

Table 10A. Income and Cash Operating Summary; Upland Cotton, 1998

COUNTY: Pima FARM: Pima County 98 WATER SOURCE: Cortaro-Marana TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 1,009.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/5/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Lint	Pound	1,009.00	\$0.68	\$686.12	\$803.69	_____
Cottonseed	Ton	0.88	\$133.60	\$117.57		_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					62.28	_____
Tractor/Self Propelled				40.44		_____
Hand				6.49		_____
Irrigation				15.35		_____
Chemicals and Custom Applications					139.50	_____
Fertilizer				33.90		_____
Insecticide				55.58		_____
Herbicide				31.65		_____
Other Chemicals				18.37		_____
Farm Machinery and Vehicles					52.62	_____
Diesel Fuel				17.56		_____
Repairs and Maintenance				35.06		_____
Irrigation Water (excluding labor)					105.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				9.07	15.07	_____
Other Services and Rentals				6.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					374.48	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					9.80	_____
Tractor/Self Propelled				4.57		_____
Other/Contract				5.23		_____
Chemicals and Custom Applications					21.38	_____
Other Chemicals				21.38		_____
Farm Machinery and Vehicles					54.20	_____
Diesel Fuel				5.65		_____
Repairs and Maintenance				48.56		_____
Custom Harvest/Post Harvest					8.47	_____
Cotton Ginning					81.61	_____
Crop Assessment					7.21	_____
Other Materials					1.67	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					184.35	_____
OPERATING OVERHEAD PICKUP USE					14.82	_____
OPERATING INTEREST AT 10.0%					17.93	_____
TOTAL CASH OPERATING EXPENSES					\$591.58	=====
RETURNS OVER CASH OPERATING EXPENSES					\$212.11	_____

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

** A water assessment charge of \$40.00 per Acre is included as an ownership cost in Table B.

Table 10B. Allocations of Ownership Costs; Upland Cotton, 1998

COUNTY: Pima	FARM: Pima County 98	WATER SOURCE: Cortaro-Marana	TILLAGE: Conventional
CROP: Cotton, Upland	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Marana	YIELD: 1,009.0 Lb / Acre	PREVIOUS CROP: Cotton, Upland	DATE: 2/5/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.68 / Lb	\$803.69		\$803.69	
TOTAL OPERATING EXPENSES	\$591.58		\$591.58	
RETURN OVER CASH OPERATING EXPENSES		\$212.11		\$212.11
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	10.33		10.33	
General and Office Overhead (5.0% of Total Operating Exp.)	29.58		29.58	
General Farm Maintenance (3.0% of Total Operating Exp.)	17.75		17.75	
Total Cash Overhead Expenses	57.66		57.66	
Total Cash Operating and Overhead Cost	649.24		649.24	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$154.45		\$154.45
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			73.63	
Interest on Equity, Machinery and Vehicles			31.22	
Total Capital Allocations			104.84	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$154.45		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$49.60
Land Cost / Ownership (100% Equity)				
Property Taxes (\$540.00 X 16.0% X 0.183)	15.87		15.87	
Opportunity Interest on Land (100% X 6.0 X \$540.00)			32.40	
Water Assessment	40.00		40.00	
Total Land Costs	55.87		88.27	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$98.57		
RETURNS TO MANAGEMENT AND RISK ----->				(\$38.67)
Management Services (8% of Total Operation Expenses)			47.33	
TOTAL OWNERSHIP COST	113.53		298.10	
TOTAL COST	\$705.11		\$889.68	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$98.57		
RETURNS TO RISK (PROFITS) ----->				(\$86.00)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.47		\$0.47
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.11		\$0.30
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.58		\$0.77

Table 10C. Variable Operating Costs; Upland Cotton, 1998

COUNTY: Pima FARM: Pima County 98 WATER SOURCE: Cortaro-Marana TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 1,009.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/5/99

No.	First Month	Operation	--- Hours * ---		--- Operating Costs (\$/ACRE *) Per Operation ---				Total Times	Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials				Total
1	Jan	Rip	0.360	0.400	5.13	3.28			8.41	0.5	4.20	L
2	Jan	Plow	0.400	0.444	6.95	3.64			10.59	1.0	10.59	L
3	Jan	Landplane	0.257	0.286	3.70	2.34			6.04	1.0	6.04	L
4	Jan	Apply Herbicide/Ground	0.150	0.167	2.13	1.37		13.46	16.96	1.0	16.96	G
5	Jan	Disk	0.225	0.200	3.78	1.64			5.41	1.0	5.41	L
6	Jan	List	0.180	0.200	2.67	1.64			4.30	1.0	4.30	L
7	Jan	Disk Ends	0.011	0.013	0.18	0.11			0.29	6.0	1.73	G
8	Jan	Buck Rows	0.023	0.025	0.20	0.20			0.40	5.0	2.02	G
9	Jan	Preirrigate		0.900		6.14		30.00	36.14	1.0	36.14	G
10	Apr	Mulch	0.300	0.333	4.87	2.73			7.59	1.0	7.59	L
11	Apr	Plant	0.225	0.250	4.06	2.05		9.07	15.18	1.0	15.18	L
12	Apr	Remove Cap	0.129	0.143	1.42	1.17			2.59	1.0	2.59	G
13	May	Cultivate	0.300	0.333	3.11	2.73			5.83	2.0	11.67	G
14	Jun	Cultivate	0.164	0.182	1.69	1.49			3.18	2.0	6.37	G
15	Jun	Hand Weeding		2.000		12.97			12.97	0.5	6.49	G
16	Jun	Apply Herbicide/Ground	0.225	0.250	3.75	2.05		18.19	23.99	1.0	23.99	G
17	Jun	Irrigate		0.450		3.68		15.00	18.68	2.0	37.37	G
18	Jun	Field Scouting					6.00		6.00	1.0	6.00	G
19	Jun	Irrigate/Run Fertilizer		0.450		3.07		26.30	29.37	3.0	88.11	G
20	Jul	Apply Insecticide/Air					4.23	14.55	18.78	1.0	18.78	G
21	Aug	Apply Growth Regulator					4.23	14.14	18.37	1.0	18.37	G
22	Aug	Apply Insecticide/Air					4.75	13.65	18.40	2.0	36.80	G
23	Sep	Apply Defoliant/Air					4.75	16.63	21.38	1.0	21.38	H
24	Sep	Prepare Ends	0.023	0.025	0.38	0.20			0.58	1.0	0.58	H
25	Sep	Cotton, First Pick	0.450	0.500	31.05	3.41			34.46	1.0	34.46	H
26	Sep	Cotton, Make Modules	0.300	0.333	3.57	2.73		1.67	7.97	1.0	7.97	H
27	Sep	Haul, Custom .2 Mu					5.94		5.94	1.0	5.94	H
28	Nov	Cotton, Second Pick .2 Mu	0.300	0.333	20.70	2.27			22.97	0.8	18.38	H
29	Oct	Cotton Ginning 29.7 Cs					81.61		81.61	1.0	81.61	P
30	Dec	Cotton Classing 2 Ba					2.54		2.54	1.0	2.54	M
31	Dec	Crop Assessment 2 Ba					7.21		7.21	1.0	7.21	M
32	Nov	Cut Stalks 2 Ba	0.180	0.200	2.65	1.64			4.28	1.0	4.28	P
33	Nov	Disk Residue 2 Ba	0.300	0.333	5.03	2.73			7.76	1.0	7.76	L
		Pickup Use60 Mi/Acre		2.000		14.82					14.82	
		Operating Interest at 10.0					17.93				17.93	
TOTAL CASH OPERATING EXPENSES (includes all times over):										=====	591.58	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 \$40.00 per Acre is included as an ownership cost in Table B.

Table 10C. Variable Operating Costs; Upland Cotton, 1998

COUNTY: Pima FARM: Pima County 98 WATER SOURCE: Cortaro-Marana TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 1,009.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/5/99

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	61.08
Growing (G)	313.39
Harvest (H)	88.71
Post Harvest (P)	85.89
Marketing (M)	9.74
Operating Overhead (O)	32.75
	=====
Total (T)	\$591.58

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

Prices		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$0.51	\$0.61	\$0.68	\$0.75	\$0.85	Break-even Price
- 25%	756.8	-161.26	-84.07	-32.61	18.85	96.04	0.72
- 10%	908.1	-111.72	-19.09	42.66	104.41	197.03	0.63
Budgeted	1,009.0	-78.70	24.22	92.83	161.45	264.36	0.59
+ 10%	1,109.9	-45.67	67.54	143.01	218.48	331.69	0.55
+ 25%	1,261.3	3.86	132.51	218.28	304.04	432.69	0.51
Break-even Yield		1,249.45	952.58	822.32	723.40	612.83	

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Table 10D. Resource and Cash Flow Requirements; Upland Cotton, 1998

COUNTY: Pima FARM: Pima County 98 WATER SOURCE: Cortaro-Marana TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 1,009.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/5/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C	0.1	1.2	1.57	3.00	21.37	12.69	13.46			50.53
FEB C	0.5	6.0	0.51	15.00	0.80	3.56				19.36
MAR C	0.4	4.8	0.37	12.00	0.18	2.56				14.75
APR C			0.53		7.61	4.34		4.54		16.48
MAY C			0.86		8.95	7.06		4.54		20.55
JUN C	2.0	12.0	2.47	30.00	6.03	17.87	20.40		6.00	80.29
JUL C	2.0	12.0	1.08	30.00	2.44	8.20	34.94		4.23	79.81
AUG C	1.0	6.0	0.47	15.00	0.20	3.28	52.74		13.73	84.95
SEP C			0.16		6.94	1.16	16.63	0.17	14.10	39.00
OCT C			0.50		20.77	3.68		1.00	36.21	61.66
NOV C			0.56		22.00	4.17		0.50	25.67	52.35
DEC C			0.44		9.52	3.51			26.07	39.09
Pickup Use60 Mi/Acre					14.82					14.82
Operating Interest at 10.0									17.93	17.93
Water Assessment				**						
Total	6.0	42.0	9.51	105.00	121.65	72.08	138.18	10.75	143.94	591.58
%				17.75	20.56	12.18	23.36	1.82	24.33	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	119.4	Diesel Fuel	34.3 Gal
Total P	0.0	Unleaded Gas	6.0 Gal
Total K	0.0	All Direct Energy	5.5 MBTU
Total Labor	9.5		
Total Water	42.0		

EQUIPMENT REQUIREMENTS (per Acre)			
Cotton Picker, 5 Row	0.69 Hr	Cultivator, Sweep, 6 Rw	0.22 Hr
Lister, 7 Bottom	0.18 Hr	Module Builder	0.30 Hr
Offset Disk, 13.5'	0.07 Hr	Offset Disk, 16.5'	0.55 Hr
Planter, Drill Type, 6 Row	0.22 Hr	Power Mulcher, 6 Rw	0.30 Hr
Rotary Stalk Cutter, 4 Row	0.18 Hr	Rowbuck, 10'	0.11 Hr
Section Harrow, 3 Section	0.13 Hr	Tractor, 80 PTO HP,	0.30 Hr
Tractor, 125 PTO HP	0.65 Hr	Tractor, 150 PTO HP	2.19 Hr
		Landplane 12'X 45'	0.26 Hr
		Moldboard Plow, 5-16 2	0.40 Hr
		Pickup Truck, 1/2 Ton	2.00 Hr
		Rolling Cultivator, 6 Rw	0.93 Hr
		Saddle Tk Sprayer, 2 Tk 8	0.38 Hr
		Tractor, 100 PTO HP	1.04 Hr
		V-Ripper, 5 Shnk	0.18 Hr

MATERIALS REQUIREMENT (per Acre)			
32-00-00, URAN 32, Lqd	33.75 Ga	Acephate	1.34 Lb
Cyanazine	1.00 Qt	Endosulfan	2.00 Pt
Mepiquat Chloride	1.00 Pt	Module Tarps	31.88 C
Thidiazuron	0.20 Lb	Tribufos	0.95 Pt
Upl Cotton Sd+NU-Flow	12.00 Lb	Water, District	42.00 Al
		Acephate	0.50 Lb
		Lambdacyhalothrin	6.40 Oz
		Prometryn	5.00 Pt
		Trifluralin	1.00 Pt

LABOR REQUIREMENT (per Acre)			
Hand Weeders	1.00 Hr	Harvest	0.77 Hr
Tractor	5.50 Hr	Irrigators	2.25 Hr

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

** A water assessment charge of \$40.00 per Acre is included as an ownership cost in Table B.

Table 10E. Schedule of Operations; Upland Cotton, 1998

COUNTY: Pima FARM: Pima County 98 WATER SOURCE: Cortaro-Marana TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Marana YIELD: 1,009.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/5/99

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	\$/ Unit		
1	Jan	0.5	Rip	150	V-Ripper, 5 Shnk	2.50						Tractor
2	Jan	1.0	Plow	150	Moldboard Plow, 5-16 2	2.25						Tractor
3	Jan	1.0	Landplane	150	Landplane 12'X 45'	3.50						Tractor
4	Jan	1.0	Apply Herbicide/Ground	150	Saddle Tk Sprayer, 2 Tk 8	6.00	Prometryn	2.50 Pt	31.04 Ga			Tractor
							Trifluralin	1.00 Pt	24.95 Ga			
5	Jan	1.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
6	Jan	1.0	List	150	Lister, 7 Bottom	5.00						Tractor
7	Jan	6.0	Disk Ends	150	Offset Disk, 13.5'	80.00						Tractor
8	Jan	5.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
9	Jan	1.0	Preirrigate			1.11	Water, District	12.00 Al	30.00 AF			Irrigators
10	Apr	1.0	Mulch	125	Power Mulcher, 6 Rw	3.00						Tractor
11	Apr	1.0	Plant	125	Planter, Drill Type, 6 Row	4.00	Upl Cotton Sd+NU-Flow	12.00 Lb	72.00 Lb			Tractor
12	Apr	1.0	Remove Cap	125	Section Harrow, 3 Section	7.00						Tractor
13	May	2.0	Cultivate	100	Rolling Cultivator, 6 Rw	3.00						Tractor
14	Jun	2.0	Cultivate	100	Rolling Cultivator, 6 Rw	5.50						Tractor
15	Jun	0.5	Hand Weeding			0.50						Hand
16	Jun	1.0	Apply Herbicide/Ground	150	Cultivator, Sweep, 6 Rw Saddle Tk Sprayer, 2 Tk 8 Row	4.00	Prometryn	2.50 Pt	31.04 Ga			Tractor
							Cyanazine	1.00 Qt	30.50 Ga			
17	Jun	2.0	Irrigate			2.22	Water, District	6.00 Al	30.00 AF			Tractor
18	Jun	1.0	Field Scouting		CST Scout For Insects						6.00 Ac	
19	Jun	3.0	Irrigate/Run Fertilizer			2.22	Water, District	6.00 Al	30.00 AF			Irrigators
							32-00-00, URAN 32,	11.25 Ga	173.00 Tn			
20	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		Endosulfan	2.00 Pt	34.80 Ga		4.23 Ac	
							Acephate	0.50 Lb	10.31 Lb			
21	Aug	1.0	Apply Growth Regulator		CST Air Spray, 3 Gal Mix		Mepiquat Chloride	1.00 Pt	107.75 Ga		4.23 Ac	
22	Aug	2.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Lambdacyhalothrin	3.20 Oz	278.75 Ga		4.75 Ac	
							Acephate	0.67 Lb	9.00 Lb			
23	Sep	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mix		Thidiazuron	0.20 Lb	56.16 Lb		4.75 Ac	
							Tribufos	0.95 Pt	38.82 Ga			
24	Sep	1.0	Prepare Ends	150	Offset Disk, 16.5'	40.00						Tractor
25	Sep	1.0	Cotton, First Pick		Cotton Picker, 5 Row	2.00						Harvest
26	Sep	1.0	Cotton, Make Modules	80	Module Builder	3.00	Module Tarps	31.88 C	0.05 CW			Tractor
27	Sep	1.0	Haul, Custom		CST Haul Cotton Modules						35.00 Mu	
28	Nov	0.8	Cotton, Second Pick		Cotton Picker, 5 Row	3.00						Harvest
29	Oct	1.0	Cotton Ginning		CST Gin Upland Cotton						2.75 Cs	
30	Dec	1.0	Cotton Classing		CST Class Cotton, HVI						1.25 Ba	
31	Dec	1.0	Crop Assessment		CST Upland (Low Elev)						3.55 Ba	
32	Nov	1.0	Cut Stalks	150	Rotary Stalk Cutter, 4 Row	5.00						Tractor
33	Nov	1.0	Disk Residue	150	Offset Disk, 16.5'	3.00						Tractor
			Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

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