

Table 12A. Income and Cash Operating Cost Summary, Safflower, 1996

COUNTY: Pinal	FARM: Pinal County Farm	WATER SOURCE: CAID	TILLAGE: Conventional
CROP: Safflower	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy Loam
AREA: Maricopa	YIELD: 1.0 Tn/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/08/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Seed	Ton	1.00	\$200.0000	\$200.00	\$200.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					45.57	_____
Tractor/Self Propelled				10.13		_____
Irrigation				35.45		_____
Chemicals & Custom Applications					68.78	_____
Fertilizers				48.35		_____
Insecticides				20.43		_____
Farm Machinery and Vehicles					11.45	_____
Diesel Fuel				4.74		_____
Repairs & Maint.				6.72		_____
Irrigation Water (excluding labor)					171.00	_____
Water Assessment (See Note Below) **					**	_____
Other Purchased Inputs & Services					9.92	_____
Seed/Transplants				9.92		_____
					306.73	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES						
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					3.99	_____
Tractor/Self Propelled				3.99		_____
Farm Machinery and Vehicles					4.52	_____
Diesel Fuel				2.01		_____
Repairs & Maint.				2.52		_____
Custom Harvest/Post Harvest					40.00	_____
					48.52	_____
TOTAL HARVEST AND POST HARVEST EXPENSE						
OPERATING OVERHEAD->PICKUP USE						
					10.25	_____
OPERATING INTEREST AT 8.0%						
					7.56	_____
					=====	=====
TOTAL CASH OPERATING EXPENSES					\$373.05	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$173.05)	_____

Notes: The above figures do not include ownership costs, see Table 12B on Next Page for detailed cost allocation.

** A water assessment charge of \$18.75/Acre is included in the ownership costs of Table 12B.

Table 12B. Allocation of Ownership Costs; Safflower, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Safflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy Loam
 AREA: Maricopa YIELD: 1.0 Tn/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 200.0000/Tn	\$200.00		\$200.00	
TOTAL OPERATING EXPENSES	373.05		373.05	
RETURN OVER CASH OPERATING EXPENSES		(\$173.05)		(\$173.05)
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	1.68		1.68	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	18.65		18.65	
General Farm Maint. (3% of Tot. Oper. Exp.)	11.19		11.19	
Total Cash Overhead Expenses	<u>31.52</u>		<u>31.52</u>	
Total Cash Oper. & Over. Cost	404.57		404.57	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		(204.57)		(204.57)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			9.54	
Interest on Equity, Machinery & Vehicles			5.05	
Total Capital Allocations			<u>14.59</u>	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		>(204.57)		
RETURNS TO LAND, MANAGEMENT & RISK				>(219.17)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$372 X 16% X .16455)	9.79		9.79	
Opport. Inter. on Land (100% X 6.0% X \$372)			22.32	
Water Assessment **	18.75		18.75	
Total Land Costs	<u>28.54</u>		<u>50.86</u>	
RETURNS TO MANAGEMENT, CAPITAL & RISK		>(233.12)		
RETURNS TO MANAGEMENT & RISK				>(270.03)
Management Services (8% of Tot. Oper. Exp.)			29.84	
TOTAL OWNERSHIP COST	<u>60.06</u>		<u>126.82</u>	
TOTAL COST	<u>\$433.12</u>		<u>\$499.87</u>	
RETURN TO MANAGEMENT, CAPITAL & RISK		>(\$233.12)		
RETURN TO RISK (PROFITS)				>(\$299.87)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)		\$373.05		\$373.05
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$60.06		\$126.82
BREAK-EVEN PRICE TO COVER TOTAL COST		\$433.12		\$499.87

Table 12C. Variable Operating Costs; Safflower, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Safflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy Loam
 AREA: Maricopa YIELD: 1.0 Tn/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)					Tot. Cash		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total	Times	Expense	Class
1	Dec	Apply Fert/Ground	0.075	0.083	0.46	0.70		26.25	27.41	1.0	27.41	G
2	Dec	Disk	0.225	0.250	2.54	2.10			4.64	1.0	4.64	L
3	Dec	List	0.237	0.263	2.70	2.21			4.91	1.0	4.91	L
4	Dec	Mulch	0.300	0.333	3.30	2.80			6.10	1.0	6.10	L
5	Dec	Plant	0.225	0.250	2.33	2.10		9.92	14.35	1.0	14.35	L
6	Dec	Buck Rows	0.022	0.025	0.13	0.21			0.34	1.0	0.34	G
7	Dec	Irrigate		0.562		3.94		19.00	22.94	7.0	160.58	G
8	Feb	Irrigate/Run Fertilizer		0.562		3.94		30.05	33.99	2.0	67.98	G
9	Jun	Apply Insecticide/Air					6.00	4.22	10.22	2.0	20.44	G
10	Jul	Prepare Ends	0.022	0.025	0.25	0.21			0.46	1.0	0.46	H
11	Jul	Combine Harvest					35.00		35.00	1.0	35.00	H
12	Jul	Haul, Custom 20.0 CW					5.00		5.00	1.0	5.00	H
13	Jul	Cut Stalks	0.180	0.200	1.74	1.68			3.42	1.0	3.42	P
14	Jul	Residue Disposal	0.225	0.250	2.54	2.10			4.64	1.0	4.64	P
		Pickup Use 40 Mi/Ac	1.330		10.25						10.25	O
		Operating Interest at 8.00%					7.47				7.47	O
TOTAL CASH OPERATING EXPENSES:					\$26.23	\$49.57	\$59.47	\$237.71			\$372.98	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 \$18.75/Acre included as ownership cost in Table 12B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$30.00								
Growing (G)	276.74								
Harvest (H)	40.45	Yields		\$150.00	\$180.00	\$200.00	\$220.00	\$250.00	Break-even
Post Harvest (P)	8.05								
Marketing (M)	0.00	-25%	0.7	-248.34	-225.84	-210.84	-195.84	-173.34	481.13
Operating Overhead (O)	17.72	-10%	0.9	-233.12	-206.12	-188.12	-170.12	-143.12	409.02
		Budgeted	1.0	-222.97	-192.97	-172.97	-152.97	-122.97	372.97
Total (T)	\$372.97	+10%	1.1	-212.82	-179.82	-157.82	-135.82	-102.82	343.48
		+25%	1.2	-197.60	-160.10	-135.10	-110.10	-72.60	308.08
		Break-even Yield		3.19	2.46	2.14	1.89	1.61	

Table 12D. Resource and Cash Flow Requirements; Safflower, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Safflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy Loam
 AREA: Maricopa YIELD: 1.0 Tn/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						Total
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	
DEC P	0.4	2.4	1.01	7.60	7.51	8.18	18.38	4.96		46.63
JAN C	0.6	3.6	0.75	11.40	3.94	5.88	7.88	4.96		34.07
FEB C	1.0	6.0	0.56	19.00		3.94	11.05			33.99
MAR C	1.0	6.0	0.56	19.00		3.94				22.94
APR C	2.0	12.0	1.12	38.00		7.88	11.05			56.93
MAY C	2.0	12.0	1.12	38.00		7.88				45.88
JUN C	2.0	12.0	1.12	38.00		7.88	8.43		12.00	66.31
JUL C			0.35		3.25	2.94			40.00	46.20
AUG C			0.12		1.27	1.05				2.32
Pickup Use 40 Mi/Ac					10.25					10.25
Operating Interest at 8.0%									7.48	7.48
Water Assessment				**						
Total	9.0	54.0	6.73	171.00	26.23	49.57	56.79	9.92	59.48	372.98
%				45.84	7.03	13.28	15.23	2.66	15.94	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	132.0 lbs	Diesel Fuel	7.0 Gal
Total P	40.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	4.0 Gal
Total Labor	6.7 Hrs		
Total Water	54.0 AI	All Direct Energy	1.4 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 70 PTO HP, MFWD	0.32 Hrs	Fertilizer Broadcaster, Towed	0.08 Hrs
Offset Disk, 13.5'	0.47 Hrs	Tractor, 100 PTO HP	0.24 Hrs
Power Mulcher, 4 Rw	0.30 Hrs	Planter, 4 Row	0.23 Hrs
Rotary Stalk Cutter, 4 Row	0.18 Hrs	Pickup Truck, 1/2 Ton	1.33 Hrs
		Tractor, 100 PTO HP, MFWD	0.95 Hrs
		Lister, 5 Bottom	0.24 Hrs
		Rowbuck, 10'	0.02 Hrs

MATERIALS REQUIREMENTS (/Acre)			
16-20-00, Dry	200.00 Lb	Safflower Sd	18.00 Lb
82-00-00, Anhyd. Ammonia	122.00 Lb	Dimethoate	2.00 Pt
		Water, District	54.00 AI

LABOR REQUIREMENTS (/Acre)			
Tractor	1.68 Hrs	Irrigators	5.06 Hrs

* NOTE: P = Previous Year C = Current Year N = Next Year
 ** A water assessment charge of \$18.75/Acre included as ownership cost in Table 12B.

Table 12E. Schedule of Operations; Safflower, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Safflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy Loam
 AREA: Maricopa YIELD: 1.0 Tn/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	First Month	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	Dec	1.0	Apply Fert/Ground	70	Fertilizer Broadcaster,	12.00	16-20-00, Dry	200.00 Lb	250.00 Tn		Tractor
2	Dec	1.0	Disk	100	Offset Disk, 13.5'	4.00					Tractor
3	Dec	1.0	List	100	Lister, 5 Bottom	3.80					Tractor
4	Dec	1.0	Mulch	100	Power Mulcher, 4 Rw	3.00					Tractor
5	Dec	1.0	Plant	70	Planter, 4 Row	4.00	Safflower Sd	18.00 Lb	52.50 CW		Tractor
6	Dec	1.0	Buck Rows	70	Rowbuck, 10'	40.00					Tractor
7	Dec	7.0	Irrigate			1.78	Water, District	6.00 AI	38.00 AF		Irrigator
8	Feb	2.0	Irrigate/Run Fertiliz			1.78	Water, District	6.00 AI	38.00 AF		Irrigator
							82-00-00, Anhyd. A	61.00 Lb	345.00 Tn		
9	Jun	2.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Dimethoate	1.00 Pt	32.13 Ga	6.00 Ac	
10	Jul	1.0	Prepare Ends	100	Offset Disk, 13.5'	40.00					Tractor
11	Jul	1.0	Combine Harvest		CST Combine Safflower					35.00 Ac	
12	Jul	1.0	Haul, Custom		CST Haul Grain					0.25 CW	
13	Jul	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4	5.00					Tractor
14	Jul	1.0	Residue Disposal	100	Offset Disk, 13.5'	4.00					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 \$18.75/Acre included as ownership cost in Table 12B.

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