

Table 10A. Income and Cash Operating Cost Summary, Durum Wheat, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Wheat, Durum ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 5,400.0 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 | 5,400.00 | \$0.0682 | \$368.28 | \$368.28 | |
| CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax) | | | | | | |
| Paid Labor (including benefits) | | | | | 23.11 | |
| Tractor/Self Propelled | | | | 9.86 | | |
| Irrigation | | | | 13.08 | | |
| Other/Contract | | | | 0.18 | | |
| Chemicals & Custom Applications | | | | | 100.00 | |
| Fertilizers | | | | 80.43 | | |
| Herbicides | | | | 19.58 | | |
| Farm Machinery and Vehicles | | | | | 10.92 | |
| Diesel Fuel | | | | 5.07 | | |
| Repairs & Maint. | | | | 5.85 | | |
| Irrigation Water (excluding labor) | | | | | 8.36 | |
| Water Assessment (See Note Below) ** | | | | | ** | |
| Other Purchased Inputs & Services | | | | | 19.84 | |
| Seed/Transplants | | | | 19.84 | | |
| TOTAL CASH LAND PREPARATION AND GROWING EXPENSES | | | | | 162.23 | |
| 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 | | | | | 50.40 | |
| TOTAL HARVEST AND POST HARVEST EXPENSE | | | | | 51.31 | |
| OPERATING OVERHEAD->PICKUP USE | | | | | 7.43 | |
| OPERATING INTEREST AT 8.0% | | | | | 5.48 | |
| TOTAL CASH OPERATING EXPENSES | | | | | \$226.45 | |
| RETURNS OVER CASH OPERATING EXPENSES | | | | | \$141.83 | |

Notes: The above figures do not include ownership costs, see Table 10B on Next Page for detailed cost allocation.

** A water assessment charge of \$20.34/Acre is included in the ownership costs of Table 10B.

Table 10B. Allocation of Ownership Costs; Durum Wheat, 1996

| | | | |
|--------------------------|----------------------------|---------------------------------|-----------------------|
| COUNTY: Maricopa | FARM: Maricopa County Farm | WATER SOURCE: SRP | TILLAGE: Conventional |
| CROP: Wheat, Durum | ACRES: 1.0 | IRRIGATION SYSTEM: Flood Furrow | SOIL: Sandy-Loam |
| AREA: Salt River Project | YIELD: 5,400.0 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 \$ 0.0682/Lb | \$368.28 | | \$368.28 | |
| TOTAL OPERATING EXPENSES | 226.45 | | 226.45 | |
| RETURN OVER CASH OPERATING EXPENSES | | \$141.82 | | \$141.82 |
| CASH OVERHEAD EXPENSES | | | | |
| Taxes, Housing & Insur., Farm Machinery | 1.26 | | 1.26 | |
| Gen. & Off. Overhead (5% of Tot. Oper. Exp.) | 11.32 | | 11.32 | |
| General Farm Maint. (3% of Tot. Oper. Exp.) | 6.79 | | 6.79 | |
| Total Cash Overhead Expenses | <u>19.37</u> | | <u>19.37</u> | |
| Total Cash Oper. & Over. Cost | 245.82 | | 245.82 | |
| RETURNS OVER CASH OPER. & OVER. EXPENSES. | | 122.45 | | 122.45 |
| CAPITAL ALLOCATIONS (100% Equity) | | | | |
| Capital Replacement, Machinery & Vehicles | | | 6.93 | |
| Interest on Equity, Machinery & Vehicles | | | 3.82 | |
| Total Capital Allocations | | | <u>10.75</u> | |
| RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK | | 122.45 | | |
| RETURNS TO LAND, MANAGEMENT & RISK | | | | 111.70 |
| 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 | <u>34.49</u> | | <u>76.61</u> | |
| RETURNS TO MANAGEMENT, CAPITAL & RISK | | 87.96 | | |
| RETURNS TO MANAGEMENT & RISK | | | | 35.09 |
| Management Services (8% of Tot. Oper. Exp.) | | | 18.11 | |
| TOTAL OWNERSHIP COST | <u>53.86</u> | | <u>124.85</u> | |
| TOTAL COST | <u>280.31</u> | | <u>351.30</u> | |
| RETURN TO MANAGEMENT, CAPITAL & RISK | | 87.96 | | |
| RETURN TO RISK (PROFITS) | | | | 16.97 |
| BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb) | | \$0.0419 | | \$0.0419 |
| BREAK-EVEN PRICE TO COVER OWNERSHIP COST | | \$0.0099 | | \$0.0231 |
| BREAK-EVEN PRICE TO COVER TOTAL COST | | \$0.0519 | | \$0.0650 |

Table 10C. Variable Operating Costs; Durum Wheat, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Wheat, Durum ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 5,400.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/03/96

| No. | First Month | Operation | — Hours * — | | Operating Costs (\$/Acre*) | | | | Total | Times | Tot. Cash Expense | Class |
|--------------------------------|-------------|-----------------------------|-------------|-------|----------------------------|---------|-----------|-----------|-------|-------|-------------------|-------|
| | | | Machine | Labor | Fuel/Rps. | Labor | Cust/Ser. | Materials | | | | |
| 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 | 0.158 | 0.175 | 1.53 | 1.47 | | | 3.00 | 1.0 | 3.00 | G |
| 4 | Dec | Plant | 0.225 | 0.250 | 2.58 | 2.10 | | 19.84 | 24.52 | 1.0 | 24.52 | L |
| 5 | Dec | Buck Rows | 0.022 | 0.050 | 0.14 | 0.39 | | | 0.53 | 1.0 | 0.53 | G |
| 6 | Dec | Irrigate/Run Fertilizer | | 0.333 | | 2.33 | | 23.81 | 26.14 | 2.0 | 52.28 | G |
| 7 | Jan | Apply Herbicide/Air | | | | | 8.32 | 11.26 | 19.58 | 1.0 | 19.58 | G |
| 8 | Mar | Irrigate | | 0.300 | | 2.10 | | 2.09 | 4.19 | 4.0 | 16.76 | G |
| 9 | May | Prepare Ends | 0.045 | 0.050 | 0.49 | 0.42 | | | 0.91 | 1.0 | 0.91 | H |
| 10 | May | Combine Harvest | | | | | 36.40 | | 36.40 | 1.0 | 36.40 | H |
| 11 | May | Haul, Custom 56.0 CW | | | | | 14.00 | | 14.00 | 1.0 | 14.00 | H |
| 12 | 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% | | | | | 5.48 | | | | 5.48 | O |
| TOTAL CASH OPERATING EXPENSES: | | | | | \$18.84 | \$23.51 | \$64.20 | \$119.89 | | | \$226.44 | 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 10B.

| OPERATING COST SUMMARY BY CLASS | | SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre) | | | | | | | |
|---------------------------------|----------|--|---------|----------|----------|----------|----------|----------|------------|
| | | Prices -> | | -25% | -10% | Budgeted | +10% | +25% | |
| Land Preparation (L) | \$34.14 | | | | | | | | |
| Growing (G) | 128.06 | | | | | | | | |
| Harvest (H) | 51.31 | Yields | | \$0.05 | \$0.06 | \$0.06 | \$0.07 | \$0.08 | Break-even |
| Post Harvest (P) | 0.00 | | | | | | | | |
| Marketing (M) | 0.00 | -25% | 4,050.0 | -6.45 | 34.97 | 62.60 | 90.22 | 131.65 | 0.05 |
| Operating Overhead (O) | 12.91 | -10% | 4,860.0 | 27.28 | 77.00 | 110.14 | 143.29 | 193.00 | 0.04 |
| | | Budgeted | 5,400.0 | 49.77 | 105.01 | 141.84 | 178.67 | 233.91 | 0.04 |
| Total (T) | \$226.43 | +10% | 5,940.0 | 72.26 | 133.02 | 173.53 | 214.05 | 274.81 | 0.03 |
| | | +25% | 6,750.0 | 105.99 | 175.05 | 221.08 | 267.12 | 336.17 | 0.03 |
| | | Break-even Yield | | 4,204.91 | 3,375.73 | 2,983.51 | 2,672.95 | 2,311.96 | |

Table 10D. Resource and Cash Flow Requirements; Durum Wheat, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Wheat, Durum ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 5,400.0 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 | 6.0 | 1.19 | | 8.38 | 9.56 | 56.62 | 19.84 | | 94.41 |
| JAN C | | | | | | | 11.26 | | 8.32 | 19.58 |
| FEB C | 1.0 | 6.0 | 0.33 | | | 2.33 | 23.81 | | | 26.14 |
| MAR C | 2.0 | 11.0 | 0.60 | | | 4.20 | | | | 4.20 |
| APR C | 2.0 | 11.0 | 0.60 | 8.34 | | 4.20 | | | | 12.54 |
| MAY C | | | 0.05 | | 0.49 | 0.42 | | | 5.00 | 5.91 |
| 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% Water Assessment | | | | ** | | | | | 5.42 | 5.42 |
| Total | 6.0 | 34.0 | 3.11 | 8.34 | 18.84 | 23.53 | 91.69 | 19.84 | 45.24 | 207.48 |
| % | | | | 4.02 | 9.07 | 11.34 | 44.19 | 9.56 | 21.80 | 100.00 |

| TOTAL RESOURCES REQUIREMENTS (/Acre) | | TOTAL ENERGY REQUIREMENTS (/Acre) | |
|--------------------------------------|-----------|-----------------------------------|-----------|
| Total N | 181.6 lbs | Diesel Fuel | 6.0 Gal |
| Total P | 50.0 lbs | Regular Gas | 0.0 Gal |
| Total K | 0.0 lbs | NonLead Gas | 3.0 Gal |
| Total Labor | 3.1 Hrs | | |
| Total Water | 34.0 AI | All Direct Energy | 1.2 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 | 0.16 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 | 0.16 Hrs |
| | | Rowbuck, 10' | 0.02 Hrs |
| | | Pickup Truck, 1/2 Ton | 1.00 Hrs |

| MATERIALS REQUIREMENTS (/Acre) | | | |
|--------------------------------|-----------|----------------------|----------|
| 16-20-00, Dry | 250.00 Lb | Durum Wheat Sd, Cert | 90.00 Lb |
| 32-00-00, URAN 32, Lqd | 40.00 Ga | Dicamba | 1.00 Pt |
| | | Water, District | 34.00 AI |

| LABOR REQUIREMENTS (/Acre) | | | |
|----------------------------|----------|------------|----------|
| Tractor | 1.22 Hrs | Other | 0.03 Hrs |
| | | Irrigators | 1.87 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 10B.

Table 10E Schedule of Operations; Durum Wheat, 1996

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional
 CROP: Wheat, Durum ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Salt River Project YIELD: 5,400.0 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 | 5.70 | | | | | Tractor |
| 4 | Dec | 1.0 | Plant | 100 | Grain Drill, 16' | 4.00 | Durum Wheat Sd, Ce | 90.00 Lb | 21.00 CW | | Tractor |
| 5 | Dec | 1.0 | Buck Rows | 80 | Rowbuck, 10' | 40.00 | | | | | Tractor |
| 6 | Dec | 2.0 | Irrigate/Run Fertiliz | | | 3.00 | Water, District | 6.00 AI | 0.00 AF | | Other |
| | | | | | | | 32-00-00, URAN 32, | 20.00 Ga | 205.00 Tn | | 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 | Mar | 4.0 | Irrigate | | | 3.33 | Water, District | 5.50 AI | 0.00 AF | | Irrigator |
| 9 | May | 1.0 | Prepare Ends | 100 | Offset Disk, 13.5' | 20.00 | | | | | Tractor |
| 10 | May | 1.0 | Combine Harvest | | CST Combine Wheat | | | | | 17.50 Ac | |
| 11 | May | 1.0 | Haul, Custom | | CST Haul Grain | | | | | 0.25 CW | |
| 12 | 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 10B.

ARIZONA COOPERATIVE EXTENSION
 Department of Ag & Resource Economics
 The University of Arizona F 5/38