

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... CURRY COUNTY Projected 2008.
FARM SIZE..... 520 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 2

VERSION 1.0

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[ENTER] AND RETURN TO THE MENU

** BE SURE PRINTER IS ON AND PAPER IS ALIGNED
BEFORE YOU PRINT

TABLE 1. Acreage Summary, Curry County, Projected 2008.

| | | | |
|----------------------|--------------|--|--|
| BUDGET AREA..... | CURRY COUNTY | | |
| FARM SIZE..... | 520 ACRES | | |
| IRRIGATION TYPE..... | FLOOD | | |
| NUMBER OF CROPS.. | 2 | | |

| ACREAGE SUMMARY: | LAND USE (ACRES) | WATER USE | |
|------------------------------------|------------------|----------------|--------------|
| | | AC.IN. PER AC. | TOTAL AC.IN. |
| WHEAT | 255 | 15 | 3,825 |
| ARP | 0 | | |
| FLEX IN WHEAT | 45 | 15 | 675 |
| GRAIN SORGHUM | 170 | 20 | 3,400 |
| ARP | 0 | | |
| FLEX IN WHEAT | 30 | 15 | 450 |
| ROADS, DITCHES | | | |
| HOMESTEAD | 20 | | |
| TOTAL | 520 | | 8,350 |
| ACRE FEET PER ACRE OF WATER RIGHTS | | | 1.34 |

TABLE 2. Basic cost information for Curry County, Projected 2008.

| Item | | |
|---------------------------------|--------------------------------|----------|
| Labor Wage Rate: | | |
| Equipment operators | \$/hour | \$7.45 |
| General & Irrigators | \$/hour | \$6.65 |
| Purchased Inputs: | | |
| Fertilizer: | | |
| Nitrogen (N) | \$/pound | \$0.63 |
| Phosphate (P205) | \$/pound | \$0.55 |
| Anhydrous (NH3) | \$/ton | \$565.00 |
| Seed: | | |
| Grain Sorghum | \$/pound | \$0.89 |
| Wheat | \$/pound | \$0.28 |
| Diesel fuel | \$/gallon | \$3.05 |
| Gasoline | \$/gallon | \$2.80 |
| Electricity (SWPS) | cents/KwHr | 6.71 |
| LP gas | \$/gallon | \$2.60 |
| Natural Gas (Gas NM) | \$/MCF | \$3.24 |
| Employee Liability Insurance | \$/1,000 wages | \$20.00 |
| Employee Benefits | percent/wages | 18.00% |
| Labor Downtime | percent | 25.00% |
| Financial Rates: | | |
| Operating Capital Interest Rate | percent | 7.75% |
| Land Interest Rate | percent | 7.75% |
| Equipment Interest Rate | percent | 7.75% |
| Real Interest Rate | percent | 3.00% |
| Land Taxes | \$109.00 /acre (full value) | \$0.74 |
| Personal Propety Tax Rate | - NR \$/1,000 (Assessed Value) | \$20.49 |
| | - R | \$20.73 |
| Supervision Factors | | |
| Field Crop-Irrigation | \$/labor hour | \$1.00 |
| Field Crop-Equipment & General | \$/labor hour | \$0.50 |
| Management Rate | percent | 7.00% |

TABLE 3. Overhead cost information for Curry County, Projected 2008.

| Item | | |
|------------------------------------|---------------------------|----------|
| Electricity (Domestic & Shop) | \$224.00 per month | \$2,688 |
| Telephone | \$112.00 per month | \$1,344 |
| Accounting & Legal | | \$1,652 |
| Misc. Supplies & Hand Tools | | \$2,470 |
| Pickup and Auto | | |
| miles | 22,400 @ \$0.415 per mile | \$9,296 |
| Insurance | | |
| - general liability (non-employee) | | \$2,206 |
| - fire/theft | | \$1,770 |
| Property Taxes | | |
| - non-planted land | | \$0 |
| - other than land & machinery | | \$0 |
| Building repairs and maintenance | | \$1,462 |
| Dues, fees, publications | | \$403 |
| Farmstead Equipment | | \$168 |
| | Total | \$23,458 |
| | Total Per Planted Acre | \$55.20 |

TABLE 6. Wheat, flood-irrigated, budgeted per acre costs and returns for a 520 acre farm with above average management, Curry County, Projected 2008.
Planting Dates: August 15 - September 15
Harvesting Dates: June 15 - July 15

| ITEM | PRICE | YIELD | BASE | TOTAL |
|--------------------------|---------|--------------|------|-----------------|
| GROSS RETURNS | | | | |
| WHEAT | \$9.50 | 65.00 BUSHEL | | \$617.50 |
| DIRECT PAYMENT | \$0.00 | 65.00 BUSHEL | 0.85 | \$0.00 |
| COUNTER CYCLICAL PAYMENT | \$0.00 | | | \$0.00 |
| GRAZING | \$40.00 | 1.00 ACRE | | \$40.00 |
| TOTAL | | | | \$657.50 |

| PURCHASED INPUTS | PRICE | QUANTITY | PURCHASED INPUTS | FIXED COST | TOTAL |
|-------------------------|---------|------------|------------------|------------|-----------------|
| SEED | \$0.28 | 60 LBS | \$16.80 | | \$16.80 |
| ANHYDROUS AMMONIA (NH3) | \$0.28 | 100 LBS | \$28.25 | | \$28.25 |
| NITROGEN (N) | \$0.63 | 18 LBS | \$11.34 | | \$11.34 |
| PHOSPHORUS (P205) | \$0.55 | 46 LBS | \$25.30 | | \$25.30 |
| INSECTICIDE (CUSTOM) | \$9.59 | 1 ACRE | \$9.59 | | \$9.59 |
| HERBICIDE (CUSTOM) | \$10.69 | 1 ACRE | \$10.69 | | \$10.69 |
| PUMP WATER* | | 15 AC. IN. | | | |
| CROP INSURANCE | \$0.15 | | \$0.15 | | \$0.15 |
| SUBTOTAL | | | \$102.12 | | \$102.12 |

| PREHARVEST OPERATIONS | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL |
|-----------------------|------------|---------------------|------------------|----------------|----------------|---------------|----------------|-----------------|
| DISC (3X) | 185 HP | 0.33 HR | | \$2.46 | \$10.43 | \$5.59 | \$12.74 | \$31.22 |
| ANHYDROUS APPL | 185 HP | 0.17 HR | | \$1.27 | \$5.37 | \$0.98 | \$4.76 | \$12.38 |
| LISTER | 185 HP | 0.12 HR | | \$0.89 | \$3.79 | \$1.01 | \$4.20 | \$9.90 |
| FERT SPREADER | 145 HP | 0.05 HR | | \$0.37 | \$1.19 | \$0.22 | \$2.42 | \$4.20 |
| DRILL | 145 HP | 0.13 HR | | \$0.97 | \$3.10 | \$0.79 | \$9.14 | \$13.99 |
| IRRIGATE (3X) | | 1.50 HR | | \$9.98 | \$48.95 | \$0.00 | \$3.56 | \$62.48 |
| SUBTOTAL | | 2.30 HR | | \$15.94 | \$72.83 | \$8.60 | \$36.81 | \$134.17 |

| HARVEST OPERATIONS | | | | | |
|--------------------|--|--|----------------|--|----------------|
| COMBINE (CUSTOM) | | | \$24.74 | | \$24.74 |
| HAUL (CUSTOM) | | | \$10.40 | | \$10.40 |
| SUBTOTAL | | | \$35.14 | | \$35.14 |

| OVERHEAD EXPENSES | | | | | |
|----------------------------|--|----------------|----------------|----------------|---------------|
| DOWNTIME | | 0.20 HR | | \$1.49 | \$1.49 |
| EMPLOYEE BENEFITS | | | | \$2.87 | \$2.87 |
| INSURANCE | | | \$0.32 | | \$0.32 |
| LAND TAXES | | | | | \$0.74 |
| SUPERVISION AND MANAGEMENT | | | | \$47.93 | \$47.93 |
| OTHER EXPENSES | | | \$55.20 | | \$55.20 |
| SUBTOTAL | | 0.20 HR | \$55.51 | \$52.28 | \$0.74 |

TOTAL OPERATING EXPENSES 2.50 HR \$192.77 \$68.22 \$72.83 \$8.60 \$37.56 \$379.97

NET OPERATING PROFIT \$277.53

INTEREST ON OPERATING CAPITAL (\$74.34 @ 7.75%) \$5.76
INTEREST ON EQUIPMENT INVESTMENT \$14.56

RETURN TO LAND AND RISK \$257.21

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

| | | | |
|--------------------------------|----------|-----------------|---|
| GROSS RETURN | | \$657.50 | |
| VARIABLE OPERATING EXPENSES | \$274.20 | | |
| RETURN OVER VARIABLE EXPENSES | | \$383.30 | (GROSS MARGIN) |
| FIXED EXPENSES | \$37.56 | | |
| NET FARM INCOME | | \$345.75 | (RETURN TO CAPITAL, LABOR, LAND & RISK) |
| LABOR AND MANAGEMENT COST | \$68.22 | | |
| NET OPERATING PROFIT | | \$277.53 | (RETURN TO CAPITAL, LAND & RISK) |
| CAPITAL COSTS | \$20.32 | | |
| RETURN TO LAND AND RISK | | \$257.21 | |

TABLE 7. Grain sorghum, flood-irrigated, budgeted per acre costs and returns for a 520 acre farm with above average management, Curry County, Projected 2008.
 Planting Dates: May 15 - June 15
 Harvesting Dates: October 15 - November 15

| ITEM | PRICE | YIELD | BASE | TOTAL |
|--------------------------|--------|-----------|------|-----------------|
| GROSS RETURNS | | | | |
| GRAIN SORGHUM | \$7.70 | 65.00 CWT | | \$500.50 |
| DIRECT PAYMENT | \$0.00 | 65.00 CWT | 0.85 | \$0.00 |
| COUNTER CYCLICAL PAYMENT | \$0.00 | 0.00 CWT | | \$0.00 |
| GRAZING | \$9.00 | 1.00 ACRE | | \$9.00 |
| TOTAL | | | | \$509.50 |

| PURCHASED INPUTS | PRICE | QUANTITY | PURCHASED INPUTS | FIXED COST | TOTAL |
|----------------------|---------|------------|------------------|------------|-----------------|
| SEED | \$0.89 | 5 LBS | \$4.45 | | \$4.45 |
| ANHYDROUS (NH3) | \$0.28 | 150 LBS | \$42.38 | | \$42.38 |
| NITROGEN (N) | \$0.63 | 25 LBS | \$15.75 | | \$15.75 |
| PHOSPHORUS (P205) | \$0.55 | 50 LBS | \$27.50 | | \$27.50 |
| HERBICIDE (CUSTOM) | \$14.11 | 1 X/ACRE | \$14.11 | | \$14.11 |
| INSECTICIDE (CUSTOM) | \$13.49 | 1 X/ACRE | \$13.49 | | \$13.49 |
| TRACE ELEMENTS | \$13.89 | 1 ACRE | \$13.89 | | \$13.89 |
| PUMP WATER* | | 20 AC. IN. | | | |
| CROP INSURANCE | \$0.29 | | \$0.29 | | \$0.29 |
| SUBTOTAL | | | \$131.85 | | \$131.85 |

| PREHARVEST OPERATIONS | POWER UNIT | ACCOMPLISHMENT RATE | PURCHASED INPUTS | LABOR | FUEL & LUBE | REPAIRS | FIXED COST | TOTAL |
|-----------------------|------------|---------------------|------------------|----------------|-----------------|----------------|----------------|-----------------|
| DISC | 185 HP | 0.11 HR | | \$0.82 | \$3.48 | \$1.86 | \$4.25 | \$10.41 |
| CHISEL | 185 HP | 0.15 HR | | \$1.12 | \$4.74 | \$1.17 | \$6.09 | \$13.12 |
| DISC (2X) | 185 HP | 0.22 HR | | \$1.64 | \$6.95 | \$3.73 | \$8.50 | \$20.81 |
| ANHYDROUS APPL | 185 HP | 0.17 HR | | \$1.27 | \$5.37 | \$0.98 | \$4.76 | \$12.38 |
| LISTER | 185 HP | 0.12 HR | | \$0.89 | \$3.79 | \$1.01 | \$4.20 | \$9.90 |
| PRE-IRRIGATE | | 0.50 HR | | \$3.73 | \$13.05 | \$0.00 | \$0.95 | \$17.73 |
| ROD WEEDER | 140 HP | 0.08 HR | | \$0.60 | \$1.91 | \$0.41 | \$4.58 | \$7.50 |
| PLANTER | 140 HP | 0.17 HR | | \$1.27 | \$4.05 | \$1.09 | \$14.76 | \$21.16 |
| CULTIVATOR (2X) | 140 HP | 0.26 HR | | \$1.94 | \$6.20 | \$2.74 | \$18.30 | \$29.18 |
| IRRIGATE (4X) | | 2.00 HR | | \$13.30 | \$52.21 | \$0.00 | \$3.80 | \$69.31 |
| SUBTOTAL | | 3.78 HR | | \$26.56 | \$101.75 | \$13.00 | \$70.17 | \$211.49 |

| HARVEST OPERATIONS | | | | |
|--------------------|--|--|----------------|----------------|
| COMBINE (CUSTOM) | | | \$28.43 | \$28.43 |
| HAUL (CUSTOM) | | | \$12.35 | \$12.35 |
| SUBTOTAL | | | \$40.78 | \$40.78 |

| OVERHEAD EXPENSES | | | | |
|----------------------------|--|----------------|----------------|----------------|
| DOWNTIME | | 0.32 HR | \$2.38 | \$2.38 |
| EMPLOYEE BENEFITS | | | \$4.78 | \$4.78 |
| INSURANCE | | | \$0.53 | \$0.53 |
| LAND TAXES | | | | \$0.74 |
| SUPERVISION AND MANAGEMENT | | | \$38.56 | \$38.56 |
| OTHER EXPENSES | | | \$55.20 | \$55.20 |
| SUBTOTAL | | 0.32 HR | \$55.73 | \$45.72 |

| | | | | | | | |
|---------------------------------|----------------|-----------------|----------------|-----------------|----------------|----------------|-----------------|
| TOTAL OPERATING EXPENSES | 4.10 HR | \$228.36 | \$72.28 | \$101.75 | \$13.00 | \$70.92 | \$486.31 |
|---------------------------------|----------------|-----------------|----------------|-----------------|----------------|----------------|-----------------|

| | | | | | | | |
|-----------------------------|--|--|--|--|--|--|----------------|
| NET OPERATING PROFIT | | | | | | | \$23.19 |
|-----------------------------|--|--|--|--|--|--|----------------|

| | | | | | | | |
|----------------------------------|---|---------|---|-------|---|--|---------|
| INTEREST ON OPERATING CAPITAL | (| \$98.01 | @ | 7.75% |) | | \$7.60 |
| INTEREST ON EQUIPMENT INVESTMENT | | | | | | | \$27.63 |

| | | | | | | | |
|--------------------------------|--|--|--|--|--|--|------------------|
| RETURN TO LAND AND RISK | | | | | | | (\$12.04) |
|--------------------------------|--|--|--|--|--|--|------------------|

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

| | | | |
|-------------------------------|----------|---|--|
| GROSS RETURN | | \$509.50 | |
| VARIABLE OPERATING EXPENSES | \$343.12 | | |
| RETURN OVER VARIABLE EXPENSES | \$166.38 | (GROSS MARGIN) | |
| FIXED EXPENSES | \$70.92 | | |
| NET FARM INCOME | \$95.47 | (RETURN TO CAPITAL, LABOR, LAND & RISK) | |
| LABOR AND MANAGEMENT COST | \$72.28 | | |
| NET OPERATING PROFIT | \$23.19 | (RETURN TO CAPITAL, LAND & RISK) | |
| CAPITAL COSTS | \$35.23 | | |
| RETURN TO LAND AND RISK | | (\$12.04) | |

TABLE 8. Summary of per acre costs and returns for a 520 acre farm with above average management, Curry County
Projected 2008.

| | WHEAT | GRAIN SORGHUM |
|----------------------------------|--------------|------------------|
| | BUSHEL | CWT |
| PRIMARY YIELD | 65.00 | 65.00 |
| PRIMARY PRICE | \$9.50 | \$7.70 |
| GOVERNMENT PAYMENTS | \$0.00 | \$0.00 |
| SECOND INCOME | \$40.00 ACRE | \$9.00 ACRE |
| GROSS RETURN | \$657.50 | \$509.50 |
| CASH OPERATING EXPENSES | | |
| SEED | \$16.80 | \$4.45 |
| FERTILIZER | \$64.89 | \$99.51 |
| CHEMICALS | \$20.28 | \$27.60 |
| CROP INSURANCE | \$0.15 | \$0.29 |
| OTHER PURCHASED INPUTS | | |
| CANAL WATER | | |
| FUEL, OIL & LUBRICANTS-EQUIPMENT | \$23.88 | \$36.48 |
| FUEL-IRRIGATION | \$48.95 | \$65.27 |
| REPAIRS | \$8.60 | \$13.00 |
| CUSTOM CHARGES | \$35.14 | \$40.78 |
| LAND TAXES | \$0.74 | \$0.74 |
| OTHER EXPENSES | \$55.51 | \$55.73 |
| TOTAL CASH EXPENSES | \$274.94 | \$343.86 |
| RETURN OVER CASH EXPENSES | \$382.56 | \$165.64 |
| FIXED EXPENSES | \$36.81 | \$70.17 |
| TOTAL EXPENSES | \$311.75 | \$414.03 |
| NET FARM INCOME | \$345.75 | \$95.47 |
| LABOR AND MANAGEMENT COSTS | \$68.22 | \$72.28 |
| NET OPERATING PROFIT | \$277.53 | \$23.19 |
| CAPITAL COSTS | | |
| INTEREST ON OPERATING CAPITAL | \$5.76 | \$7.60 |
| INTEREST ON EQUIPMENT INVESTMENT | \$14.56 | \$27.63 |
| TOTAL CAPITAL COSTS | \$20.32 | \$35.23 |
| RETURN TO LAND AND RISK | \$257.21 | (\$12.04) |

Flex Computation

308.58

85.76

TABLE 9. Whole farm summary, Curry County,
Projected 2008.

| | | |
|----------------------------------|-----------|------------------------|
| GROSS RETURNS | | |
| WHEAT | 330 ACRES | |
| CROP | | \$203,775 |
| GRAZING | | \$13,200 |
| DIRECT PAYMENT | | \$0 |
| COUNTER CYCLICAL PAYMENT | | \$0 |
| GRAIN SORGHUM | 170 ACRES | |
| CROP | | \$85,085 |
| GRAZING | | \$1,530 |
| DIRECT PAYMENT | | \$0 |
| COUNTER CYCLICAL PAYMENT | | \$0 |
| GROSS RETURN | | <u>\$303,590</u> |
| CASH OPERATING EXPENSES | | |
| SEED | | \$6,301 |
| FERTILIZER | | \$38,331 |
| CHEMICALS | | \$11,382 |
| CROP INSURANCE | | \$100 |
| OTHER PURCHASED INPUTS | | \$0 |
| CANAL WATER | | \$0 |
| FUEL, OIL & LUBRICANTS-EQUIPMENT | | \$14,082 |
| FUEL-IRRIGATION | | \$27,249 |
| REPAIRS | | \$5,048 |
| CUSTOM CHARGES | | \$18,529 |
| LAND TAXES | | \$372 |
| OTHER EXPENSES | | \$27,794 |
| TOTAL CASH EXPENSES | | <u>\$149,187</u> |
| RETURN OVER CASH EXPENSES | | \$154,403 |
| FIXED EXPENSES | | \$24,077 |
| TOTAL EXPENSES | | \$173,264 |
| NET FARM INCOME | | \$130,326 |
| LABOR AND MANAGEMENT COSTS | | \$34,800 |
| NET OPERATING PROFIT | | \$95,526 |
| CAPITAL COSTS | | |
| INTEREST ON OPERATING CAPITAL | | \$3,193 |
| INTEREST ON EQUIPMENT INVESTMENT | | \$9,501 |
| TOTAL CAPITAL COSTS | | <u>\$12,694</u> |
| RETURN TO LAND AND RISK | | <u><u>\$82,832</u></u> |

| LAND VALUE | RETURN TO RISK* | RETURN ON INVESTMENT** |
|---------------|-----------------|------------------------|
| \$500 /ACRE | \$75,032 | 25.42% |
| \$1,000 /ACRE | \$67,232 | 15.03% |
| \$1,500 /ACRE | \$59,432 | 10.66% |
| \$2,000 /ACRE | \$51,632 | 8.27% |
| \$2,500 /ACRE | \$43,832 | 6.75% |

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)