

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

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,600.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/2/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Grain	Pound	4,600.00	\$0.06	\$289.80	\$289.80	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					26.78	_____
Tractor/Self Propelled				10.94		_____
Irrigation				15.60		_____
Other/ Contract				0.24		_____
Chemicals and Custom Applications					86.67	_____
Fertilizer				68.23		_____
Herbicide				18.43		_____
Farm Machinery and Vehicles					10.43	_____
Diesel Fuel				4.46		_____
Repairs and Maintenance				5.97		_____
Irrigation Water (excluding labor)					6.67	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				22.84	22.84	_____
					-----	_____
					153.38	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.49	_____
Tractor/Self Propelled				0.49		_____
Farm Machinery and Vehicles					0.47	_____
Diesel Fuel				0.18		_____
Repairs and Maintenance				0.29		_____
Custom Harvest/Post Harvest					66.90	_____
					-----	_____
					67.86	_____
OPERATING OVERHEAD PICKUP USE						
					7.64	_____
OPERATING INTEREST AT 10.0%						
					6.02	_____
					=====	=====
					\$234.91	_____
					=====	=====
					\$54.89	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

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

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,600.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/2/99

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	\$289.80		\$289.80	
TOTAL OPERATING EXPENSES	\$234.91		\$234.91	
RETURN OVER CASH OPERATING EXPENSES		\$54.89		\$54.89
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	1.29		1.29	
General and Office Overhead (5.0% of Total Operating Exp.)	11.75		11.75	
General Farm Maintenance (3.0% of Total Operating Exp.)	7.05		7.05	
Total Cash Overhead Expenses	20.09		20.09	
Total Cash Operating and Overhead Cost	255.00		255.00	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$34.80		\$34.80
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			7.03	
Interest on Equity, Machinery and Vehicles			3.88	
Total Capital Allocations			10.91	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$34.80		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$23.89
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	13.98		13.98	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			37.14	
Water Assessment	20.00		20.00	
Total Land Costs	33.98		71.12	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$0.82		
RETURNS TO MANAGEMENT AND RISK ----->				(\$47.23)
Management Services (8% of Total Operation Expenses)			18.79	
TOTAL OWNERSHIP COST	54.07		120.91	
TOTAL COST	\$288.98		\$355.82	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$0.82		
RETURNS TO RISK (PROFITS) ----->				(\$66.02)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.05		\$0.05
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.06		\$0.08

Table 6C. Variable Operating Costs; Barley, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
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 AREA: Salt River Project YIELD: 4,600.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/2/99

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	Dec	Apply Fert/Ground	0.180	0.200	1.39	1.95		31.81	35.15	1.0	35.15	G
2	Dec	Disk	0.170	0.189	2.71	1.84			4.55	1.0	4.55	L
3	Dec	Make Borders	0.113	0.125	1.07	1.22			2.29	1.0	2.29	G
4	Dec	Plant	0.225	0.250	2.70	2.44		22.84	27.98	1.0	27.98	L
5	Dec	Buck Rows	0.022	0.050	0.13	0.49			0.62	1.0	0.62	G
6	Dec	Irrigate		0.400		3.90			3.90	1.0	3.90	G
7	Jan	Apply Herbicide/Air					4.75	13.68	18.43	1.0	18.43	G
8	Feb	Irrigate/Run Fertilizer		0.300		2.92		18.21	21.14	2.0	42.27	G
9	Apr	Irrigate		0.300		2.92		3.33	6.26	2.0	12.52	G
10	May	Prepare Ends	0.045	0.050	0.47	0.49			0.96	1.0	0.96	H
11	May	Combine Harvest						54.65	54.65	1.0	54.65	H
12	May	Haul, Custom 49 CW						12.25	12.25	1.0	12.25	H
13	Jun	Disk Residue 49 CW	0.300	0.333	2.42	3.25			5.67	1.0	5.67	L
		Pickup Use30 Mi/Acre	1.000		7.64				7.64		7.64	
		Operating Interest at 10.0						6.02	6.02		6.02	
TOTAL CASH OPERATING EXPENSES (includes all times over):											234.91	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. A water assessment charge of \$20.00 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%	Break-even Price	
Land Preparation (L)	38.20	Yields	\$0.05	\$0.06	\$0.06	\$0.07	\$0.08		
Growing (G)	115.19								
Harvest (H)	67.86	- 25%	3,450.0	-54.13	-21.53	0.20	21.94	54.54	0.06
Post Harvest (P)	0.00	- 10%	4,140.0	-31.71	7.41	33.49	59.58	98.70	0.05
Marketing (M)	0.00	Budgeted	4,600.0	-16.76	26.71	55.69	84.67	128.14	0.05
Operating Overhead (O)	13.66	+ 10%	5,060.0	-1.81	46.00	77.88	109.76	157.58	0.05
	=====	+ 25%	5,750.0	20.61	74.95	111.17	147.40	201.74	0.04
Total (T)	\$234.91	Break-even Yield		5,115.77	3,963.28	3,445.77	3,047.80	2,597.75	

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

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
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 AREA: Salt River Project YIELD: 4,600.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/2/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P	1.0	8.0	1.21		8.01	11.83	31.81	22.84		74.50
JAN C							13.68		4.75	18.43
FEB C	1.0	6.0	0.30			2.92	18.21			21.14
MAR C	1.0	6.0	0.30			2.92	18.21			21.14
APR C	2.0	12.0	0.60	6.67		5.85				12.52
MAY C			0.05		0.47	0.49			7.95	8.91
JUN C			0.33		2.42	3.25			58.95	64.62
Pickup Use30 Mi/Acre					7.64					7.64
Operating Interest at 10.0									6.02	6.02
Water Assessment				**						
Total	5.0	32.0	2.80	6.67	18.55	27.27	81.92	22.84	77.67	234.91
%				2.84	7.90	11.61	34.87	9.72	33.06	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 167.4
 Total P 50.0
 Total K 0.0
 Total Labor 2.8
 Total Water 32.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 5.7 Gal
 Unleaded Gas 3.0 Gal
 All Direct Energy 1.2 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Border Disk, Heavy Duty 0.11 Hr	Fertilizer Broadcaster, 0.18 Hr	Grain Drill, 14' 0.22 Hr
Offset Disk, 13.5' 0.05 Hr	Offset Disk, 18' 0.17 Hr	Pickup Truck, 1/2 Ton 1.00 Hr
Rotary Hoe, 4 Rw 0.30 Hr	Rowbuck, 10' 0.02 Hr	Tractor, 80 PTO HP, 0.02 Hr
Tractor, 100 PTO HP, 0.75 Hr	Tractor, 125 PTO HP, 0.11 Hr	Tractor, 150 PTO HP, 0.17 Hr

MATERIALS REQUIREMENT (per Acre)

16-20-00, Dry 250.00 Lb	32-00-00, URAN 32, Lqd 36.00 Ga	Barley Sd, Cert 90.00 Lb
Dicamba 1.00 Pt	Water, District 32.00 Al	

LABOR REQUIREMENT (per Acre)

Irrigators 1.60 Hr	Other 0.03 Hr	Tractor 1.17 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$20.00 per Acre is included as an ownership cost in Table B.

Table 6E. Schedule of Operations; Barley, 1998

COUNTY: Maricopa FARM: Maricopa County 98 WATER SOURCE: Salt River Project TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,600.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/2/99

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			
1	Dec	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	5.00	16-20-00, Dry	250.00	Lb	240.67	Tn	Tractor
2	Dec	1.0	Disk	150	Offset Disk, 18'	5.30						Tractor
3	Dec	1.0	Make Borders	125	Border Disk, Heavy Duty	8.00						Tractor
4	Dec	1.0	Plant	100	Grain Drill, 14'	4.00	Barley Sd, Cert	90.00	Lb	24.00	CW	Tractor
5	Dec	1.0	Buck Rows	80	Rowbuck, 10'	40.00						Tractor
												Other
6	Dec	1.0	Irrigate			2.50	Water, District	8.00	Al	0.00	AF	Irrigators
7	Jan	1.0	Apply Herbicide/Air	CST	Air Spray, 5 Gal Mix		Dicamba	1.00	Pt	103.50	Ga	4.75 Ac
8	Feb	2.0	Irrigate/Run Fertilizer			3.33	Water, District	6.00	Al	0.00	AF	Irrigators
							32-00-00, URAN 32,	18.00	Ga	173.00	Tn	
9	Apr	2.0	Irrigate			3.33	Water, District	6.00	Al	6.67	AF	Irrigators
10	May	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
11	May	1.0	Combine Harvest	CST	Combine Barley							37.50 Ac
12	May	1.0	Haul, Custom	CST	Haul Grain							0.25 C
13	Jun	1.0	Disk Residue	100	Rotary Hoe, 4 Rw	3.00						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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