

Table 9A. Income and Cash Operating Cost Summary, Barley, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,900.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Grain	Pound	4,900.00	\$0.0567	\$277.83	\$277.83	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					20.82	
Tractor/Self Propelled				9.44		
Irrigation				11.21		
Other/Contract				0.18		
Chemicals & Custom Applications					95.24	
Fertilizers				75.66		
Herbicides				19.58		
Farm Machinery and Vehicles					10.48	
Diesel Fuel				4.82		
Repairs & Maint.				5.66		
Irrigation Water (excluding labor)					6.66	
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					22.68	
Seed/Transplants				22.68		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					155.89	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.42	
Tractor/Self Propelled				0.42		
Farm Machinery and Vehicles					0.49	
Diesel Fuel				0.19		
Repairs & Maint.				0.30		
Custom Harvest/Post Harvest					48.15	
TOTAL HARVEST AND POST HARVEST EXPENSE					49.06	
OPERATING OVERHEAD->PICKUP USE					7.43	
OPERATING INTEREST AT 8.0%					4.89	
TOTAL CASH OPERATING EXPENSES					\$217.27	
RETURNS OVER CASH OPERATING EXPENSES					\$60.56	

Notes: The above figures do not include ownership costs, see Table 9B on Next Page for detailed cost allocation.

** A water assessment charge of \$20.34/Acre is included in the ownership costs of Table 9B.

Table 9B. Allocation of Ownership Costs; Barley, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,900.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 0.0567/Lb	\$277.83		\$277.83	
TOTAL OPERATING EXPENSES	217.26		217.26	
RETURN OVER CASH OPERATING EXPENSES		\$60.56		\$60.56
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	1.22		1.22	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	10.86		10.86	
General Farm Maint. (3% of Tot. Oper. Exp.)	6.52		6.52	
Total Cash Overhead Expenses	18.60		18.60	
Total Cash Oper. & Over. Cost	235.86		235.86	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		41.96		41.96
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			6.72	
Interest on Equity, Machinery & Vehicles			3.69	
Total Capital Allocations			10.41	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		41.96		
RETURNS TO LAND, MANAGEMENT & RISK				31.54
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$702 X 16% X .12601)	14.15		14.15	
Opport. Inter. on Land (100% X 6.0% X \$702)			42.12	
Water Assessment **	20.34		20.34	
Total Land Costs	34.49		76.61	
RETURNS TO MANAGEMENT, CAPITAL & RISK		7.46		
RETURNS TO MANAGEMENT & RISK				(45.06)
Management Services (8% of Tot. Oper. Exp.)			17.38	
TOTAL OWNERSHIP COST	53.09		123.01	
TOTAL COST	\$270.36		\$340.27	
RETURN TO MANAGEMENT, CAPITAL & RISK		\$7.46		
RETURN TO RISK (PROFITS)				(\$62.44)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.0443		\$0.0443
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0108		\$0.0251
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.0551		\$0.0694

Table 9C. Variable Operating Costs; Barley, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 4,900.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)				Times	Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				Total
1	Dec	Apply Fert/Ground	0.180	0.200	1.44	1.68		32.81	35.93	1.0	35.93	G
2	Dec	Disk	0.170	0.189	2.71	1.59			4.30	1.0	4.30	L
3	Dec	Make Borders	0.113	0.125	1.09	1.05			2.14	1.0	2.14	G
4	Dec	Plant	0.225	0.250	2.58	2.10		22.68	27.36	1.0	27.36	L
5	Dec	Buck Rows	0.022	0.050	0.14	0.39			0.53	1.0	0.53	G
6	Dec	Irrigate		0.400		2.80			2.80	1.0	2.80	G
7	Jan	Apply Herbicide/Air						8.32	11.26	1.0	19.58	G
8	Feb	Irrigate/Run Fertilizer		0.300		2.10			21.43	2.0	47.06	G
9	Apr	Irrigate		0.300		2.10			3.33	2.0	10.86	G
10	May	Prepare Ends	0.045	0.050	0.49	0.42			0.91	1.0	0.91	H
11	May	Combine Harvest						34.65	34.65	1.0	34.65	H
12	May	Haul, Custom 54.0 CW						13.50	13.50	1.0	13.50	H
13	Jun	Disk Residue	0.300	0.333	2.53	2.80			5.33	1.0	5.33	L
		Pickup Use 30 Mi/Ac	1.000		7.43						7.43	O
		Operating Interest at 8.00%						4.89			4.89	O
TOTAL CASH OPERATING EXPENSES:					\$18.40	\$21.23	\$61.36	\$116.27			\$217.26	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 \$20.34/Acre included as ownership cost in Table 9B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$36.98								
Growing (G)	118.89								
Harvest (H)	49.06	Yields		\$0.04	\$0.05	\$0.05	\$0.06	\$0.07	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	3,675.0	-48.71	-17.46	3.37	24.21	55.46	0.05
Operating Overhead (O)	12.32	-10%	4,410.0	-24.82	12.68	37.69	62.69	100.20	0.04
		Budgeted	4,900.0	-8.88	32.78	60.56	88.35	130.02	0.04
		+10%	5,390.0	7.04	52.88	83.44	114.00	159.84	0.04
		+25%	6,125.0	30.93	83.03	117.76	152.48	204.58	0.03
Total (T)	\$217.26	Break-even Yield		5,173.41	4,100.71	3,602.70	3,212.55	2,763.62	

Table 9D. Resource and Cash Flow Requirements; Barley, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
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 AREA: Salt River Project YIELD: 4,900.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P	1.0	8.0	1.21		7.95	9.61	32.81	22.68		73.05
JAN C							11.26		8.32	19.58
FEB C	1.0	6.0	0.30			2.10	21.43			23.53
MAR C	1.0	6.0	0.30			2.10	21.43			23.53
APR C	2.0	12.0	0.60	6.66		4.20				10.86
MAY C			0.05		0.49	0.42			4.50	5.41
JUN C			0.33		2.53	2.80			26.50	31.83
Pickup Use 30 Mi/Ac					7.43					7.43
Operating Interest at 8.0%									4.85	4.85
Water Assessment				**						
Total	5.0	32.0	2.79	6.66	18.40	21.24	86.93	22.68	44.17	200.09
%				3.32	9.19	10.61	43.45	11.33	22.07	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	167.4 lbs	Diesel Fuel	5.7 Gal
Total P	50.0 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	3.0 Gal
Total Labor	2.7 Hrs		
Total Water	32.0 AI	All Direct Energy	1.1 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Tractor, 100 PTO HP, MFWD	0.75 Hrs	Fertilizer Broadcaster, Towed	0.18 Hrs
Offset Disk, 18'	0.17 Hrs	Tractor, 125 PTO HP, MFWD	0.11 Hrs
Grain Drill, 16'	0.23 Hrs	Tractor, 80 PTO HP, MFWD	0.02 Hrs
Offset Disk, 13.5'	0.05 Hrs	Rotary Hoe, 4 Rw	0.30 Hrs
		Tractor, 150 PTO HP, MFWD	0.17 Hrs
		Border Disk, Heavy Duty	0.11 Hrs
		Rowbuck, 10'	0.02 Hrs
		Pickup Truck, 1/2 Ton	1.00 Hrs

MATERIALS REQUIREMENTS (/Acre)			
16-20-00, Dry	250.00 Lb	Barley Sd, Cert	90.00 Lb
Dicamba	1.00 Pt	32-00-00, URAN 32, Lqd	36.00 Ga
		Water, District	32.00 AI

LABOR REQUIREMENTS (/Acre)			
Tractor	1.17 Hrs	Other	0.03 Hrs
		Irrigators	1.60 Hrs

* NOTE: P = Previous Year C = Current Year N = Next Year
 ** A water assessment charge of \$20.34/Acre included as ownership cost in Table 9B.

Table 9E Schedule of Operations; Barley, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
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 AREA: Salt River Project YIELD: 4,900.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit		
1	Dec	1.0	Apply Fert/Ground	100	Fertilizer Broadcaster,	5.00	16-20-00, Dry	250.00 Lb	250.00 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, 16'	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 AI	0.00 AF		Irrigator
7	Jan	1.0	Apply Herbicide/Air		CST Air Spray, 5 Gal Mi		Dicamba	1.00 Pt	85.76 Ga	8.32 Ac	
8	Feb	2.0	Irrigate/Run Fertiliz			3.33	Water, District	6.00 AI	0.00 AF		Irrigator
							32-00-00, URAN 32,	18.00 Ga	205.00 Tn		
9	Apr	2.0	Irrigate			3.33	Water, District	6.00 AI	0.00 AF		Irrigator
10	May	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00					Tractor
11	May	1.0	Combine Harvest		CST Combine Barley					17.50 Ac	
12	May	1.0	Haul, Custom		CST Haul Grain					0.25 CW	
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					

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

** A water assessment charge of \$20.34/Acre included as ownership cost in Table 9B.

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