

Table 7A. Income and Cash Operating Cost Summary, Upland Cotton, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Laser Leveled Ba SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 1,138.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lint	Pound	1,138.00	\$0.7200	\$819.36		
Cottonseed	Ton	1.06	114.6000	121.48	\$940.84	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					48.84	
Tractor/Self Propelled				32.87		
Irrigation				15.96		
Chemicals & Custom Applications					201.70	
Fertilizers				22.10		
Insecticides				143.93		
Herbicides				22.90		
Other Chemicals				12.78		
Farm Machinery and Vehicles					34.06	
Diesel Fuel				14.98		
Repairs & Maint.				19.07		
Irrigation Water (excluding labor)					152.03	
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					33.60	
Seed/Transplants				33.60		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					470.23	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					26.52	
Tractor/Self Propelled				18.03		
Other/Contract				8.49		
Chemicals & Custom Applications					44.92	
Other Chemicals				44.92		
Farm Machinery and Vehicles					66.41	
Diesel Fuel				11.44		
Repairs & Maint.				54.97		
Custom Harvest/Post Harvest					3.43	
Cotton Ginning					100.41	
Crop Assessments					8.23	
Other Materials					3.15	
TOTAL HARVEST AND POST HARVEST EXPENSE					253.06	
OPERATING OVERHEAD->PICKUP USE					15.38	
OPERATING INTEREST AT 8.0%					13.03	
TOTAL CASH OPERATING EXPENSES					\$751.70	
RETURNS OVER CASH OPERATING EXPENSES					\$189.14	

Notes: The above figures do not include ownership costs, see Table 7B on Next Page for detailed cost allocation.

** A water assessment charge of \$18.75/Acre is included in the ownership costs of Table 7B.

Table 7B. Allocation of Ownership Costs; Upland Cotton, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
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 AREA: Maricopa YIELD: 1,138.0 Lb/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 \$ 0.7200/Lb + 2nd Crop	\$940.84		\$940.84	
TOTAL OPERATING EXPENSES	751.69		751.69	
RETURN OVER CASH OPERATING EXPENSES		\$189.14		\$189.14
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	10.00		10.00	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	37.58		37.58	
General Farm Maint. (3% of Tot. Oper. Exp.)	22.55		22.55	
Total Cash Overhead Expenses	70.13		70.13	
Total Cash Oper. & Over. Cost	821.83		821.83	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		119.00		119.00
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			72.40	
Interest on Equity, Machinery & Vehicles			32.41	
Total Capital Allocations			104.80	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		119.00		
RETURNS TO LAND, MANAGEMENT & RISK				14.19
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	28.54		50.86	
RETURNS TO MANAGEMENT, CAPITAL & RISK		90.46		
RETURNS TO MANAGEMENT & RISK				(36.66)
Management Services (8% of Tot. Oper. Exp.)			60.13	
TOTAL OWNERSHIP COST	98.67		285.94	
TOTAL COST	\$850.37		\$1,037.64	
RETURN TO MANAGEMENT, CAPITAL & RISK		\$90.46		
RETURN TO RISK (PROFITS)				(\$96.80)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.5537		\$0.5537
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0867		\$0.2512
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.6405		\$0.8050

Table 7C. Variable Operating Costs; Upland Cotton, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Laser Leveled Ba SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 1,138.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)				Times	Tot. Cash		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials		Total	Expense	Class
1	Jan	Disk	0.225	0.250	2.54	2.10			4.64	1.0	4.64	L
2	Jan	Plow	0.300	0.333	3.95	2.80			6.75	1.0	6.75	L
3	Jan	Landplane	0.900	1.000	8.42	8.41			16.83	0.7	11.78	L
4	Jan	Laser Level	0.900	1.000	7.88	8.41			16.29	0.3	4.89	L
5	Jan	List	0.180	0.200	1.82	1.68			3.50	1.0	3.50	L
6	Jan	Buck Rows	0.022	0.025	0.13	0.21			0.34	3.0	1.01	G
7	Feb	Preirrigate		0.278		1.95		25.33	27.28	1.0	27.28	G
8	Mar	Disk Ends	0.022	0.025	0.25	0.21			0.46	3.0	1.37	G
9	Mar	Apply Herbicide/Ground	0.225	0.250	3.00	2.10		4.73	9.83	1.0	9.83	G
10	Mar	Mulch	0.300	0.333	3.30	2.80			6.10	1.0	6.10	L
11	Mar	Plant	0.225	0.250	2.33	2.10		33.60	38.03	1.0	38.03	L
12	Mar	Remove Cap	0.129	0.143	0.72	1.20			1.92	1.0	1.92	G
13	Apr	Cultivate	0.225	0.250	1.49	2.10			3.59	3.0	10.76	G
14	May	Irrigate/Run Fertilizer		0.200		1.40		23.72	25.12	2.0	50.24	G
15	Jun	Apply Insecticide/Air						6.00	6.49	1.0	12.49	G
16	Jun	Apply Growth Regulator						6.00	6.78	1.0	12.78	G
17	Jun	Irrigate		0.200		1.40		12.67	14.07	8.0	112.56	G
18	Jul	Apply Insecticide/Air						6.00	13.03	1.0	19.03	G
19	Jul	Apply Insecticide/Air						6.00	36.75	1.0	42.75	G
20	Jul	Apply Herbicide/Air						8.32	9.84	1.0	18.16	G
21	Aug	Apply Insecticide/Air						6.00	19.21	1.0	25.21	G
22	Aug	Apply Insecticide/Air						6.00	26.25	1.0	32.25	G
23	Aug	Apply Insecticide/Air						6.00	6.19	1.0	12.19	G
24	Sep	Apply Defoliant/Air						8.32	15.51	1.0	23.83	H
25	Oct	Apply Defoliant/Air						8.32	12.77	1.0	21.09	H
26	Oct	Cotton, First Pick	0.900	1.000	34.18	8.41			42.59	1.0	42.59	H
27	Oct	Cotton, Make Modules	0.300	0.666	3.84	5.13		1.58	10.55	1.0	10.55	H
28	Nov	Cotton, Second Pick	0.600	0.667	22.79	4.67			27.46	0.9	24.71	H
29	Nov	Cotton, Rood	0.300	0.333	2.95	2.80			5.75	1.0	5.75	H

* NOTES: See next page for notes.

Table 7C. Variable Operating Costs; Upland Cotton, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Laser Levelled Ba SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 1,138.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	Month	First Operation	— Hours * —		Operating Costs (\$/Acre*)				Total	Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				
30	Nov	Cotton, Make Modules	0.250	0.556	3.20	4.29		1.58	9.07	1.0	9.07	H
31	Oct	Haul, Custom 0.2 Mu							0.00	1.0	0.00	H
32	Oct	Cotton Ginning 33.5 Cs						100.41	100.41	1.0	100.41	P
33	Dec	Cotton Classing 2.3 Ba						3.43	3.43	1.0	3.43	M
34	Dec	Crop Assessment 2.3 Ba						8.23	8.23	1.0	8.23	M
35	Dec	Cut Stalks	0.180	0.200	1.74	1.68			3.42	1.0	3.42	P
36	Dec	Disk Residue	0.225	0.250	2.54	2.10			4.64	1.0	4.64	L
		Pickup Use 60 Mi/Ac	2.000		15.37						15.37	O
		Operating Interest at 8.00%						13.03			13.03	O
TOTAL CASH OPERATING EXPENSES:					\$115.84	\$75.31	\$192.06	\$368.44			\$751.65	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 7B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$80.34								
Growing (G)	389.83								
Harvest (H)	137.58	Yields		\$0.54	\$0.64	\$0.72	\$0.79	\$0.90	Break-even
Post Harvest (P)	103.82								
Marketing (M)	11.65	-25%	853.5	-227.49	-135.31	-73.86	-12.41	79.76	0.80
Operating Overhead (O)	28.40	-10%	1,024.2	-173.27	-62.66	11.07	84.82	195.43	0.70
		Budgeted	1,138.0	-137.13	-14.22	67.70	149.64	272.54	0.66
Total (T)	\$751.65	+10%	1,251.8	-100.98	34.20	124.33	214.46	349.66	0.62
		+25%	1,422.5	-46.76	106.86	209.28	311.70	465.33	0.57
		Break-even Yield		1,569.74	1,171.42	1,001.93	875.29	735.78	

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 AREA: Maricopa YIELD: 1,138.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
JAN C			1.69		15.73	14.26				29.99
FEB C	0.5	4.0	0.25	12.67	0.97	1.92				15.56
MAR C	0.5	4.0	0.65	12.67	4.93	5.29	2.37	16.80		42.05
APR C			0.76		6.29	6.42	2.37	16.80		31.88
MAY C	1.0	4.0	0.45	12.67	1.49	3.50	11.05			28.71
JUN C	3.0	12.0	0.85	38.01	1.49	6.31	24.32		12.00	82.13
JUL C	3.0	12.0	0.65	38.01	0.37	4.63	59.62		20.32	122.95
AUG C	2.0	8.0	0.40	25.34		2.80	51.65		18.00	97.79
SEP C	1.0	4.0	0.20	12.67		1.40	15.51		8.32	37.90
OCT C			1.02		23.06	8.34	12.77	0.94	58.53	103.64
NOV C			1.44		29.67	11.30		1.42	40.16	82.55
DEC C			1.08		15.70	8.57		0.79	21.70	46.75
JAN N			0.07		0.76	0.63				1.39
Pickup Use 60 Mi/Ac					15.37					15.37
Operating Interest at 8.0%									13.03	13.03
Water Assessment				**						
Total	11.0	48.0	9.54	152.03	115.84	75.36	179.66	36.75	192.06	751.70
%				20.22	15.41	10.02	23.90	4.88	25.54	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	100.0 lbs	Diesel Fuel	27.7 Gal
Total P	0.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	6.0 Gal
Total Labor	9.5 Hrs		
Total Water	48.0 AI	All Direct Energy	4.6 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 100 PTO HP, MFWD	2.60 Hrs	Offset Disk, 13.5'	0.74 Hrs
Landplane 12' X 45'	0.63 Hrs	Drag Scraper, 10'	0.27 Hrs
Laser Trailer	0.27 Hrs	Lister, 7 Bottom	0.18 Hrs
Rowbuck, 10'	0.07 Hrs	Saddle Tk Sprayer, 2 Tk 8 Row	0.23 Hrs
Planter, 4 Row	0.23 Hrs	Section Harrow, 3 Section	0.13 Hrs
Cotton Picker, 2 Row	1.44 Hrs	Tractor, 80 PTO HP, MFWD	0.55 Hrs
Rood, 3 Row W/Basket Cleaner	0.30 Hrs	Rotary Stalk Cutter, 4 Row	0.18 Hrs
		Moldboard Plow, 5-16 2 Way	0.30 Hrs
		Laser Receiver, Mast System	0.27 Hrs
		Tractor, 70 PTO HP, MFWD	1.40 Hrs
		Power Mulcher, 4 Rw	0.30 Hrs
		Rolling Cultivator, 4 Rw	0.68 Hrs
		Module Builder	0.55 Hrs
		Pickup Truck, 1/2 Ton	2.00 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Water, District	48.00 AI	Trifluralin	1.20 Pt
82-00-00, Anhyd. Ammonia	122.00 Lb	Acephate	0.67 Lb
Oxamyl	1.50 Pt	Pyriproxyfen	8.00 Oz
Methidathion	3.00 Pt	Buprofezin	0.50 Lb
Thidiazuron/diuron	9.50 Oz	Sodium Chlorate	2.00 Ga
		Upland Bt Cotton	16.00 Lb
		Mepiquat Chloride	0.50 Pt
		Prometryn	2.50 Pt
		Methomyl	1.00 Pt
		Module Tarps	60.00 CW

LABOR REQUIREMENTS (/Acre)			
Tractor	6.05 Hrs	Irrigators	2.28 Hrs
Harvest	0.60 Hrs	Other	0.61 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 7B.

Table 7E. Schedule of Operations; Upland Cotton, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Cotton, Upland ACRES: 1.0 IRRIGATION SYSTEM: Laser Levelled Ba SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 1,138.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	First Month	Times	Operation	Equipment/Custom Oper. HP	Self-Prop./Implem.	Job Rate Acres/Hr	Material Name	Use & Cost Appl. Rate	\$/Unit	Service Cost \$/Unit	Labor Type
1	Jan	1.0	Disk	100	Offset Disk, 13.5'	4.00					Tractor
2	Jan	1.0	Plow	100	Moldboard Plow, 5-16 2	3.00					Tractor
3	Jan	0.7	Landplane	100	Landplane 12'X 45'	1.00					Tractor
4	Jan	0.3	Laser Level	100	Drag Scraper, 10' Laser Receiver, Mast Sy Laser Trailer	1.00					Tractor
5	Jan	1.0	List	100	Lister, 7 Bottom	5.00					Tractor
6	Jan	3.0	Buck Rows	70	Rowbuck, 10'	40.00					Tractor
7	Feb	1.0	Preirrigate			3.60	Water, District	8.00 AI	38.00 AF		Irrigator
8	Mar	3.0	Disk Ends	100	Offset Disk, 13.5'	40.00					Tractor
9	Mar	1.0	Apply Herbicide/Groun	100	Saddle Tk Sprayer, 2 Tk Offset Disk, 13.5'	4.00	Trifluralin	1.20 Pt	30.06 Ga		Tractor
10	Mar	1.0	Mulch	100	Power Mulcher, 4 Rw	3.00					Tractor
11	Mar	1.0	Plant	70	Planter, 4 Row	4.00	Upland Bt Cotton	16.00 Lb	200.00 CW		Tractor
12	Mar	1.0	Remove Cap	70	Section Harrow, 3 Secti	7.00					Tractor
13	Apr	3.0	Cultivate	70	Rolling Cultivator, 4 R	4.00					Tractor
14	May	2.0	Irrigate/Run Fertiliz			5.00	Water, District	4.00 AI	38.00 AF		Irrigator
							82-00-00, Anhyd. A	61.00 Lb	345.00 Tn		
15	Jun	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Acephate	0.67 Lb	9.23 Lb	6.00 Ac	
16	Jun	1.0	Apply Growth Regulato		CST Air Spray, 3 Gal Mi		Mepiquat Chloride	0.50 Pt	103.28 Ga	6.00 Ac	
17	Jun	8.0	Irrigate			5.00	Water, District	4.00 AI	38.00 AF		Irrigator
18	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Oxamyl	1.50 Pt	66.19 Ga	6.00 Ac	
19	Jul	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Pyriproxyfen	8.00 Oz	560.00 Ga	6.00 Ac	
20	Jul	1.0	Apply Herbicide/Air		CST Air Spray, 5 Gal Mi		Prometryn	2.50 Pt	30.00 Ga	8.32 Ac	
21	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Methidathion	3.00 Pt	48.80 Ga	6.00 Ac	
22	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Buprofezin	0.50 Lb	50.00 Lb	6.00 Ac	
23	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Methomyl	1.00 Pt	47.16 Ga	6.00 Ac	
24	Sep	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mi		Thidiazuron/diuron	9.50 Oz	199.00 Ga	8.32 Ac	
25	Oct	1.0	Apply Defoliant/Air		CST Air Spray, 5 Gal Mi		Sodium Chlorate	2.00 Ga	6.08 Ga	8.32 Ac	
26	Oct	1.0	Cotton, First Pick		Cotton Picker, 2 Row	1.00					Tractor
27	Oct	1.0	Cotton, Make Modules	80	Module Builder	3.00	Module Tarps	30.00 CW	0.05 CW		Tractor Other
28	Nov	0.9	Cotton, Second Pick		Cotton Picker, 2 Row	1.50					Harvest
29	Nov	1.0	Cotton, Rood	70	Rood, 3 Row W/Basket Cl	3.00					Tractor
30	Nov	1.0	Cotton, Make Modules	80	Module Builder	3.60	Module Tarps	30.00 CW	0.05 CW		Tractor Other
31	Oct	1.0	Haul, Custom		CST Haul Cotton Modules					0.00 Mu	
32	Oct	1.0	Cotton Ginning		CST Gin Upland Cotton					3.00 Cs	
33	Dec	1.0	Cotton Classing		CST Class Cotton, HVI					1.50 Ba	
34	Dec	1.0	Crop Assessment		CST Upland (Low Elev)					3.60 Ba	
35	Dec	1.0	Cut Stalks	100	Rotary Stalk Cutter, 4	5.00					Tractor
36	Dec	1.0	Disk Residue	100	Offset Disk, 13.5'	4.00					Tractor
			Pickup Use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50					

* 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 7B.