

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

COUNTY: Pinal	FARM: Pinal County 98	WATER SOURCE: Central Arizona	TILLAGE: Conventional
CROP: Barley	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Maricopa	YIELD: 4,900.0 Lb / Acre	PREVIOUS CROP: Cotton, Upland	DATE: 2/18/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Grain	Pound	4,900.00	\$0.06	\$308.70	\$308.70	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					26.58	_____	
Tractor/Self Propelled				9.18		_____	
Irrigation				17.40		_____	
Chemicals and Custom Applications					67.47	_____	
Fertilizer				67.47		_____	
Farm Machinery and Vehicles					13.71	_____	
Diesel Fuel				4.80		_____	
Repairs and Maintenance				8.90		_____	
Irrigation Water (excluding labor)					96.00	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs & Seed/Transplants					34.34	_____	
				34.34		_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					238.10	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					0.20	_____	
Tractor/Self Propelled				0.20		_____	
Farm Machinery and Vehicles					0.39	_____	
Diesel Fuel				0.14		_____	
Repairs and Maintenance				0.25		_____	
Custom Harvest/Post Harvest					68.10	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					68.70	_____	
OPERATING OVERHEAD PICKUP USE					7.71	_____	
OPERATING INTEREST AT 10.0%					9.76	_____	
TOTAL CASH OPERATING EXPENSES					\$324.26	=====	
RETURNS OVER CASH OPERATING EXPENSES					(\$15.56)	_____	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$19.80 per Acre is included as an ownership cost in Table B.

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

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Central Arizona TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 4,900.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.06 / Lb	\$308.70		\$308.70	
TOTAL OPERATING EXPENSES	\$324.26		\$324.26	
RETURN OVER CASH OPERATING EXPENSES		(\$15.56)		(\$15.56)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	1.53		1.53	
General and Office Overhead (5.0% of Total Operating Exp.)	16.21		16.21	
General Farm Maintenance (3.0% of Total Operating Exp.)	9.73		9.73	
Total Cash Overhead Expenses	27.47		27.47	
Total Cash Operating and Overhead Cost	351.73		351.73	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$43.03)		(\$43.03)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			8.78	
Interest on Equity, Machinery and Vehicles			4.58	
Total Capital Allocations			13.36	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$43.03)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$56.39)
Land Cost / Ownership (100% Equity)				
Property Taxes (\$447.00 X 16.0% X 0.169)	12.15		12.15	
Opportunity Interest on Land (100% X 6.0 X \$447.00)			26.82	
Water Assessment	19.80		19.80	
Total Land Costs	31.95		58.77	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$74.98)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$115.16)
Management Services (8% of Total Operation Expenses)			25.94	
TOTAL OWNERSHIP COST	59.42		125.54	
TOTAL COST	\$383.68		\$449.80	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$74.98)		
RETURNS TO RISK (PROFITS) ----->				(\$141.10)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.07		\$0.07
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.08		\$0.09

Table 6C. Variable Operating Costs; Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Central Arizona TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 4,900.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

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	Nov	Apply Fert/Ground	0.075	0.083	0.42	0.68		33.87	34.97	1.0	34.97	G
2	Nov	Disk	0.225	0.250	3.92	2.05			5.97	1.0	5.97	L
3	Nov	List	0.237	0.263	3.10	2.15			5.26	1.0	5.26	L
4	Dec	Plant	0.225	0.250	2.22	2.05		34.34	38.61	1.0	38.61	L
5	Dec	Buck Rows	0.022	0.025	0.12	0.20			0.32	1.0	0.32	G
6	Dec	Irrigate		0.750		5.12		24.00	29.12	1.0	29.12	G
7	Feb	Irrigate/Run Fertilizer		0.450		3.07		34.80	37.87	2.0	75.74	G
8	Mar	Irrigate		0.450		3.07		18.00	21.07	2.0	42.14	G
9	May	Prepare Ends	0.023	0.025	0.39	0.20			0.60	1.0	0.60	H
10	May	Combine Harvest					55.35	55.35	1.0	55.35	55.35	H
11	May	Haul, Custom 51 CW					12.75	12.75	1.0	12.75	12.75	H
12	Jun	Disk Residue 51 CW	0.225	0.250	3.92	2.05			5.97	1.0	5.97	L
		Pickup Use30 Mi/Acre	1.000		7.71						7.71	
		Operating Interest at 10.0					9.76				9.76	
TOTAL CASH OPERATING EXPENSES (includes all times over):											324.26	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 \$19.80 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)	55.81	Yields	\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	Break-even Price	
Growing (G)	182.29								
Harvest (H)	68.70								
Post Harvest (P)	0.00	- 25%	3,675.0	-134.45	-99.73	-76.57	-53.42	-18.69	0.08
Marketing (M)	0.00	- 10%	4,410.0	-110.03	-68.36	-40.57	-12.79	28.88	0.07
Operating Overhead (O)	17.47	Budgeted	4,900.0	-93.75	-47.44	-16.57	14.30	60.60	0.07
	=====	+ 10%	5,390.0	-77.47	-26.53	7.43	41.38	92.32	0.06
Total (T)	\$324.26	+ 25%	6,125.0	-53.04	4.84	43.43	82.02	139.90	0.06
		Break-even Yield		7,721.17	6,011.59	5,238.36	4,641.37	3,963.77	

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

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Central Arizona TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 4,900.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P			0.30		3.72	2.44	16.93			23.10
DEC P	0.4	3.2	0.72	9.60	4.83	5.51	16.93	17.17		54.05
JAN C	0.6	4.8	0.59	14.40	1.17	4.20		17.17		36.94
FEB C	1.0	6.0	0.45	18.00		3.07	16.80			37.87
MAR C	1.5	9.0	0.67	27.00		4.61	16.80			48.41
APR C	1.5	9.0	0.67	27.00		4.61				31.61
MAY C			0.03		0.39	0.20			7.80	8.40
JUN C			0.25		3.92	2.05			60.05	44.97
DEC C			0.01		0.06	0.10				0.16
Pickup Use 30 Mi/Acre					7.71					7.71
Operating Interest at 10.0									9.76	9.76
Water Assessment				**						
Total	5.0	32.0	3.70	96.00	21.81	26.79	67.47	34.34	77.85	324.26
%				29.61	6.73	8.26	20.81	10.59	24.01	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 183.8
 Total P 95.4
 Total K 0.0
 Total Labor 3.7
 Total Water 32.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 6.5 Gal
 Unleaded Gas 3.0 Gal
 All Direct Energy 1.3 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Fertilizer Broadcaster,	0.08 Hr	Grain Drill, 14'	0.22 Hr	Lister, 5 Bottom	0.24 Hr
Offset Disk, 16.5'	0.47 Hr	Pickup Truck, 1/2 Ton	1.00 Hr	Rowbuck, 10'	0.02 Hr
Tractor, 70 PTO HP,	0.32 Hr	Tractor, 125 PTO HP	0.24 Hr	Tractor, 150 PTO HP	0.47 Hr

MATERIALS REQUIREMENT (per Acre)

11-53-00, Dry	180.00 Lb	82-00-00, Anhyd.	200.00 Lb	Barley Sd, Cert	135.00 Lb
Water, District	32.00 Al				

LABOR REQUIREMENT (per Acre)

Irrigators	2.55 Hr	Tractor	1.15 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$19.80 per Acre is included as an ownership cost in Table B.

Table 6E. Schedule of Operations; Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Central Arizona TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 4,900.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	----- Material Use and Cost ----- Name	----- Service Cost -----		Labor Type
				HP	Self-Prop./ Implement			Appl. Rate \$ / Unit	\$ / Unit	
1	Nov	1.0	Apply Fert/Ground	70	Fertilizer Broadcaster,	12.00	11-53-00, Dry	180.00 Lb	355.00 Tn	Tractor
2	Nov	1.0	Disk	150	Offset Disk, 16.5'	4.00				Tractor
3	Nov	1.0	List	125	Lister, 5 Bottom	3.80				Tractor
4	Dec	1.0	Plant	70	Grain Drill, 14'	4.00	Barley Sd, Cert	135.00 Lb	24.00 CW	Tractor
5	Dec	1.0	Buck Rows	70	Rowbuck, 10'	40.00				Tractor
6	Dec	1.0	Irrigate			1.33	Water, District	8.00 AI	36.00 AF	Irrigators
7	Feb	2.0	Irrigate/Run Fertilizer			2.22	Water, District	6.00 AI	36.00 AF	Irrigators
							82-00-00, Anhyd.	100.00 Lb	317.00 Tn	
8	Mar	2.0	Irrigate			2.22	Water, District	6.00 AI	36.00 AF	Irrigators
9	May	1.0	Prepare Ends	150	Offset Disk, 16.5'	40.00				Tractor
10	May	1.0	Combine Harvest		CST Combine Barley					37.50 Ac
11	May	1.0	Haul, Custom		CST Haul Grain					0.25 C
12	Jun	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00				Tractor
			Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00				

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

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