

Table 6A. Income and Cash Operating Summary; Watermelons, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam
 AREA: Maricopa YIELD: 17.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 11/23/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Melons	Ton	17.00	\$123.00	\$2,091.00	\$2,091.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					87.74	_____	
Tractor/Self Propelled					43.38	_____	
Irrigation					44.36	_____	
Chemicals and Custom Applications					138.42	_____	
Fertilizer					73.92	_____	
Insecticide					25.19	_____	
Herbicide					39.30	_____	
Farm Machinery and Vehicles					52.21	_____	
Diesel Fuel					19.32	_____	
Repairs and Maintenance					32.89	_____	
Irrigation Water (excluding labor)					181.46	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs &					631.09	_____	
Seed/Transplants					88.09	_____	
Other Services and Rentals					543.00	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1090.91	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					163.78	_____	
Tractor/Self Propelled					163.78	_____	
Farm Machinery and Vehicles					122.94	_____	
Diesel Fuel					33.78	_____	
Repairs and Maintenance					89.16	_____	
Custom Harvest/Post Harvest					170.00	_____	
Other Materials					486.54	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					943.27	_____	
OPERATING OVERHEAD PICKUP USE					15.41	_____	
OPERATING INTEREST AT 10.0%					40.17	_____	
TOTAL CASH OPERATING EXPENSES					\$2,089.76	=====	
RETURNS OVER CASH OPERATING EXPENSES					\$1.24	_____	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 6B. Allocations of Ownership Costs; Watermelons, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam
 AREA: Maricopa YIELD: 17.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 11/23/98

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$123.00 / Tn	\$2,091.00		\$2,091.00	
TOTAL OPERATING EXPENSES	\$2,089.76		\$2,089.76	
RETURN OVER CASH OPERATING EXPENSES		\$1.24		\$1.24
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	15.51		15.51	
General and Office Overhead (5.0% of Total Operating Exp.)	104.49		104.49	
General Farm Maintenance (3.0% of Total Operating Exp.)	62.69		62.69	
Total Cash Overhead Expenses	182.69		182.69	
Total Cash Operating and Overhead Cost	2,272.45		2,272.45	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$181.45)		(\$181.45)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			105.61	
Interest on Equity, Machinery and Vehicles			20.36	
Total Capital Allocations			125.96	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$181.45)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$307.41)
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$306.45)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$432.41)
Management Services (8% of Total Operation Expenses)			167.18	
TOTAL OWNERSHIP COST	307.69		600.84	
TOTAL COST	\$2,397.45		\$2,690.59	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$306.45)		
RETURNS TO RISK (PROFITS) ----->				(\$599.59)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$122.93		\$122.93
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$18.10		\$35.34
BREAK-EVEN PRICE TO COVER TOTAL COST		\$141.03		\$158.27

Table 6C. Variable Operating Costs; Watermelons, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam
 AREA: Maricopa YIELD: 17.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 11/23/98

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Dec	Rip	0.450	0.500	5.56	4.09			9.66	1.0	9.66	L
2	Dec	Disk	0.225	0.250	4.01	2.05			6.05	2.0	12.11	L
3	Dec	Landplane	0.225	0.250	3.47	2.05			5.52	2.0	11.04	L
4	Dec	List	0.300	0.333	3.80	2.73		39.30	45.83	1.0	45.83	L
5	Dec	Buck Rows	0.045	0.050	0.26	0.41			0.67	5.0	3.36	G
6	Dec	Preirrigate		0.500		3.41		13.96	17.37	1.0	17.37	G
7	Jan	Disk Ends	0.045	0.050	0.57	0.41			0.98	5.0	4.88	G
8	Jan	Plant	0.300	0.333	3.24	2.73		88.09	94.05	1.0	94.05	L
9	Jan	Soil Fertility					3.00		3.00	1.0	3.00	G
10	Jan	Apply Fert/Ground	0.300	0.333	3.15	2.73		29.15	35.03	1.0	35.03	G
11	Feb	Irrigate		0.400		2.73		11.17	13.90	9.0	125.07	G
12	Feb	Cultivate	0.257	0.286	1.93	2.34			4.27	6.0	25.62	G
13	Feb	Thinning					75.00		75.00	1.0	75.00	G
14	Mar	Hand Weeding					75.00		75.00	2.0	150.00	G
15	Apr	Apply Fert/Ground	0.300	0.333	2.94	2.73		20.43	26.10	1.0	26.10	G
16	Apr	Pollinate					15.00		15.00	1.0	15.00	G
17	Apr	Turn Vines					75.00		75.00	4.0	300.00	G
18	Apr	Irrigate/Run Fertilizer		0.400		2.73		15.22	17.95	6.0	107.72	G
19	Apr	Apply Insecticide/Air					4.23	8.37	12.60	2.0	25.19	G
20	Jun	Cut Melons		4.000				160.82	160.82	3.0	486.54	H
21	Jun	Load Produce	6.000	13.33	42.34	54.59			96.25	3.0	290.79	H
22	Jun	Haul, Custom 17 Tn					170.00		170.00	1.0	170.00	H
23	Jul	Disk Residue 17 Tn	0.225	0.250	4.01	2.05			6.05	1.0	6.05	L
		Pickup Use60 Mi/Acre	2.000		15.41						15.41	
		Operating Interest at 10.0					40.17				40.17	
TOTAL CASH OPERATING EXPENSES (includes all times over):					193.75	251.52	761.58	886.04			2089.76	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 \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)						
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Land Preparation (L)	178.74	Yields	\$92.25	\$110.70	\$123.00	\$135.30	\$153.75	Break-even Price
Growing (G)	912.17							
Harvest (H)	943.27							
Post Harvest (P)	0.00	- 25%	12.8	-665.99	-430.75	-273.93	-117.10	118.13
Marketing (M)	0.00	- 10%	15.3	-572.55	-290.26	-102.07	86.12	368.40
Operating Overhead (O)	55.58	Budgeted	17.0	-510.25	-196.60	12.50	221.60	535.25
		+ 10%	18.7	-447.96	-102.94	127.07	357.08	702.09
Total (T)	\$2,089.76	Break-even Yield		31.48	20.91	17.09	14.45	11.73

Table 6D. Resource and Cash Flow Requirements; Watermelons, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam
 AREA: Maricopa YIELD: 17.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 11/23/98

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
DEC P	1.0	5.0	2.38	13.96	22.51	36.24	39.30				112.01
JAN C			0.72		6.82	5.86	29.15	88.09		3.00	132.92
FEB C	3.0	12.0	1.59	33.50	17.36	27.89				75.00	153.75
MAR C	3.0	12.0	1.77	33.50	13.84	20.67				75.00	143.01
APR C	5.0	20.0	3.19	55.83	22.01	37.91	36.91			244.23	396.84
MAY C	4.0	16.0	1.80	44.67	11.32	26.33	24.59			154.23	261.14
JUN C			52.10		80.56	94.57		483.41		170.00	828.54
JUL C			0.25		3.92	2.05					5.97
Pickup Use60 Mi/Acre					15.41						15.41
Operating Interest at 10.0										40.17	40.17
Water Assessment				**							
Total	16.0	65.0	63.80	181.46	193.75	251.52	129.96	571.50	761.58	2089.76	
%				8.68	9.27	12.04	6.22	27.35	36.44	100.00	

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 189.9
 Total P 92.0
 Total K 0.0
 Total Labor 63.8
 Total Water 65.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 69.9 Gal
 Unleaded Gas 6.0 Gal
 All Direct Energy 10.4 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Cultivator, Sweep, 4 Rw	1.54 Hr	Fert. Side Dress Unit,	0.60 Hr	Landplane 12'X 45'	0.45 Hr
Lister, 5 Bottom	0.30 Hr	Offset Disk, 13.5'	0.23 Hr	Offset Disk, 16.5'	0.67 Hr
Pickup Truck, 1/2 Ton	2.00 Hr	Planter, Planet Jr, 4 Row	0.30 Hr	Rowbuck, 10'	0.23 Hr
Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 50 PTO HP,	18.00 Hr	Tractor, 60 PTO HP	0.53 Hr
Tractor, 70 PTO HP	1.84 Hr	Tractor, 100 PTO HP	0.83 Hr	Tractor, 150 PTO HP	1.13 Hr
Tractor, 150 PTO HP,	0.45 Hr	V-Ripper, 5 Shnk	0.45 Hr	Vegetable Trailer Flat Bed	18.00 Hr

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	200.00 Lb	32-00-00, URAN 32, Lqd	24.00 Ga	46-00-00, Urea 46	150.00 Lb
BT	4.00 Pt	DCPA	6.00 Lb	Water, District	65.00 Al
Watermelon Bins	51.00 Ea	Watermelon Seed (OP)	3.00 Th		

LABOR REQUIREMENT (per Acre)

Cutter	12.00 Hr	Irrigators	6.50 Hr	Loader/Watermelons	20.00 Hr
Tractor	25.30 Hr				

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

** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 6E. Schedule of Operations; Watermelons, 1998

COUNTY: Pinal FARM: Pinal Vegetables 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam
 AREA: Maricopa YIELD: 17.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 11/23/98

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		
1	Dec	1.0 Rip		150 V-Ripper, 5 Shnk	2.00					Tractor
2	Dec	2.0 Disk		150 Offset Disk, 16.5'	4.00					Tractor
3	Dec	2.0 Landplane		150 Landplane 12'X 45'	4.00					Tractor
4	Dec	1.0 List		100 Lister, 5 Bottom Saddle Tk Sprayer, 2 Tk 8 Row	3.00	DCPA	6.00 Lb	6.18 Lb		Tractor
5	Dec	5.0 Buck Rows		60 Rowbuck, 10'	20.00					Tractor
6	Dec	1.0 Preirrigate			2.00	Water, District	5.00 Al	33.50 AF		Irrigators
7	Jan	5.0 Disk Ends		100 Offset Disk, 13.5'	20.00					Tractor
8	Jan	1.0 Plant		100 Planter, Planet Jr, 4 Row	3.00	Watermelon Seed (OP)	3.00 Th	27.70 Th		Tractor
9	Jan	1.0 Soil Fertility		CST Soil Analysis (Surface)					3.00 Ac	
10	Jan	1.0 Apply Fert/Ground		70 Fert. Side Dress Unit, 4Row	3.00	18-46-00, Dry	200.00 Lb	275.00 Tn		Tractor
11	Feb	9.0 Irrigate			2.50	Water, District	4.00 Al	33.50 AF		Irrigators
12	Feb	6.0 Cultivate		70 Cultivator, Sweep, 4 Rw	3.50					Tractor
13	Feb	1.0 Thinning		CST Thinning					75.00 Ac	
14	Mar	2.0 Hand Weeding		CST Hand Weeding					75.00 Ac	
15	Apr	1.0 Apply Fert/Ground		60 Fert. Side Dress Unit, 4Row	3.00	46-00-00, Urea 46	150.00 Lb	257.00 Tn		Tractor
16	Apr	1.0 Pollinate		CST Bee Hive Rental					15.00 Ac	
17	Apr	4.0 Turn Vines		CST Hand Weeding					75.00 Ac	
18	Apr	6.0 Irrigate/Run Fertilizer			2.50	Water, District	4.00 Al	33.50 AF		Irrigators
						32-00-00, URAN 32,	4.00 Ga	173.00 Tn		
19	Apr	2.0 Apply Insecticide/Air		CST Air Spray, 3 Gal Mix		BT	2.00 Pt	31.57 Ga	4.23 Ac	
20	Jun	3.0 Cut Melons			0.25	Watermelon Bins	17.00 Ea	9.00 Ea		Cutter
21	Jun	3.0 Load Produce		50 Vegetable Trailer Flat Bed	0.15					Tractor Loader/Wat
22	Jun	1.0 Haul, Custom		CST Haul Watermelons					10.00 Tn	
23	Jul	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.