

Table 8A. Income and Cash Operating Summary; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ton	16.83	\$141.60	\$2,383.13	\$2,383.13	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					59.91	_____
Tractor/Self Propelled				28.53		_____
Irrigation				31.37		_____
Chemicals and Custom Applications					54.19	_____
Fertilizer				50.90		_____
Herbicide				3.29		_____
Farm Machinery and Vehicles					41.09	_____
Diesel Fuel				17.32		_____
Repairs and Maintenance				23.77		_____
Irrigation Water (excluding labor)					229.46	_____
Natural Gas/Pumping				199.84		_____
Repairs and Maintenance				29.62		_____
Other Purchased Inputs &					133.45	_____
Seed/Transplants				58.45		_____
Other Services and Rentals				75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					518.10	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					131.98	_____
Tractor/Self Propelled				70.63		_____
Other/Contract				61.35		_____
Farm Machinery and Vehicles					58.52	_____
Diesel Fuel				18.43		_____
Repairs and Maintenance				40.08		_____
Other Materials					319.03	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					509.53	_____
OPERATING OVERHEAD -> PICKUP USE					15.25	_____
OPERATING INTEREST AT 10.0%					44.04	_____
TOTAL CASH OPERATING EXPENSES					\$1,086.91	_____
RETURNS OVER CASH OPERATING EXPENSES					\$1,296.22	_____

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

Table 8B. Allocations of Ownership Costs; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$141.60 / Tn	\$2,383.13		\$2,383.13	
TOTAL OPERATING EXPENSES	\$1,086.91		\$1,086.91	
RETURN OVER CASH OPERATING EXPENSES		\$1,296.22		\$1,296.22
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	7.59		7.59	
Wells and Irrigation System	17.46		17.46	
General and Office Overhead (5.0%of Total Operating Exp.)	54.35		54.35	
General Farm Maintenance (3.0% of Total Operating Exp.)	32.61		32.61	
Total Cash Overhead Expenses	112.00		112.00	
Total Cash Operating and Overhead Cost	1,198.92		1,198.92	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$1,184.21		\$1,184.21
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			51.34	
Wells and Irrigation System			65.01	
Interest on Equity, Machinery and Vehicles			17.10	
Wells and Irrigation System			33.15	
Total Capital Allocations			166.60	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$1,184.21		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$1,017.62
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs	75.00		75.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,109.21		
RETURNS TO MANAGEMENT AND RISK ----->				\$942.62
Management Services (8% of Total Operation Expenses)			86.95	
TOTAL OWNERSHIP COST	187.00		440.55	
TOTAL COST	\$1,273.92		\$1,527.46	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$1,109.21		
RETURNS TO RISK (PROFITS) ----->				\$855.66
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$64.58		\$64.58
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$11.11		\$26.18
BREAK-EVEN PRICE TO COVER TOTAL COST		\$75.69		\$90.76

Table 8C. Variable Operating Costs; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

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	Jan	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L
2	Feb	Disk	0.225	0.250	3.62	2.19			5.82	2.0	11.63	L
3	Mar	Apply Fert/Ground	0.075	0.083	0.79	0.73	39.64		41.16	1.0	41.16	G
4	Feb	Laser Level	0.900	1.000	11.81	8.77			20.59	0.3	6.18	L
5	Mar	Landplane	0.225	0.250	2.59	2.19			4.78	0.5	2.39	L
6	Apr	List	0.180	0.200	2.58	1.75			4.33	1.0	4.33	L
7	Apr	Buck Rows	0.023	0.025	0.23	0.22			0.45	4.0	1.80	G
8	Apr	Preirrigate		0.565	31.65	4.33			35.98	1.0	35.98	G
9	Apr	Plant	0.333	0.370	4.77	3.25	58.45		66.47	1.0	66.47	L
10	May	Apply Herbicide/Ground	0.150	0.167	1.70	1.47	3.29		6.45	1.0	6.45	G
11	May	Cultivate	0.225	0.250	2.53	2.19			4.72	3.0	14.16	G
12	May	Irrigate		0.279	15.82	2.14			17.96	2.0	35.93	G
13	Jun	Thinning					75.00		75.00	1.0	75.00	G
14	Jun	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	G
15	Jun	Irrigate		0.424	23.74	3.25			26.99	6.0	161.93	G
16	Jun	Irrigate/Run Fertilizer		0.424	23.74	3.25	11.26		38.25	1.0	38.25	G
17	Jul	Prepare Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	H
18	Aug	Harvest, Load & Haul	3.600	8.000	28.97	65.77	159.52		254.26	2.0	508.51	H
19	Sep	Disk Residue	0.225	0.250	4.26	2.19			6.45	1.0	6.45	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0					44.04				44.04	
TOTAL CASH OPERATING EXPENSES (includes all times over):											1086.91	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

Land Preparation (L)	106.41
Growing (G)	411.69
Harvest (H)	509.53
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	59.29
Total (T)	\$1,086.91

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

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	
- 25%	12.6	425.02	693.12	871.85	1,050.59	1,318.69	72.53
- 10%	15.1	616.69	938.41	1,152.89	1,367.38	1,689.10	65.49
Budgeted	16.8	744.47	1,101.94	1,340.25	1,578.57	1,936.04	61.97
+ 10%	18.5	872.25	1,265.47	1,527.61	1,789.76	2,182.97	59.08
+ 25%	21.0	1,063.93	1,510.76	1,808.65	2,106.55	2,553.38	55.63
Break-even Yield		7.02	5.49	4.79	4.25	3.64	

Table 8D. Resource and Cash Flow Requirements; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

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			0.36		5.83	3.13				8.96
FEB C			0.55		7.17	4.83				12.00
MAR C			0.46		5.71	4.02	39.64			49.37
APR C	1.0	8.0	1.16		39.23	9.55		58.45		107.23
MAY C	1.0	4.0	0.70		20.05	5.80	3.29			29.14
JUN C	3.0	18.0	1.87		77.30	15.02	11.26		75.00	178.58
JUL C	4.0	24.0	1.72		95.24	13.23				108.47
AUG C	1.0	4.0	16.33		74.28	134.11		319.03		527.42
SEP C			0.25		4.26	2.19				6.45
Pickup Use 60 Mi/Acre					15.25					15.25
Operating Interest at 10.0									44.04	44.04
Total	10.0	58.0	23.39		344.32	191.88	54.19	377.48	119.04	1086.91
%					31.68	17.65	4.99	34.73	10.95	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 88.0
 Total P 60.0
 Total Labor 23.4
 Total Water 58.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 37.9 Gal
 Unleaded Gas 6.0 Gal
 Nat Gas/Pumping 469.0 Therms
 All Direct Energy 52.9 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	0.33 Hr	Drag Scraper, 10'	0.27 Hr	Fertilizer Broadcaster,	0.08 Hr
Landplane 12'X 45'	0.11 Hr	Laser, Complete System	0.27 Hr	Lister, 5 Bottom	0.18 Hr
Moldboard Plow, 4-16 2	0.32 Hr	Offset Disk, 12'	0.09 Hr	Offset Disk, 13.5'	0.45 Hr
Offset Disk, 16.5'	0.22 Hr	Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Stanhay, 2 Row	0.33 Hr
Rolling Cultivator, 4 Rw	0.67 Hr	Rowbuck, 10'	0.09 Hr	Saddle Tk Sprayer, 2 Tk 8	0.15 Hr
Tractor, 50 PTO HP	7.20 Hr	Tractor, 100 PTO HP	1.53 Hr	Tractor, 125 PTO HP	0.90 Hr
Tractor, 150 PTO HP	0.55 Hr	Vegetable Trailer Flat Bed	7.20 Hr		

MATERIALS REQUIREMENT (per Acre)

16-20-00, Dry	300.00 Lb	32-00-00, URAN 32, Lqd	11.30 Ga	Trifluralin	1.00 Pt
Water, Pump	58.00 Al	Watermelon Bins	33.60 Ea	Watermelon Seed (OP)	2.00 Th

LABOR REQUIREMENT (per Acre)

Irrigators	4.09 Hr	Other	8.00 Hr	Tractor	11.30 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

Table 8E. Schedule of Operations; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Jan	1.0	Plow	150	Moldboard Plow, 4-16 2	2.80						Tractor
Feb	2.0	Disk	125	Offset Disk, 13.5'	4.00						Tractor
Mar	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	12.00	16-20-00, Dry	300.00	Lb	250.50	Tn	Tractor
Feb	0.3	Laser Level	125	Drag Scraper, 10'	1.00						Tractor
				Laser, Complete System							
Mar	0.5	Landplane	100	Landplane 12'X 45'	4.00						Tractor
Apr	1.0	List	125	Lister, 5 Bottom	5.00						Tractor
Apr	4.0	Buck Rows	100	Rowbuck, 10'	40.00						Tractor
Apr	1.0	Preirrigate			1.77	Water, Pump	8.00	Al	47.47	AF	Irrigators
Apr	1.0	Plant	100	Bed Shaper, 4 Rw	2.70	Watermelon Seed (OP)	2.00	Th	27.70	Th	Tractor
				Planter, Stanhay, 2 Row							
May	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	6.00	Trifluralin	1.00	Pt	24.95	Ga	Tractor
May	3.0	Cultivate	100	Rolling Cultivator, 4 Rw	4.00						Tractor
May	2.0	Irrigate			3.58	Water, Pump	4.00	Al	47.47	AF	Irrigators
Jun	1.0	Thinning		CST Thinning						75.00	Ac
Jun	2.0	Disk Ends	100	Offset Disk, 12'	40.00						Tractor
Jun	6.0	Irrigate			2.36	Water, Pump	6.00	Al	47.47	AF	Irrigators
Jun	1.0	Irrigate/Run Fertilizer			2.36	Water, Pump	6.00	Al	47.47	AF	Irrigators
						32-00-00, URAN 32,	11.30	Ga	170.80	Tn	
Jul	2.0	Prepare Ends	100	Offset Disk, 12'	40.00						Tractor
Aug	2.0	Harvest, Load & Haul	50	Vegetable Trailer Flat Bed	0.25	Watermelon Bins	16.80	Ea	9.00	Ea	Tractor Other
Sep	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						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.

Table 8F Operations Calendar; Watermelons, 2001

COUNTY: Cochise FARM: Southern Vegetables WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Kansas Settlement YIELD: 16.8 Tn/Acre PREVIOUS CROP: Wheat, Winter DATE: 10/08/01

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow	1.0 C											
2	Disk		1.0 C	1.0 C									
3	Laser Level		0.3 C										
4	Apply Fert/Ground			1.0 C									
5	Landplane			0.5 C									
6	List				1.0 C								
7	Buck Rows				1.0 C		2.0 C		1.0 C				
8	Preirrigate				1.0 C								
9	Plant				1.0 C								
10	Apply Herbicide/Ground					1.0 C							
11	Cultivate					1.0 C	2.0 C						
12	Irrigate					1.0 C			1.0 C				
13	Thinning						1.0 C						
14	Disk Ends						2.0 C						
15	Irrigate						2.0 C	4.0 C					
16	Irrigate/Run Fertilizer						1.0 C						
17	Prepare Ends							1.0 C	1.0 C				
18	Harvest, Load & Haul								1.0 C				
19	Disk Residue											1.0 C	

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