Tractor, 50 PTO HP, MFWD	0.07 Hrs
		Directed Spray Rig, 8 Row	0.11 Hrs
		Pickup Truck, 1/2 Ton	1.00 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Grain Sorghum Sd	12.00 Lb	Bromoxynil	1.50 Pt
32-00-00, URAN 32, Lqd	30.00 Ga	Water, District	30.00 AI

LABOR REQUIREMENTS (/Acre)			
Tractor	1.89 Hrs	Irrigators	1.85 Hrs

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

Table 9E. Schedule of Operations; Grain Sorghum, 1996

COUNTY: Pima FARM: Pima County Farm WATER SOURCE: C-MID TILLAGE: Conventional
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 AREA: Marana YIELD: 3,600.0 Lb/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/14/96

No.	Month	First Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit		
1	Jun	1.0	Disk	150	Offset Disk, 13.5'	4.00					Tractor
2	Jun	1.0	List	150	Lister, 7 Bottom	5.00					Tractor
3	Jun	1.0	Plant	70	Planter, 6 Row	4.00	Grain Sorghum Sd	12.00 Lb	90.00 CW		Tractor
4	Jun	3.0	Disk Ends	150	Offset Disk, 13.5'	40.00					Tractor
5	Jun	3.0	Buck Rows	50	Rowbuck, 10'	40.00					Tractor Irrigator
6	Jun	1.0	Apply Herbicide/Groun	100	Directed Spray Rig, 8	8.00	Bromoxynil	1.50 Pt	54.57 Ga		Tractor
7	Jun	4.0	Irrigate			3.40	Water, District	5.00 AI	33.00 AF		Irrigator
8	Jul	2.0	Cultivate	70	Rolling Cultivator, 6 R	5.50					Tractor
9	Jul	2.0	Irrigate/Run Fertiliz			3.33	Water, District	5.00 AI	33.00 AF		Irrigator
							32-00-00, URAN 32,	15.00 Ga	205.00 Tn		
10	Oct	1.0	Prepare Ends	150	Offset Disk, 13.5'	80.00					Tractor
11	Oct	1.0	Combine Harvest		CST Combine Grain Sorgh					17.50 Ac	
12	Oct	1.0	Haul, Custom		CST Haul Grain					0.25 CW	
13	Nov	1.0	Cut Stalks	150	Rotary Stalk Cutter, 4	5.00					Tractor
14	Dec	1.0	Disk Residue	150	Offset Disk, 13.5'	3.00					Tractor
			Pickup Use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00					

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