### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2001 FAPRI/AFPC BASELINE

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### **Executive Summary**

The primary objective of the analysis is to determine the representative crop and livestock farms' economic viability throughout the next five years 2002-2006. The representative farm economic data is developed in cooperation with panels of producers to describe and simulate representative crop, livestock, and dairy farms. Projected prices, policy variables, and input inflation rates are obtained from the Food and Agricultural Policy Research Institute (FAPRI) December 2001 Baseline.

- # Thirty-one of the 48 crop farms have more than a 50 percent chance of cash flow deficits over the 2002-2006 period. Currently, low crop prices and the prospect for a slow recovery are the major factors behind the poor cash flow performance of the crop farms.
- # Eight of the 15 feedgrain farms have probabilities greater than 50 percent that they will experience cash flow problems in 2002-2006. Three of the 15 farms have probabilities greater than 50 percent of losing real net worth between 2001 and 2006. In summary, the financial condition of the 15 feedgrain farms is rated as follows: seven are poor, seven are marginal, and one is in good financial condition by 2006.
- # Six of the 10 wheat farms have a greater than 50 percent probability they will experience cash flow problems in 2002-2006. Three of the farms have greater than a 50 percent chance of losing real net worth by 2006. In summary, three of the 10 wheat farms are likely to be in poor financial condition by 2006, five are marginal, and two are in good financial condition.
- # Nine of the 13 cotton farms are projected to have greater than a 50 percent chance of cash flow deficits in 2002-2006. Five of the 13 will face high probabilities of losing real net worth. Eight of the 9 cotton farms will be in poor financial condition by 2006, five are marginal, and none are in good financial condition.
- # Eight of the 10 rice farms are projected to have greater than a 50 percent chance of cash flow deficits over the 2002-2006 planning horizon. Seven of the farms will likely have high probabilities of losing real net worth. Overall, seven farms will be in poor financial shape, and three will be in marginal shape by 2006.
- # The dairy farms appear in moderate to good financial shape over the 2002-2006 period. Low feed costs and higher cattle prices coupled with high milk price in 2001 offset lower milk prices in 2002-2006. Nine of the 26 farms have high probabilities of cash flow deficits. In summary, nine of the 26 dairy farms are classified in poor financial condition, eight are marginal, and nine are in good financial condition by 2006.
- # Decreasing cattle prices at the end of the planning horizon partially offset the improved financial viability of cattle operations as prices rise through 2003. Six of the eight cattle operations will likely be in poor financial condition in 2006, and two are in good financial shape.
- # Higher hog prices following the low prices in the late 90s improved the financial condition of the representative hog farms over the recent past. Only one of the seven farms is expected to have high probabilities of cash flow deficits over the 2002-2006 planning horizon. In summary, one of the seven farms is classified as being in poor financial condition in 2006, none are marginal, and six are in good financial condition.

### Farm Level Projections for FAPRI December 2001 Baseline

Baseline Review Washington, D.C. December 13 – 14, 2001

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# Figure 1. Representative Farms and Ranches | Dairy |

**Definition of Output Variables** 

Assumptions for 2002 - 2006

**Analysis** 

➤ Continuation of 1996 Farm Bill through 2006 ➤ No more Market Loss Assistance payments after 2001.

➤ FAPRI December 2001 Baseline provides

✓Inflation rates for purchased inputs

✓ Average annual prices

✓Inflation rates for land

✓Interest rates

Farmers take full advantage of flexibility in 1996 Bill.

Historical yield and price risks used to incorporate risk.

Farms structured so payment limits are not binding.

- ➤ Probability of Cash Flow Deficits chance that net cash farm income is less than family living, taxes, principal payments, and machinery replacement costs.
- ➤Probability of Losing Real Net Worth chance that net worth, adjusted for inflation, is less than net worth at the end of 2001.
- ➤ Net Income Adjustment (NIA) is the annual increase (decrease) in net cash income necessary to prevent (cause) the change in real net worth to be zero from 2002 to 2006.
- ➤ Minimum Cash Needs sum of family living, taxes, principal payments, and machinery replacement costs, average for 2002-06.
- ➤ Net Cash Income Distribution risk function showing the probability of observing lower incomes over the full range of 100 simulated income values

### **Initial Debt Levels**

- Representative farms borrow all of their operating capital.
- ➤ Real estate debt January 1, 2000 is:
  - ✓20% Feed grains
  - ✓20% Wheat
  - ✓20% Cotton
  - ✓20% Rice
  - √30% Dairy
  - ✓10% Beef cattle
  - √35% Hogs
- Machinery and livestock debt is 20% for all farms.

### **Definition of Overall Financial Position**

- Good Less than 25% chance of cash flow deficits and losing real net worth.
- Marginal A 25 50% chance of cash flow deficits and losing real net worth.
- Poor Greater than 50% chance of cash flow deficits and losing real net worth.

### Feed Grain Farms

- > 7 of 15 Poor Financial Position
- > 7 of 15 Marginal Financial Position
- ➤ 1 of 15 Good Financial Position
- ▶15% NIA needed for 3 farms to avoid losing real net worth
- ≻Pages 11 19

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2002-2006	2002-2006
IAG950	51 - 60	1 – 29
IAG2400	54 – 37	1 – 14
NEG900	25 – 52	1 – 8
NEG1300	28 – 37	1 – 14
MOCG1700	22 – 30	1-3
MOCG3300	37 – 42	1-7
MONG2050	31 – 44	1 – 31
TXNP1600	44 – 58	1 – 34
TXNP6700	55 – 44	1 – 17
TXBG2000	98 – 99	1 – 95
TXBG2500	92 – 98	1 – 86
TNG900	99 – 99	1 – 94
TNG2400	30 – 60	1 – 40
SCG1500	77 – 77	1 – 45
SCG3500	40 – 24	1-3

### Wheat Farms

- ➤ 3 of 10 Poor Financial Position
- > 5 of 10 Marginal Financial Position
- ➤ 2 of 10 Good Financial Position
- > 2% to 8% NIA needed for 3 farms to avoid losing real net worth.
- ➤ Pages 21 27

	December 2001 FAP	
with Cor	ntinuation of the 1996	Farm Bill
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2002-2006	2002-2006
WAW1725	37 – 66	1 – 23
WAW4675	47 – 55	1 – 22
NDW1760	48 – 66	1 – 52
NDW4850	48 – 41	1 – 18
KSSW1385	46 – 63	1 – 20
KSSW4000	2-7	
KSNW2325	77 – 92	1 – 69
KSNW4300	60 – 71	1 – 61
COW3000	4-4	
COW5440	15 - 27	1-1
< 25%	25-50%	>50%

### Cotton Farms

- ➤ 8 of 13 Poor Financial Position
- > 5 of 13 Marginal Financial Position
- ➤ 0 of 13 Good Financial Position
- ➤ 3% to 26% NIA needed to avoid loss in real net worth for 5 farms.
- ➤ Pages 29 37

with (	Continuation of the 1996	Farm Bill
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2002-2006	2002-2006
CAC2000	66 – 83	1 – 68
CAC6000	98 – 99	1 – 98
TXSP1682	28 – 37	1 – 15
TXSP3697	30 – 30	1-6
TXRP2500	75 – 90	1 – 77
TXBC1400	43 – 61	1 – 39
TXCB1720	42 – 51	1 – 31
LAC2640	73 – 76	1 – 83
ARC5000	31 – 53	1-4
TNC1900	35 – 27	1-1
TNC4050	56 – 54	1 – 46
ALC3000	46 – 50	1 – 25
NCC1500	93 - 99	1 - 99

### Rice Farms

- > 7 of 10 Poor Financial Position
- ➤ 3 of 10 Marginal Financial Position
- > 0 of 10 Good Financial Position
- > 10% 25% NIA needed to avoid loss of real net worth for 6 farms.
- ▶Pages 39 45

Economic Viability of Representative Rice Farms Under the December 2001 FAPRI Baseline with Continuation of the 1996 Farm Bill P(Real Net Worth Declines) Farm Name P(Cash Flow Deficit) 2002-2006 2002-2006 TXR3774 LASR1200 ARR3640 26 – 37 MSR4735 97 – 99 55 – 63 16 - 31 MOER4000

### **Dairy Farms**

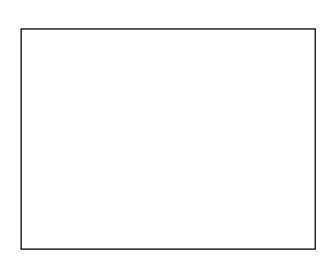
- ➤ 9 of 26 Poor Financial Position
- ➤ 8 of 26 Marginal Financial Position
- ➤ 9 of 26 Good Financial Position
- > 1% to 8% NIA needed to avoid loss in real net worth for 5 farms.
- ➤ Pages 47 60

Economic Viability of Representative Dairy Farms Under the December 2001 FAPRI Baseline with Continuation of the 1996 Farm Bill Farm Name P(Cash Flow Deficit) P(Real Net Worth Declines) 2002-2006 2002-2006 CAD1710 59 - 53 27 - 25 WAD185 WAD900 52 - 421 - 241 – 18 5 – 3 TXCD82 WID70 32 - 29 WID600 48 - 36

25-50%

Economic Viability of Representative Dairy Farms
Under the December 2001 FAPRI Baseline
with Continuation of the 1996 Farm Bill Continued

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2002-2006	2002-2006
MIED200	77 – 77	1 – 55
MICD140	92 – 95	1 – 68
NYWD800	14 – 11	1-1
NYWD1200	12 – 9	1-1
NYCD110	1-3	1-1
NYCD400	1-1	1-1
VTD134	68 – 70	1 – 53
VTD350	59 – 47	1 – 30
MOD85	99 – 99	1 – 84
MOD330	17 - 14	1-1
GAND200	99 – 99	1 – 99
GASD700	27 – 16	1-1
FLND500	21 – 13	1-1
FLSD1800	87 – 82	1 – 62
< 25%	25-50%	>50%



### Beef Cattle Ranches

- > 6 of 8 Poor Financial Position
- > 0 of 8 Marginal Financial Position
- ➤ 2 of 8 Good Financial Position
- ➤ Pages 61 66

Economic Viability of Representative Cow Calf Ranches Under the December 2001 FAPRI Baseline with Continuation of the 1996 Farm Bill						
Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)				
	2002-2006	2002-2006				
MTB500	1-1	1-5				
WYB300	98 – 98	1 – 37				
NVB680	99 – 96	1 – 85				
COB300	99 – 99	1 – 99				
NMB300	99 – 99	1 – 44				
MOB150	33 – 7	1-3				
MOCB350	99 – 98	1 – 92				
FLB1155	99 – 99	1 – 75				
< 25%	25-50%	>50%				

### Hog Farms

- ➤ 1 of 7 Poor Financial Position
- > 0 of 7 Marginal Financial Position
- ➤ 6 of 7 Good Financial Position
- ➤ 6% NIA needed to avoid losing real net worth for 1 farm.
- ➤ Pages 67 72

Farm Name	P(Cash Flow Deficit)	P(Real Net Worth Declines)
	2002-2006	2002-2006
IAH400	21 – 8	1-1
ILH200	35 – 22	1-8
ILH750	9 – 1	1-1
INH200	94 – 99	1 – 73
INH1200	22 – 10	1 – 4
NCH350	13 – 3	1-1
NCH13268	14 – 5	1 – 2

25-50%

Economic Viability of Representative Hog Farms

### **Crop Farm Summary**

- Cash flow position over 2002 2006
  - 31 of 48 - 14 of 48
- Poor Marginal
- -3 of 48
- Good
- Equity position over 2002 2006
  - 18 of 48
- Poor equity position
- 9 of 48
- Marginal equity position
- 21 of 48

- Good equity position • Overall economic viability 2002 - 2006
  - 25 of 48 - 20 of 48
- Poor Marginal
- 3 of 48
- Good

- Livestock and Dairy Summary
- Cash flow position over 2002 2006 Poor
  - 16 of 41
  - 8 of 41 Marginal

< 25%

- 17 of 41 Good
- Equity Position
  - 12 of 41
  - Poor -5 of 41Marginal
  - -24 of 41Good

### REPRESENTATIVE FARMS ECONOMIC OUTLOOK FOR THE DECEMBER 2001 FAPRI/AFPC BASELINE

The farm level economic impacts of projected long term prices under the Federal Agriculture Improvement and Reform Act of 1996 (FAIR) on representative crop and livestock operations are projected in this report. For this report the FAIR Act will be referred to as the 1996 Farm Bill. The analysis was conducted over the 2000-2006 planning horizon using FLIPSIM, AFPC's whole farm simulation model. Data to simulate farming operations in the nation's major production regions came from two sources:

- # Producer panel cooperation to develop economic information to describe and simulate representative crop, livestock, and dairy farms.
- # Projected prices, policy variables, and input inflation rates from the Food and Agricultural Policy Research Institute (FAPRI) December 2001 Baseline.

The primary objective of the analysis is to determine the farms' economic viability by region and commodity throughout the life of the 1996 Farm Bill and beyond.

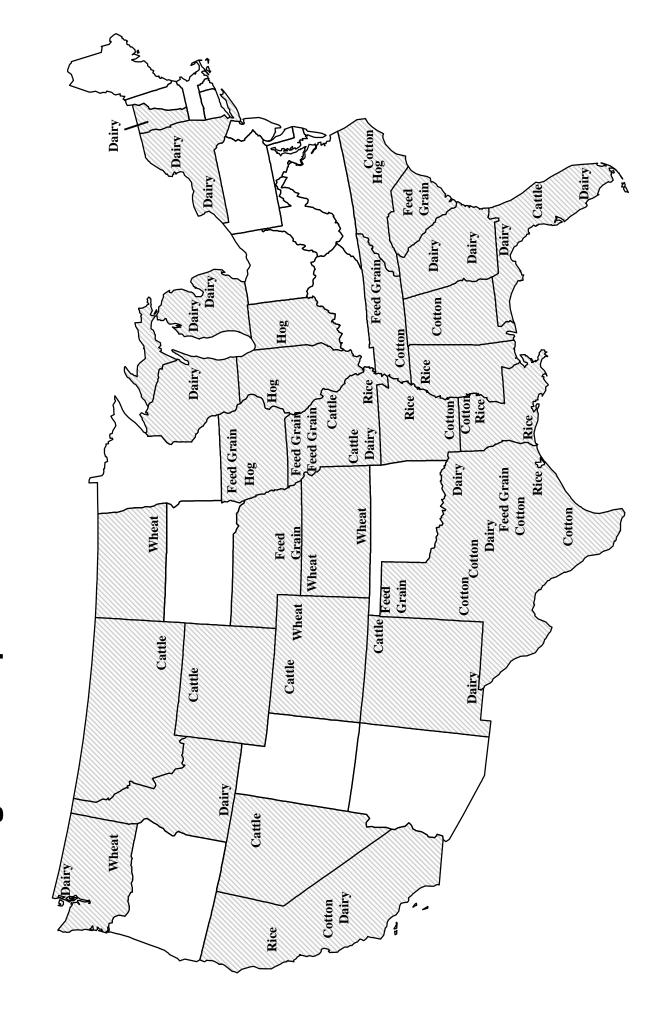
The FLIPSIM policy simulation model incorporates the historical risk faced by farmers for prices and production. This report presents the results of the December 2001 Baseline in a risk context using selected simulated probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing annual cash flow deficits and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2006.

This report is organized into ten sections. The first section summarizes the process used to develop the representative farms and the key assumptions utilized for the farm level analysis. The second section summarizes the FAPRI December 2001 Baseline and the policy and price assumptions used for the representative farm analyses. The third through sixth sections present the results of the simulation analyses for feed grain, wheat, cotton, and rice farms. The seventh through ninth sections summarize simulation results for dairy, cattle and hog farms. Two appendices constitute the final section of the report. Appendix A provides tables to summarize the physical and financial characteristics for each of the representative farms. Appendix B provides the names of producers, land grant faculty, and industry leaders who cooperated in the panel interview process to develop the representative farms.

### **Panel Process**

AFPC has developed and maintains data to simulate more than 90 representative crop and livestock farms chosen from major production areas across the United States (Figure 1). Characteristics for each of the farms in terms of location, size, crop mix, assets, and average receipts are summarized in Appendix A. The locations of these farms are primarily the results of discussions with staffers for the U.S. House and Senate Agriculture Committees. Information necessary to simulate the economic activity on these representative farms is developed from panels of producers using a consensus-building interview process. Normally two farms are developed in each region using separate panels of producers: one is representative of moderate size full-time farm operations, and the second panel usually represents farms two to three times larger.

Figure 1. Representative Farms and Ranches



The data collected from the panel farms are analyzed in the whole farm simulation model (FLIPSIM) developed by AFPC. The producer panels are provided pro-forma financial statements for their representative farm and are asked to verify the accuracy of simulated results for the past year and the reasonableness of a four to five year projection. Each panel must approve of the model's ability to reasonably reflect the economic activity on their representative farm prior to using the farm for policy analyses.

More than half of the crop farms used in the analysis have been updated with the panels through 2000. All of the crop farms are assumed to begin 2000 with 20 percent intermediate- and long-term debt, based on information provided by ERS-USDA and the panel members. Initial debt levels in 2000 for dairy farms were set at 30 percent; initial debt levels for beef cattle ranches were 10 percent for land and 20 percent for cattle and machinery; and initial debt levels for hog farms were 35 percent. The debt levels the farms have at the outset of 2000 are based on a stratified tabulation of USDA's Farm Cost and Returns Survey for 2000, using the survey data for moderate to large size farms in states where AFPC has representative farms.

### **Key Assumptions**

- # All farms classified as moderate scale are the size (acres or number of livestock) considered to be representative of a majority of full-time commercial farming operations in the study area. In many regions, a second farm, two to three times larger than the moderate scale farm is developed as an indicator of size economies.
- # Dairy, hog, and cattle herd sizes are held constant for all farms over the 2000-2006 planning horizon.
- # The farm was structured so government payment limits were not effective at reducing contract payments and loan deficiency payments.
- # Minimum family living withdrawals were assumed to be the minimum of 10 percent of gross receipts or \$20,000 annually. Actual family living withdrawals are determined by historical consumption patterns. Therefore, as the farm's profitability increases so does the level of family living withdrawals.
- # The farm is subject to owner/operator federal (income and self-employment) and state income taxes as a sole proprietor, based on the current tax provisions.
- # No off-farm-related income, including family employment, was included in the analyses. Therefore, the farm reflects only the ability of the farm to provide for family living and capital replacement.
- # Farm program parameters, average annual prices, crop and livestock yield trends, interest rates, and input cost inflation (deflation) are based on the December 2001 FAPRI Baseline which assumes implementation of the 1996 Farm Bill through 2006.
- # Contract payments for participating cotton, wheat, feed grain, and rice producers are made based on 85 percent of their historical base acreage times farm program yield times a contract payment rate. The contract payment rate is included in the December 2001 FAPRI Baseline.
- # The farms are assumed to be enrolled in the production flexibility program and take full advantage of the flexibility provisions in the 1996 Farm Bill (within the current crop mix). PFC payments are held constant in 2003-2006 at their 2002 levels. Crop mix changes after 2000 were estimated based

- on projected net returns for each of the enterprises currently produced on the farms. During the update process most of the crop farm panels indicated that they would flex out of their current crop mix, but only if expected net returns per acre from the change exceeded \$40, due to rotation and/or other cultural concerns.
- # Marketing loan provisions for cotton, rice, wheat, feed grains, and soybeans were authorized in the 1996 Farm Bill and are assumed to be in place for the farm level analysis.
- # The farm level simulation model incorporates price and yield risk faced by farmers. Historical yield variability for crops and production for livestock (sale weights, birth rates, and milk per cow) over the past ten years are assumed to prevail for the planning horizon. Market prices for crops and feedstuffs are assumed to be more variable than over the past ten years due to the 1996 Farm Bill provisions, based on recent research by FAPRI. The assumed increase in relative price variability is: 57 percent for feed grains, 20 percent for wheat, 57 percent for soybeans, 20 percent for cotton, 10 percent for rice, 20 percent for cattle and hogs and 50 percent for milk. Random prices are appropriately correlated based on historical correlations, among crop and livestock prices, both within year and across years.
- # To simulate the historical portion of the planning horizon (2000) crop yields were held constant based on actual values obtained from the producers. Crop yields for 2001-2006 were simulated stochastically based on the average yields provided by the producers and the historical yield variability for the farm. Prices were held constant at producer-provided values for 2000. FAPRI's December Baseline prices were localized for the farms and used as the average prices for 2001-2006 to simulate stochastic crop and livestock prices.
- # The milk support price remains at \$9.90/cwt. in 2001 and is eliminated thereafter.
- # Market loss assistance payments and disaster provisions passed in late 2000 and 2001 have been incorporated into the 2001 Baseline.
- # All farms are assumed to carry Multi-Peril Crop Insurance (MPCI) at the 50/100 level.

### **FAPRI December 2001 Baseline**

Projected crop prices for FAPRI's December 2001 Baseline are summarized in Table 1. Corn prices start at a low of \$1.85/bu. in 2000, but are projected to increase marginally until they reach \$2.22/bu. in 2006. Wheat prices are expected to increase through 2006 when wheat prices are projected at \$3.18/bu. Cotton prices continue to increase gradually to \$0.4922/lb. in 2006. Rice prices are expected to recover slightly to \$5.71/cwt. by 2006, from a low of \$4.25/cwt. in 2001.

Assumed loan rates and projected annual contract (AMTA) payment rates are also summarized in Table 1. The assumed contract or AMTA payment rates for 2000 and 2001 reflect the increase for the market loss assistance payments authorized in those years. Annual contract payments for 2002 are assumed to remain constant for 2003, 2004, 2005, and 2006.

Projected livestock prices for FAPRI's December 2001 Baseline are summarized in Table 2. Beef cattle prices are projected to increase through 2003, decline slightly in 2004 and then drop significantly in 2005 and 2006. Feeder cattle prices are projected to reach \$98.84/cwt. in 2003. Hog prices are projected to recover to \$46.26/cwt. in 2001 and then fall to \$41.02/cwt. in 2003. Hog prices are expected to increase in 2004, 2005 and 2006, reaching \$46.97/cwt. in 2006. Annual milk prices for the 12 states where representative dairy farms are located are summarized in Table 2. The U.S. all milk price increased dramatically in 2001 to \$15.16/cwt. but are expected to decrease to \$12.99/cwt. by 2002. Milk price is projected to remain at about \$13/cwt. through 2006.

Projected annual rates of change for variable cash expenses are presented in Table 3. The rate of change in input prices and interest rates come from FAPRI's December 2001 Baseline which relies on WEFA's macroeconomic projections. Annual interest rates paid for long- and intermediate-term loans and earned for savings are also summarized in Table 3. Assumed annual rates of change in land values over the 2001-2006 period are provided by the FAPRI Baseline and indicate a slight decrease in nominal land values after 2002 (Table 3).

### **Definitions of Variables in the Summary Tables**

- # Overall Financial Position 2002-2006 -- As a means of summarizing the representative farms' economic efficiency, liquidity, and solvency position AFPC classifies each farm as being in either a good, marginal or poor position. AFPC assumes a farm is in a good financial position when it has less than a 25 percent chance each of a cash flow deficit and losing real net worth. If the probabilities of these events are between 25 and 50 percent the farm is classified as marginal. A probability greater than 50 percent places the farm in a poor financial position.
- # Net Income Adjustment (NIA), 2002-2006 -- NIA is the annual increase or decrease in net cash farm income necessary to insure the farm maintains its real net worth during the 2002-2006 period. A positive NIA indicates the additional annual net income needed to maintain real net worth. A negative NIA indicates the largest possible annual loss in net income the farm can endure and still maintain its real net worth through the period.
- # Annual Change in Real Net Worth, 2002-2006 -- annualized percentage change in the operator's net worth from January 1, 2002 through December 31, 2006, after adjusting for inflation. This value reflects the real annualized increase or decrease in net worth or equity for the farm over the planning horizon including changes in real estate values.

- # Cost to Receipts Ratio, 2002-2006 -- average ratio of total cash expenses to total receipts (from all sources). Cash expenses include interest costs, fixed cash costs, and variable costs but exclude principal payments, depreciation, income taxes, and family living expenses. Total receipts include crop and livestock receipts plus government payments and insurance indemnities.
- # Government Payments/Receipts, 2002-2006 sum of all farm program payments (AMTA and marketing loan deficiency payments) divided by total receipts received from the market plus contract payments, marketing loans, crop insurance indemnities, and other farm related income.
- # Total Cash Receipts -- sum of cash receipts from all sources, including market sales, AMTA (or contract) payments, CCC loans, marketing loan deficiency payments, crop insurance indemnities, and other farm related income. The values in the tables are the average total receipts for each year in the planning horizon.
- **Wet Cash Farm Income --** equals total cash receipts minus all cash expenses. Net cash farm income is used to pay family living expenses, principal payments, income taxes, self employment taxes, and machinery replacement costs. The values in the tables are the averages for each year in the planning horizon.
- # Probability of a Cash Flow Deficit -- is the number of times out of 100 that the farm's annual net cash farm income does not exceed cash requirements for family living, principal payments, taxes (income and self-employment), and actual machinery replacement expenses (not depreciation). This probability is reported for each year of the planning horizon to indicate whether the cash flow risk for a farm increases or decreases over the planning horizon.
- **#** Ending Cash Reserves -- equals total cash on hand at the end of the year. Ending cash equals beginning cash reserves plus net cash farm income and interest earned on cash reserves less principal payments, federal taxes (income and self employment), state income taxes, family living withdrawals, and actual machinery replacement costs (not depreciation).
- **# Nominal Net Worth --** equity at the end of each year equals total assets including land minus total debt from all sources. Net worth is not adjusted for inflation and averages are reported for each year in the planning horizon.
- # Probability of Losing Real Net Worth -- is the number of times out of 100 that real net worth is less than the net worth for the farm at the beginning of 2002. The probability is reported for each year of the planning horizon to indicate whether the equity risk is increasing or decreasing from the end of the base year, 2001.
- # Minimum Cash Needs -- is the average annual cash requirements for the farm operation over the 2002-2006 period. Cash needs include family living expenses, principal payments, income and social security taxes and cash differences for machinery replacement.
- **Net Cash Income Distribution --** is the cumulative probability distribution (CDF) of annual net cash farm income over the 2002-2006 period. The CDF is developed by sorting the 100 stochastic iterations of net cash incomes from the lowest to highest value. The CDF thus shows the probability (Y axis value) of net cash income falling below any given income level on the X axis.

Table 1. FAPRI December 2001 Baseline Projections of Crop Prices, Loan Rates, and AMTA Payment Rates, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Crop Prices							
Corn (\$/bu.)	1.850	2.000	2.130	2.160	2.180	2.200	2.220
Wheat (\$/bu.)	2.620	2.840	2.940	3.050	3.090	3.120	3.180
Cotton (\$/lb.)	0.4980	0.3619	0.4093	0.4293	0.4528	0.4743	0.4922
Sorghum (\$/bu.)	1.880	1.960	2.000	2.040	2.070	2.090	2.100
Soybeans (\$/bu.)	4.550	4.300	4.330	4.500	4.710	4.790	4.920
Barley (\$/bu.)	2.110	2.180	2.230	2.230	2.260	2.280	2.300
Oats (\$/bu.)	1.100	1.300	1.330	1.360	1.370	1.370	1.360
Rice (\$/cwt.)	5.560	4.250	4.890	5.170	5.400	5.560	5.710
Soybean Meal (\$/ton)	166.700	148.100	149.600	156.800	164.400	166.400	169.800
All Hay (\$/ton)	83.000	96.800	89.700	90.200	91.600	93.000	94.200
All Peanuts (cents/lb.)	25.700	22.620	25.960	25.790	25.920	26.050	26.060
Additional Peanuts (cents/lb.)	18.960	15.700	18.300	18.160	18.260	18.360	18.370
Comparison of Loan Rate							
Corn (\$/bu.)	1.890	1.890	1.890	1.890	1.890	1.890	1.890
Wheat (\$/bu.)	2.580	2.580	2.580	2.580	2.580	2.580	2.580
Cotton (\$/lb.)	0.519	0.519	0.519	0.519	0.519	0.519	0.519
Sorghum (\$/bu.)	1.710	1.710	1.750	1.760	1.790	1.830	1.800
Soybeans (\$/bu.)	5.260	5.260	5.260	5.260	5.260	5.260	5.260
Barley (\$/bu.)	1.620	1.650	1.720	1.740	1.740	1.700	1.670
Oats (\$/bu.)	1.160	1.210	1.190	1.180	1.200	1.210	1.220
Rice (\$/cwt.)	6.500	6.500	6.500	6.500	6.500	6.500	6.500
AMTA Payment Rate Corn (\$/bu.)	0.697	0.567	0.261	0.261	0.261	0.261	0.261
Wheat (\$/bu.)	1.220	0.995	0.461	0.461	0.461	0.461	0.461
Cotton (\$/lb.)	0.150	0.121	0.057	0.057	0.057	0.057	0.057
Sorghum (\$/bu.)	0.835	0.680	0.314	0.314	0.314	0.314	0.314
Barley (\$/bu.)	0.522	0.427	0.202	0.202	0.202	0.202	0.202
Oats (\$/bu.)	0.057	0.045	0.022	0.022	0.022	0.022	0.022
Rice (\$/cwt.)	5.437	4.432	2.050	2.050	2.050	2.050	2.050

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

Table 2. FAPRI December 2001 Baseline Projections of Livestock and Milk Prices, 2002-2006.

	2000	2001	2002	2003	2004	2005	2006
Cattle Prices Feeder Cattle (\$/cwt)	94.35	96.44	97.53	98.84	94.53	88.63	85.02
Fat Cattle (\$/cwt)	69.65	72.68	74.74	76.91	75.06	72.33	69.98
Culled Cows (\$/cwt)	41.71	44.92	47.16	48.42	44.98	42.09	39.70
Hog Prices Barrows/Gilts (\$/cwt)	44.70	46.26	44.81	41.02	43.68	45.58	46.97
Culled Sows (\$/cwt)	29.79	34.45	32.66	30.08	32.16	33.86	35.57
Milk Prices National and State All Milk Price (\$/cwt)	12.40	15.16	12.99	12.91	12.94	13.03	13.08
California (\$/cwt)	11.50	13.93	11.60	11.52	11.56	11.64	11.69
Florida (\$/cwt)	15.60	18.41	16.16	16.09	16.14	16.23	16.30
Georgia (\$/cwt)	12.90	15.71	13.53	13.46	13.51	13.61	13.68
Idaho (\$/cwt)	10.60	13.61	11.55	11.49	11.55	11.65	11.72
Michigan (\$/cwt)	12.90	15.34	13.19	13.13	13.18	13.28	13.35
Missouri (\$/cwt)	12.10	15.11	12.93	12.86	12.91	13.01	13.08
New Mexico (\$/cwt)	12.40	14.92	12.83	12.78	12.83	12.93	13.01
New York (\$/cwt)	13.10	16.01	13.88	13.82	13.87	13.97	14.04
Texas (\$/cwt)	13.40	16.00	13.91	13.86	13.91	14.01	14.09
Vermont (\$/cwt)	13.70	15.99	13.51	13.45	13.50	13.60	13.67
Washington (\$/cwt)	12.80	15.26	13.14	13.09	13.14	13.24	13.31
Wisconsin (\$/cwt)	11.70	14.90	13.00	12.97	13.03	13.14	13.21

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

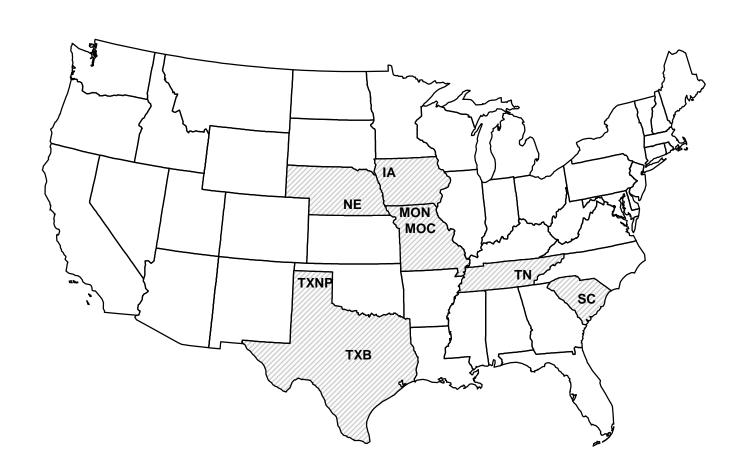
Table 3. FAPRI December 2001 Baseline Assumed Rates of Change in Input Prices, Annual Interest Rates, and Annual Changes in Land Values. 2001-2006.

Land Values, 2001-2006.	2001	2002	2003	2004	2005	2006	
Annual Rate of Change in Prices Paid							
Seed Prices (%)	2.54	3.12	3.16	3.47	2.90	2.48	
Fertilizer Prices (%)	-13.65	-3.79	-0.91	0.84	0.30	-0.36	
Chemical Prices (%)	1.31	1.31	1.69	1.67	1.64	1.62	
Machinery Prices (%)	1.95	1.06	1.19	1.13	0.81	1.40	
Fuel and Lube Prices (%)	-13.65	-3.79	-0.91	0.84	0.30	-0.36	
Labor (%)	4.07	3.33	2.09	2.75	2.95	2.83	
Other Prices Paid (%)	1.18	1.64	1.66	1.52	1.50	1.56	
Non-Feed Livestock Costs (%)	1.18	1.64	1.66	1.52	1.50	1.56	
Annual Change in Consumer Price Index	2.95	2.92	2.66	2.50	2.49	2.39	
Annual Interest Rates Long-Term (%)	8.94	8.63	8.52	8.40	8.79	8.97	
Intermediate-Term (%)	8.20	7.03	6.99	7.16	7.55	7.75	
Savings Account (%)	5.82	3.71	3.55	4.50	4.90	5.14	
Annual Rate of Change for U.S. Farm Land (%)	4.63	1.94	-0.30	-1.10	-1.16	-0.10	

Source: Food and Agricultural Policy Research Institute (FAPRI) at the University of Missouri-Columbia and Iowa State University.

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## FIGURE 2. REPRESENTATIVE FARMS PRODUCING FEED GRAINS AND OILSEEDS



### **Feedgrain and Oilseed Farm Impacts**

- # Corn prices are projected to increase throughout the 2002-2006 period. Soybean prices recover from the \$0.25/bu decline in 2001 and increase slightly throughout the remainder of the period. After declining substantially in 2001, fuel and fertilizer costs increase at roughly 1.5% per year over the period.
- # Fourteen of the 15 feedgrain/oilseed operations are in a vulnerable liquidity position over the 2002-2006 period. The probability of a cash flow deficit in 2002 ranges from 22 percent on the moderate Central Missouri farm to 99 percent on the moderate Tennessee farm. Even though prices increase modestly throughout the period, only two farms (IAG2400 and SCG3500) improve their liquidity position by 2006 relative to 2002.
- # The situation looks better when examining the farms capability of sustaining real wealth over the period (Table 4-5 and Figure 3). Seven farms (the large Iowa, moderate and large Nebraska and Central Missouri, large Texas Northern High Plains, and large South Carolina) are projected to have less than a 25 percent chance of losing real equity by 2006. The moderate Iowa, Northern Missouri, moderate Texas Northern High Plains, large Tennessee, and moderate South Carolina have between a 25 and 50 percent chance of losing equity by 2006 and the remaining three farms have greater than a 50 percent chance that they will lose real equity without additional government assistance or infusion of outside capital.
- # For the three operations (TXBG2000, TXBG2500, and TNG900) projected to lose real equity on average over the 2002-2006 period, an infusion of receipts equivalent to 14 percent of gross receipts would be needed for them to maintain real equity.
- # Overall, when considering both liquidity and solvency risk, AFPC classes seven as extremely vulnerable, seven as marginally vulnerable and one (SCG3500) as capable of remaining economically sound.

Table 4. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

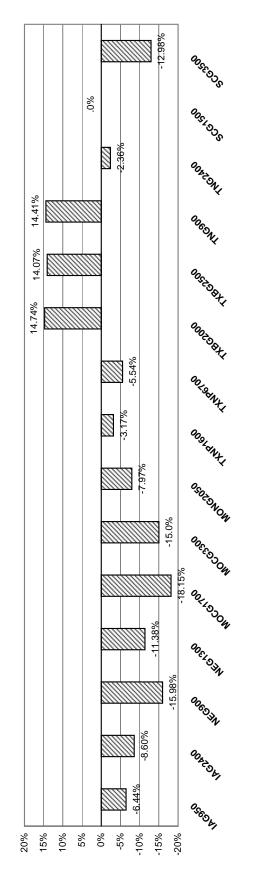
	IACOFO	IAG2400	NEG900	NEC4200	MOCG1700	MOCG3300	MONG2050	
	IAG950	IAG2400	NEG900	NEG1300	MOCG1700	MOCG3300	MONG2050	
Overall Financial Position								
2002-2006 Ranking	Poor	Marginal	Marginal	Marginal	Marginal	Marginal	Marginal	
NIA to Maintain Real								
Net Worth (\$1,000)	-17.65	-51.40	-52.76	-53.55	-66.45	-105.92	-46.32	
NIA to Maintain Real								
Net Worth (% Rec.)	-6.44	-8.60	-15.98	-11.38	-18.15	-15.00	-7.97	
Change Real Net Worth (%)								
2002-2006 Average	0.78	1.92	2.59	1.96	1.52	1.35	0.72	
Cost to Receipts Ratio (%)								
2002-2006 Average	75.95	79.10	67.72	70.48	67.50	70.86	79.41	
Govt Payments/Receipts (%)								
2002-2006 Average	17.37	17.74	16.48	15.37	16.57	18.78	11.85	
Total Cash Receipts (\$1000)								
2000	279.11	609.54	343.79	482.46	364.89	709.45	457.96	
2001	278.29	606.01	339.57	481.38	368.14	711.48	584.54	
2002 2003	266.07 272.18	576.23 589.45	316.37 324.69	451.85 464.62	356.71 370.51	680.26 703.49	566.67 582.70	
2004	275.20	595.96	332.35	470.53	371.01	706.44	584.42	
2004	280.43	607.33	335.81	480.30	371.01	714.09	581.48	
2006	285.44	618.26	342.04	485.67	381.90	726.46	589.97	
2002-2006 Average	275.86	597.44	330.25	470.60	371.14	706.15	581.05	
-								
Net Cash Farm Income (\$100								
2000	76.38	152.63	136.41	157.60	113.88	235.49	103.13	
2001	79.46	152.85	130.15	168.25	125.33	236.70	161.82	
2002	69.90	128.77	109.01	142.20	118.21	206.06	145.36	
2003	73.59	140.66	112.18	152.15	133.23	227.89	152.96	
2004 2005	72.86	143.16	117.90	151.02	130.92	224.83	151.85 144.95	
2006	75.44 80.77	149.55 156.40	118.70 126.99	153.16 155.42	129.63 136.54	228.00 236.99	144.95	
2002-2006 Average	74.51	143.71	116.96	150.79	129.71	224.75	148.95	
-	0/ \							
Prob. of a Cash Flow Deficit (* 2001	%) 23	38	35	15	22	30	35	
2001	23 51	36 54	35 25	28	22	30 37	35 31	
2003	55	58	53	24	25	43	47	
2004	65	52	59	40	34	55	49	
2005	74	54	58	38	32	53	55	
2006	60	37	52	37	30	42	44	
Ending Cash Reserves (\$100	0)							
2000	130.16	176.39	281.51	295.48	197.12	523.14	193.72	
2001	147.79	189.55	306.31	351.69	239.38	584.75	243.72	
2002	145.06	174.52	329.89	378.59	268.90	607.80	275.63	
2003	141.32	158.61	337.77	413.38	304.34	634.26	271.67	
2004	130.28	159.01	340.25	430.96	326.25	633.89	270.29	
2005	108.26	163.62	344.48	447.08	350.85	634.48	255.35	
2006	100.95	195.48	358.31	475.29	388.76	674.39	261.82	
2002-2006 Average	125.18	170.25	342.14	429.06	327.82	636.96	266.95	
Nominal Net Worth (\$1000)								
2000	1,001.34	1,611.53	1,061.68	1,350.23	1,984.95	3,590.09	2,039.41	
2001	1,034.12	1,665.54	1,108.91	1,406.17	2,056.33	3,712.43	2,446.90	
2002	1,060.91	1,707.47	1,148.25	1,440.96	2,123.17	3,823.15	2,535.23	
2003	1,067.93	1,732.63	1,171.85	1,476.36	2,165.40	3,884.15	2,562.59	
2004	1,071.90	1,777.48	1,198.17	1,498.95	2,197.06	3,914.14	2,573.05	
2005	1,080.71	1,821.22	1,233.82	1,535.50	2,229.77	3,960.95	2,583.37	
2006 2002-2006 Average	1,097.60 1,075.81	1,863.69 1,780.50	1,290.92 1,208.60	1,574.46 1,505.25	2,272.49 2,197.58	4,059.52 3,928.38	2,616.00 2,574.05	
·		.,. 50.00	.,_30.00	.,500.20	_,	2,320.00	_,500	
Prob. of Losing Real Net Wor 2001	th (%) 1	1	1	1	1	1	1	
2002	1	1	1	1	1	1	1	
2002	35	34	29	17	10	15	34	
2004	36	21	22	19	7	19	35	
2005	31	23	14	11	8	14	34	
2006	29	14	8	14	3	7	31	

Table 5. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Feed Grains and Oilseeds.

T:	XNP1600	TXNP6700	TXBG2000	TXBG2500	TNG900	TNG2400	SCG1500	SCG3500	
Overall Financial Position									
2002-2006 Ranking	Poor	Marginal	Poor	Poor	Poor	Poor	Poor	Good	
NIA to Maintain Real									
Net Worth (\$1,000)	-14.36	-95.44	50.66	37.56	39.59	-16.49	0.00	-195.35	
NIA to Maintain Real									
Net Worth (% Rec.)	-3.17	-5.54	14.74	14.06	14.41	-2.36	0.00	-12.98	
Change Real Net Worth (%)									
2002-2006 Average	2.16	3.05	-12.73	-4.60	-8.07	0.40	0.12	3.38	
Cost to Receipts Ratio (%)									
2002-2006 Average	85.83	84.26	103.23	103.32	97.58	83.90	89.83	78.71	
Cout Bouments/Bassists (0/)									
Govt Payments/Receipts (%) 2002-2006 Average	11.28	12.65	16.92	8.75	12.91	15.39	14.26	13.78	
·									
Total Cash Receipts (\$1000) 2000	428.58	1,710.12	356.97	307.04	266.88	692.70	485.07	1,539.54	
2000	426.56 457.44	1,710.12	359.69	313.25	276.74	694.69	483.16	1,539.54	
2002	437.53	1,677.85	333.09	307.61	272.89	674.21	461.16	1,456.02	
2003	443.79	1,714.28	339.16	308.67	279.38	685.15	480.09	1,487.90	
2004	454.04	1,734.47	342.62	316.81	281.01	700.92	480.97	1,501.26	
2005	457.42	1,768.20	352.40	323.62	286.56	712.57	492.44	1,531.38	
2006	475.22	1,793.76	351.44	322.12	288.72	726.65	504.59	1,550.57	
2002-2006 Average	453.60	1,737.71	343.74	315.77	281.71	699.90	483.85	1,505.43	
Net Cash Farm Income (\$1000)	ı								
2000	57.27	247.08	28.03	7.31	16.61	124.26	65.15	368.59	
2000	103.19	347.13	30.89	7.31 14.44	23.58	146.51	73.00	366.47	
2001	87.84	284.83	6.53	10.99	21.96	128.69	53.10	318.05	
2002	87.94	309.12	7.95	7.33	20.53	125.48	67.97	353.53	
2004	94.25	309.74	-2.71	6.83	16.02	128.81	63.33	357.39	
2005	91.15	321.90	-5.41	3.97	8.77	134.41	67.22	379.12	
2006	105.78	335.83	-14.28	-4.56	5.08	140.06	71.46	395.81	
2002-2006 Average	93.39	312.29	-1.59	4.91	14.47	131.49	64.61	360.78	
Prob. of a Cash Flow Deficit (%	)								
2001	27	29	96	96	99	28	57	31	
2002	44	55	98	92	99	30	77	40	
2003	63	60	98	95	99	48	79	41	
2004	64	67	99	94	99	60	85	34	
2005	65	65	99	96	99	63	79	36	
2006	58	44	99	98	99	60	77	24	
Ending Cash Reserves (\$1000)									
2000	105.20	537.30	-71.63	-86.70	-99.72	247.97	-7.19	643.54	
2001	134.28	641.24	-88.14	-105.69	-118.36	325.03	-13.92	751.67	
2002	139.16	612.27	-132.20	-133.28	-148.81	365.34	-39.21	807.06	
2003	127.92	558.42	-176.14	-166.19	-199.10	363.32	-55.74	884.58	
2004	115.59	501.97	-257.33	-207.62	-262.61	341.81	-81.73 -70.40	939.46	
2005 2006	99.85 107.12	475.57 523.76	-322.40 -390.62	-254.39 -307.85	-343.75 -413.71	306.59 280.92	-79.49 -73.89	1,012.08 1 153.64	
2006 2002-2006 Average	117.12	523.76 534.40	-390.62	-307.85	-413.71	331.60	-73.89 -66.01	1,153.64 959.36	
Nominal Net Worth (\$1000) 2000	451.43	2,232.69	392.13	731.74	476.49	1,596.23	810.63	3,261.82	
2000	480.14	2,232.09	379.76	731.74 724.96	466.78	1,671.18	821.42	3,420.97	
2001	487.23	2,360.26	338.37	697.10	449.18	1,716.98	818.38	3,557.98	
2003	488.17	2,402.93	301.68	665.98	416.54	1,719.37	815.55	3,684.93	
2004	503.37	2,498.10	242.36	630.08	372.25	1,718.15	803.11	3,785.84	
2005	523.92	2,591.59	197.97	591.21	326.66	1,736.79	824.09	3,929.64	
2006	547.68	2,706.88	134.47	542.70	272.71	1,745.02	821.86	4,133.62	
2002-2006 Average	510.08	2,511.95	242.97	625.41	367.47	1,727.26	816.60	3,818.40	
Prob. of Losing Real Net Worth	(%)								
2001	1	1	1	1	1	1	1	1	
2002	1	1	1	1	1	1	1	1	
2003	50	44	79	72	79	42	48	29	
2004	45	29	91	74	90	50	59	18	
	26	21	93	0.4	00	4.4	40	12	
2005 2006	36 34	17	95 95	81 86	93 94	44 40	49 45	3	

# Figure 3. Feed Grain and Oilseed Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Feed Grain and Oilseed Farms

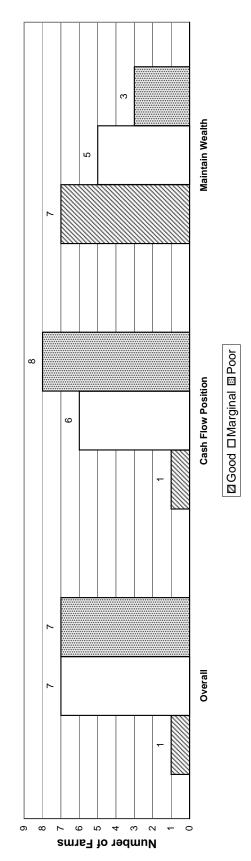


Figure 4. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Feed Grain Farms, 2002-2006.

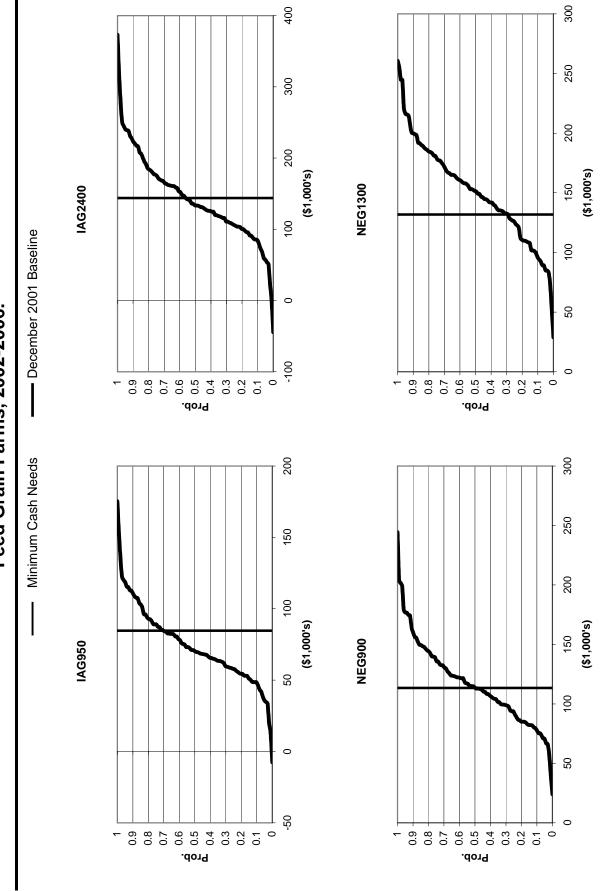


Figure 5. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Feed Grain Farms, 2002-2006.

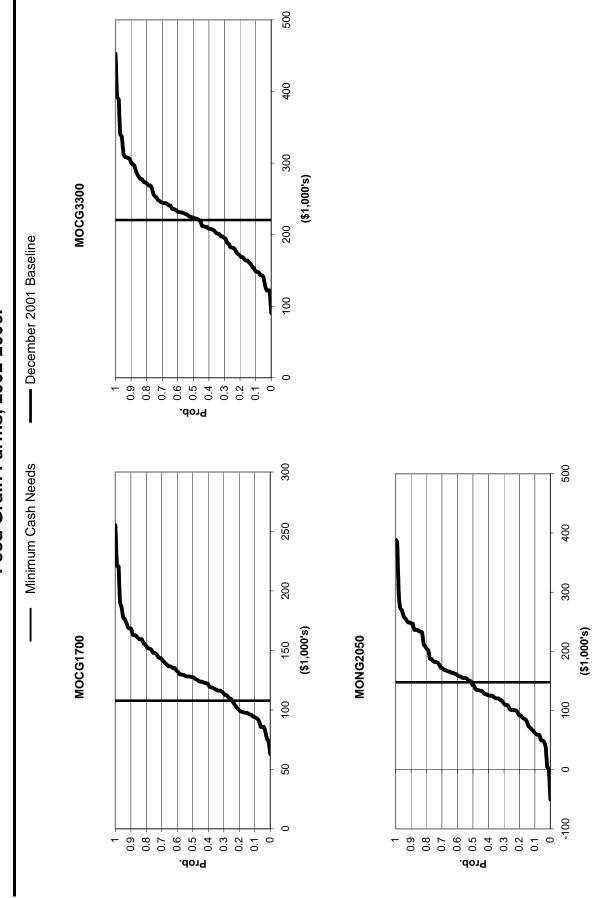


Figure 6. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Feed Grain Farms, 2002-2006.

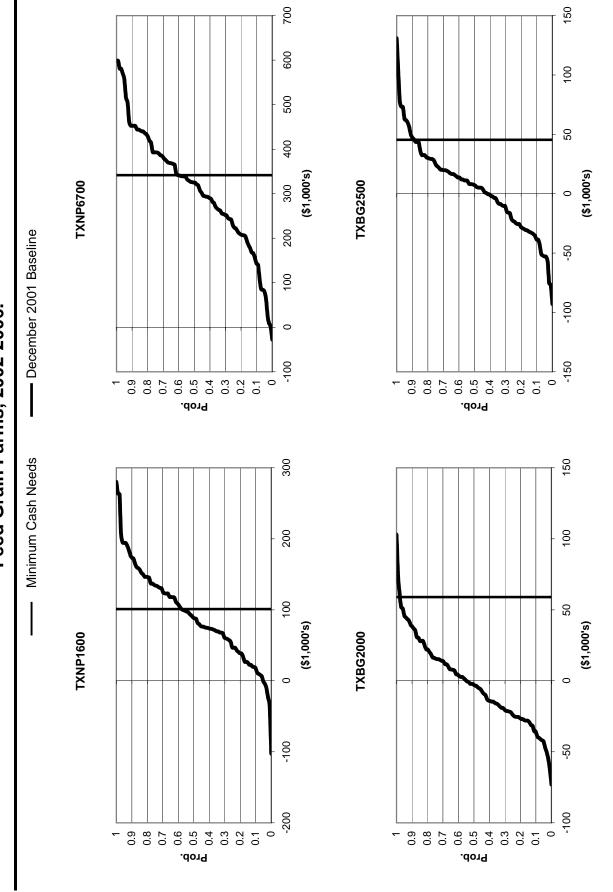
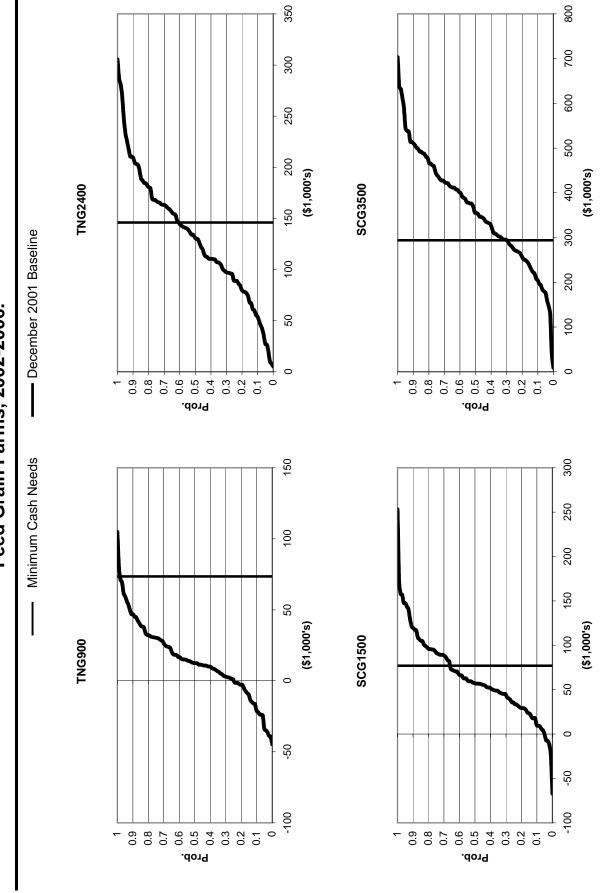
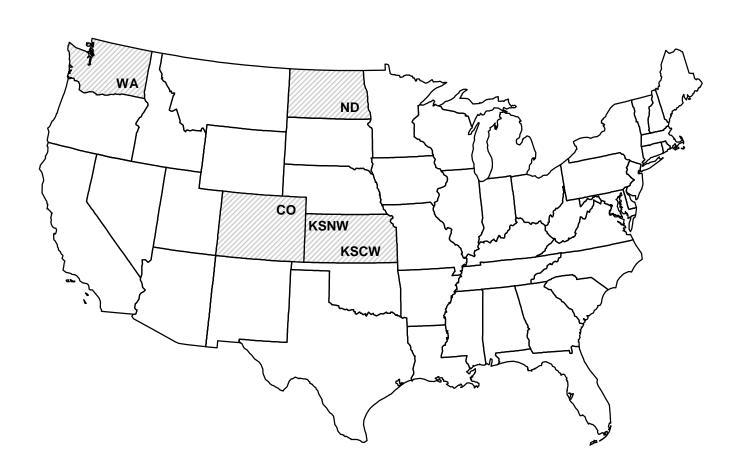


Figure 7. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Feed Grain Farms, 2002-2006.



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### FIGURE 8. REPRESENTATIVE FARMS PRODUCING WHEAT



### **Wheat Farm Impacts**

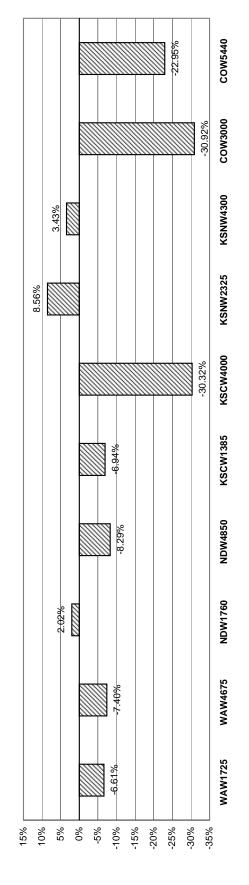
- # Wheat prices are projected to increase modestly each year from the \$2.84/bu price forecast in 2001 to \$3.35/bu in 2006.
- # Only two operations (KSCW4000 and COW3000) appear capable of handling the liquidity pressure over the 2002-2006 study period (Table 6 and Figure 9). These two farms are the most efficient of all 10 wheat farms with an expense to receipts ratio in the mid 50s. Based on the probability of cash flow deficits, two additional farms (NDW4850 and COW5440) are in the marginal economic viability category with the remaining six in the poor category. The probability of a cash flow deficit in 2006 of the eight farms in vulnerable liquidity position ranges from 27 to 92 percent with six over 50 percent.
- # From a solvency perspective, the story is considerably better. Seven of the ten farms are characterized as good when measuring their probability of maintaining real net worth throughout the period while only three farms (NDW1760, KSNW2325, and KSNW4300) are in the poor category. A 2 to 9 percent increase in receipts relative to gross receipts would be needed to allow the three farms with declining net worth to maintain the status quo.
- # Overall, two farms appear capable of sustaining economic viability without additional assistance. These include the large Central Kansas and the moderate Colorado farms (Figure 9). Five farms are cautiously vulnerable and the remaining three operations will likely need additional assistance over the period to remain viable.

Table 6. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Wheat.

	WAW1725	WAW4675	NDW1760	NDW4850	KSCW1385	KSCW4000	KSNW2325	KSNW4300	COW3000	COW5440
Overall Financial Position						0 1			0 1	
2002-2006 Ranking	Marginal	Marginal	Poor	Marginal	Marginal	Good	Poor	Poor	Good	Marginal
NIA to Maintain Real Net Worth (\$1,000)	-24.77	-68.70	4.74	-59.75	-10.09	-161.18	17.95	16.21	-82.48	-107.62
NIA to Maintain Real Net Worth (% Rec.)	-6.61	-7.40	2.02	-8.29	-6.94	-30.32	8.56	3.43	-30.92	-22.95
(,										
Change Real Net Worth (9 2002-2006 Average	6) 1.56	1.12	-0.79	2.02	1.02	4.36	-3.72	-1.53	3.48	2.35
Cost to Receipts Ratio (%)	)									
2002-2006 Average	77.46	79.25	82.93	77.78	67.54	51.46	88.83	90.28	55.07	62.02
Govt Payments/Receipts ( 2002-2006 Average	%) 9.67	10.10	14.06	12.87	19.44	13.79	12.67	12.48	8.67	10.66
•										
Total Cash Receipts (\$100 2000	00) 333.03	967.00	235.85	751.74	157.63	479.97	227.75	482.02	258.28	392.14
2001	404.38	1,097.41	239.78	745.03	157.03	431.02	233.34	490.93	288.44	501.84
2001	361.62	903.66	224.11	693.40	140.74	520.07	218.62	457.31	264.51	450.74
2003	370.49	915.20	229.88	710.16	144.12	529.72	225.72	473.79	272.20	463.08
2004	373.86	927.26	232.56	723.45	144.51	531.61	227.68	473.73	273.68	470.92
2005	380.06	940.42	239.75	737.08	147.77	536.89	229.48	477.19	273.34	475.96
2006	387.01	958.36	245.49	757.87	149.74	539.50	237.09	489.09	277.72	484.11
2002-2006 Average	374.61	928.98	234.36	724.39	145.38	531.56	227.72	474.22	272.29	468.96
Net Cash Farm Income (\$	1000)									
2000	76.03	320.16	54.48	215.13	71.19	215.28	45.54	70.26	107.00	115.04
2001	123.91	378.75	62.75	215.32	68.66	173.92	51.15	90.49	140.42	220.60
2002	87.23	203.13	45.51	165.46	47.99	260.45	39.39	60.44	119.82	173.75
2003	95.92	207.99	48.41	182.69	52.46	270.17	39.96	72.76	125.96	183.15
2004	95.27	216.78	48.66	194.29	48.93	263.99	38.59	64.01	125.27	187.94
2005	98.05	225.80	48.71	207.46	52.98	270.93	34.62	57.96	127.15	191.36
2006	99.09	234.33	50.76	225.07	51.29	274.31	38.15	63.09	130.58	199.52
2002-2006 Average	95.11	217.60	48.41	195.00	50.73	267.97	38.14	63.65	125.76	187.14
Prob. of a Cash Flow Defice 2001	cit (%)	12	24	31	9	12	66	36	1	5
2002	37	47	48	48	46	2	77	60	4	15
2003	42	57	55	47	28	9	89	55	8	17
2004	71	43	58	52	57	36	95	67	9	34
2005	46	47	62	45	59	19	94	69	6	46
2006	66	55	66	41	63	7	92	71	4	27
Ending Cash Reserves (\$										
2000	17.35	316.52	70.62	456.85	118.09	570.16	34.97	98.04	144.10	289.67
2001	46.91	469.72	83.35	521.53	143.99	648.66	22.47	125.01	195.11	393.77
2002	65.12	480.92	78.85	526.37	149.54	747.85	-5.62	114.03	228.50	450.76
2003	85.22	481.29	73.51	535.48	158.62	831.83	-54.40	119.66	261.64	503.69
2004 2005	66.26	498.35	67.68	533.42 532.33	158.23	883.66	-108.10	102.22	292.84	540.45 565.99
2006	82.54 70.11	501.73 501.76	55.82 43.97		158.37	957.94 1,055.40	-156.61 -193.62	73.83 57.04	328.98	622.47
2002-2006 Average	73.85	492.81	63.97	582.37 541.99	155.11 155.97	895.34	-103.67	93.36	377.71 297.93	536.67
Nominal Net Worth (\$1000	))									
2000	1,164.91	3,546.55	382.30	1,964.71	660.65	1,654.87	428.40	754.15	942.25	2,019.35
2001	946.40	3,241.59	390.26	2,026.24	684.99	1,721.95	417.18	773.05	1,046.73	2,143.83
2002	972.18	3,321.93	387.80	2,054.52	690.02	1,807.56	398.83	759.49	1,109.55	2,235.26
2003	997.44	3,367.29	386.92	2,087.79	699.50	1,899.67	372.13	762.89	1,155.22	2,298.28
2004	1,014.53	3,403.02	383.63	2,116.32	705.19	1,978.24	349.35	743.24	1,192.64	2,347.08
2005	1,028.66	3,437.93	377.05	2,167.48	715.22	2,089.14	341.43	723.12	1,242.22	2,400.01
2006 2002-2006 Average	1,043.96 1,011.35	3,490.38 3,404.11	372.27 381.53	2,248.96 2,135.01	721.91 706.37	2,189.55 1,992.83	330.92 358.53	702.26 738.20	1,296.14 1,199.16	2,485.06 2,353.14
Prob. of Losing Real Net V										
2001	1	1	1	1	1	1	1	1	1	1
2002	1	1	1	1	1	1	1	1	1	1
2003	37	39	52	33	24	2	75	56	3	12
2004	25	30	53	30	26	1	78	57	1	3
2005	25	22	55	23	22	1	74	58	1	2
_000		22	52			1	69	61		1

# Figure 9. Wheat Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Wheat Farms

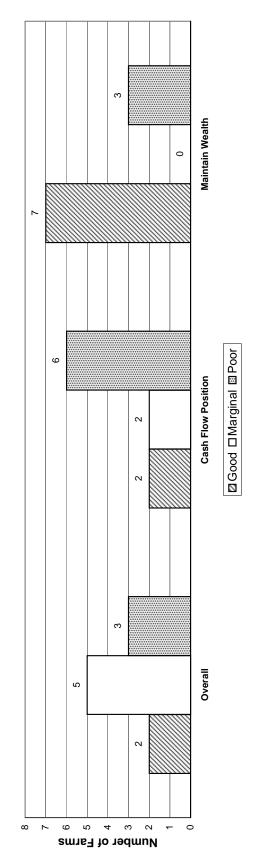


Figure 10. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Wheat Farms, 2002-2006.

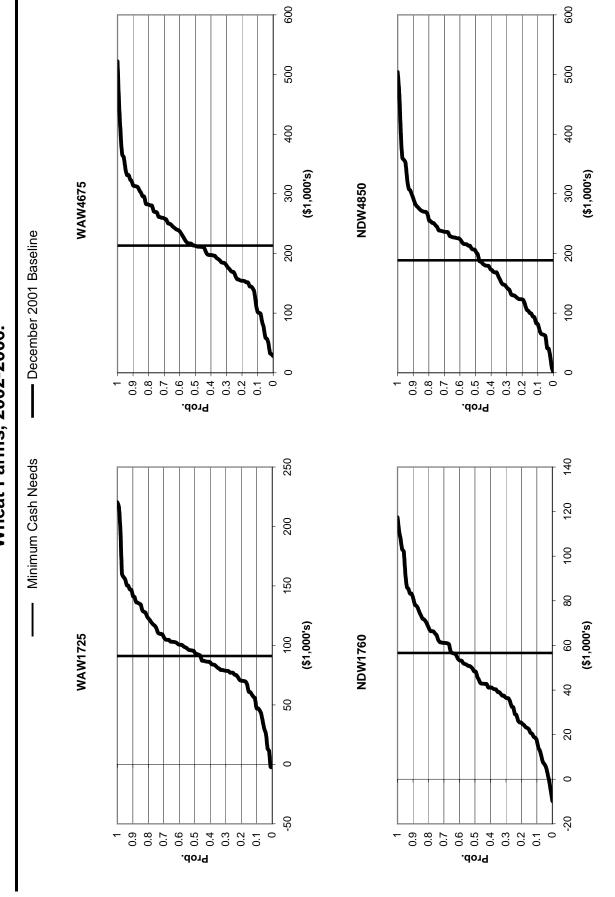


Figure 11. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Wheat Farms, 2002-2006.

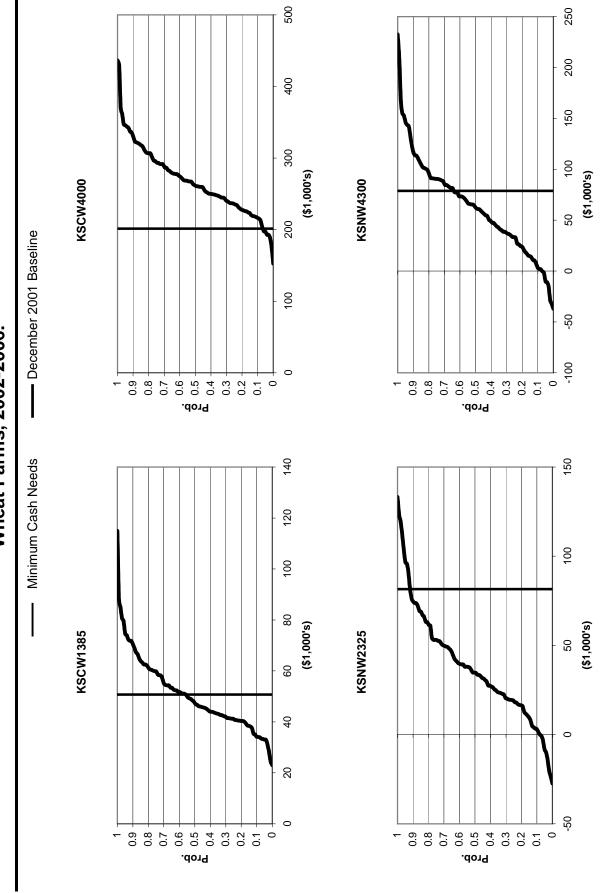
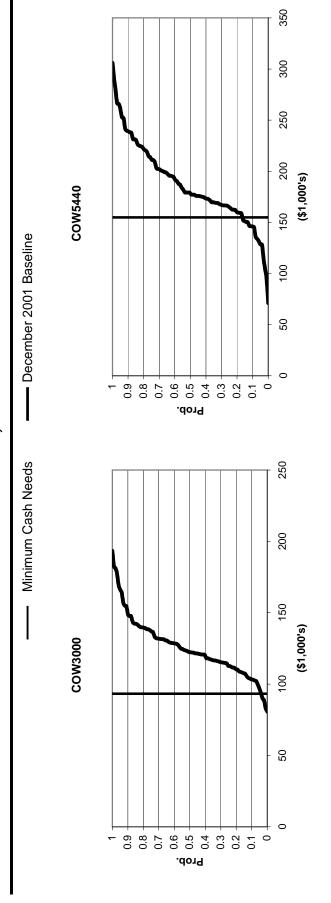
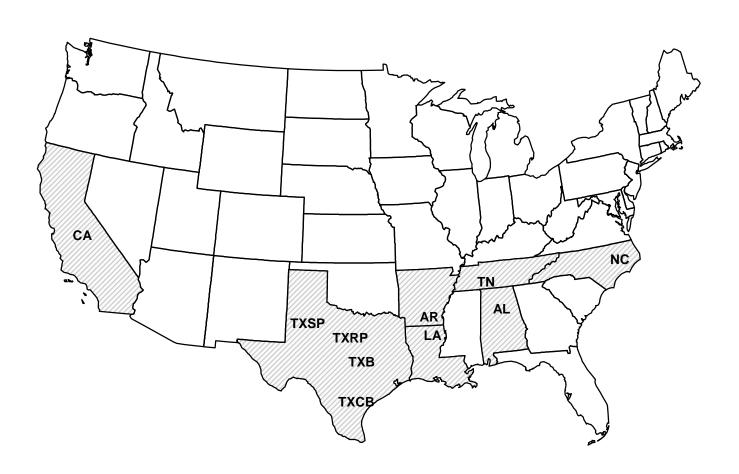


Figure 12. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Wheat Farms, 2002-2006.



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## FIGURE 13. REPRESENTATIVE FARMS PRODUCING COTTON



### **Cotton Farm Impacts**

- # Sharply lower cotton prices in 2001 followed by prices that increase but not above \$0.50/lb through the 2002 to 2006 projection period creates a cash flow crisis for the 13 cotton farms monitored by AFPC.
- # All farms are considered vulnerable in terms of liquidity position. Nine of the thirteen farms have a probability of cash flow deficit that exceeds 50 percent by 2006 (Figure 14 and Tables 7 and 8). The four farms (TXSP1682, TXSP3697, TNC1900, and ALC3000) that are in better liquidity condition still have probabilities of cash flow deficits that range from 27 to 50 percent in 2006.
- # The farms are in slightly better solvency condition than they are in terms of liquidity condition. Only five of the thirteen farms has a probability exceeding 50 percent of a decline in net worth by 2006. Of these, increases in net income relative to gross receipts of 3 to 26 percent would be needed for them to sustain equity (Figure 14).
- # Overall, AFPC ranks five of the thirteen cotton farms as marginal with the remaining eight in extremely vulnerable or poor condition.

Table 7. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

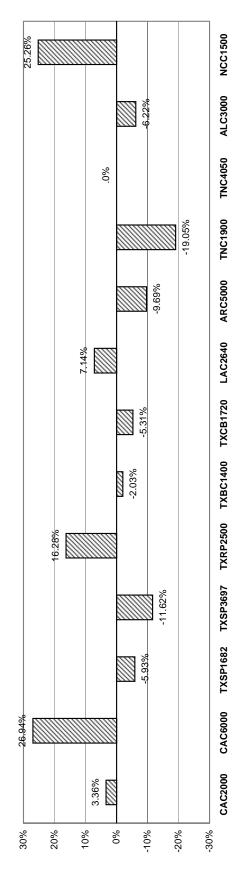
	CAC2000	CAC6000	TXSP1682	TXSP3697	TXRP2500	TXBC1400	TXCB1720	
Overall Financial Position								
2002-2006 Ranking	Poor	Poor	Marginal	Marginal	Poor	Poor	Poor	
NIA to Maintain Real								
Net Worth (\$1,000)	49.10	1,912.51	-29.27	-114.85	35.87	-4.83	-17.16	
NIA to Maintain Real								
Net Worth (% Rec.)	3.36	26.94	-5.93	-11.62	16.28	-2.03	-5.31	
Change Real Net Worth (%)								
2002-2006 Average	-1.37	-24.76	2.76	4.45	-11.31	0.62	1.28	
Cost to Receipts Ratio (%)								
2002-2006 Average	98.05	132.70	81.58	79.25	106.48	77.95	88.42	
Govt Payments/Receipts (%)								
2002-2006 Average	10.86	6.54	12.55	16.47	23.21	15.70	23.81	
Total Cook Bossints (\$1000)								
Total Cash Receipts (\$1000) 2000	1,510.94	7,070.02	513.67	1,035.63	246.16	252.80	339.88	
2001	1,483.86	7,703.78	527.46	1,059.76	253.54	252.86	357.51	
2002	1,409.66	6,900.12	490.62	966.25	213.47	233.94	320.69	
2003	1,432.54	6,994.15	495.63	974.43	216.72	237.56	319.62	
2004	1,461.82	7,010.14	502.85	985.30	220.00	240.73	321.64	
2005	1,488.59	7,179.55	507.95	1,002.06	221.26	242.15	324.72	
2006	1,517.27	7,406.29	515.07	1,012.76	230.08	243.94	328.46	
2002-2006 Average	1,461.98	7,098.05	502.43	988.16	220.31	239.66	323.03	
Net Cash Farm Income (\$100	00)							
2000	63.92	-1,458.69	104.40	252.18	50.45	71.48	84.67	
2001	93.90	-815.97	130.43	299.26	56.36	78.11	109.33	
2002	40.28	-1,628.21	102.06	223.13	17.30	54.02	77.81	
2003	52.69	-1,727.27	102.35	224.66	15.11	59.58	73.61	
2004	60.49	-1,976.78	100.85	228.03	11.87	60.88	72.88	
2005	54.17	-2,117.96	97.19	234.12	3.30	52.52	74.10	
2006	62.14	-2,207.71	101.56	241.69	0.29	54.79	73.47	
2002-2006 Average	53.95	-1,931.59	100.80	230.32	9.57	56.36	74.37	
Prob. of a Cook Flow Defi-it /	(0/ )							
Prob. of a Cash Flow Deficit ( 2001	(%) 48	95	13	9	58	13	42	
2001	46 66	95 98	28	30	56 75	43	42	
2002	69	98	38	30 41	75 81	43 31	42 47	
2003	78	99	62	42	85	50	51	
2005	89	99	53	45	94	74	54	
2006	83	99	37	30	90	61	51	
Ending Coch Book (6400	10)							
Ending Cash Reserves (\$100 2000	00) 140.92	-1,674.79	36.61	153.97	5.15	87.55	167.59	
2001	148.30	-2,629.98	83.33	286.88	14.80	113.54	210.69	
2002	81.94	-4,431.19	107.21	346.25	-13.91	114.55	228.62	
2003	17.56	-6,309.02	128.31	390.01	-44.37	123.41	236.64	
2004	-51.49	-8,445.00	111.13	409.81	-89.59	125.21	235.82	
2005	-199.57	-10,727.75	106.82	449.22	-157.94	109.87	233.24	
2006	-271.00	-13,114.72	117.89	525.36	-220.37	102.09	241.51	
2002-2006 Average	-84.51	-8,605.54	114.27	424.13	-105.23	115.03	235.17	
Nominal Net Worth (\$1000)								
2000	3,248.97	10,164.43	567.49	1,398.19	306.27	552.89	911.70	
2001	3,318.23	9,566.17	624.50	1,546.49	313.75	578.14	968.97	
2002	3,328.59	8,144.08	647.72	1,620.60	291.75	582.07	983.32	
2003	3,279.73	6,326.71	673.24	1,695.66	267.54	593.67	995.53	
2004	3,215.01	4,145.05	690.67	1,767.65	234.76	602.44	1,006.91	
2005	3,122.39	1,818.50	709.88	1,867.32	187.71	596.36	1,020.30	
2006	3,089.43	-444.62	734.25	1,969.08	145.96	597.83	1,040.92	
2002-2006 Average	3,207.03	3,997.94	691.15	1,784.06	225.54	594.47	1,009.40	
Prob. of Losing Real Net Wor	rth (%)							
2001	1	1	1	1	1	1	1	
2002	1	1	1	1	1	1	1	
- · ·	61	92	28	25	68	23	45	
2003								
2003 2004	63	94	20	17	73	23	41	
	63 72	94 99	20 18	17 8	73 75	23 38	34	

Table 8. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Cotton.

	LAC2640	ARC5000	TNC1900	TNC4050	ALC3000	NCC1500
Overall Financial Position						
2002-2006 Ranking	Poor	Marginal	Marginal	Poor	Marginal	Poor
		3	3		3	
NIA to Maintain Real						
Net Worth (\$1,000)	59.00	-218.86	-105.98	0.00	-69.38	143.59
NIA to Maintain Real						
Net Worth (% Rec.)	7.14	-9.69	-19.05	0.00	-6.22	25.26
Change Real Net Worth (%	6)					
2002-2006 Average	-4.58	2.84	3.37	0.05	2.81	-11.38
Cost to Receipts Ratio (%)						
2002-2006 Average	99.78	80.41	69.09	93.82	86.83	113.07
Govt Payments/Receipts (						
2002-2006 Average	17.26	26.77	21.05	19.14	17.95	20.07
Total Cash Receipts (\$100		0 :-		:		
2000	907.94	2,529.13	663.69	1,480.31	1,262.56	687.21
2001	854.11	2,399.64	634.46	1,490.23	1,180.33	602.72
2002	795.43	2,172.63	532.81	1,289.78	1,067.40	551.21
2003	807.83	2,215.76	541.15	1,321.97	1,088.31	562.37
2004	827.21	2,257.22	556.24	1,354.87	1,118.92	563.19
2005	843.91	2,300.38	569.13	1,388.20	1,145.05	577.27
2006	859.45	2,348.94	582.06	1,420.08	1,159.12	587.91
2002-2006 Average	826.77	2,258.99	556.28	1,354.98	1,115.76	568.39
Net Cash Farm Income (\$1	,				-	
2000	115.59	735.23	278.35	366.33	383.48	79.93
2001	68.70	660.93	262.94	379.88	309.54	13.07
2002	10.55	432.48	168.88	190.19	192.09	-35.62
2003	11.63	453.36	176.49	206.12	200.99	-36.15
2004	18.62	463.42	179.36	210.07	211.29	-57.01
2005	22.44	477.56	189.53	220.54	218.65	-75.05
2006	23.21	490.78	195.38	230.53	216.21	-99.65
2002-2006 Average	17.29	463.52	181.93	211.49	207.85	-60.70
Prob. of a Cash Flow Defice	. ,					
2001	53	6	13	40	29	70
2002	73	31	35	56	46	93
2003	82	29	10	42	52	99
2004	75	45	32	56	50	99
2005	73	46	21	59	53	99
2006	76	53	27	54	50	99
Ending Cash Reserves (\$1						
2000	192.15	1,615.89	316.18	402.21	844.57	24.05
2001	191.68	1,913.14	407.17	481.63	985.34	-18.20
2002	129.79	1,988.39	439.29	412.76	1,034.13	-105.81
2003	62.57	2,071.82	510.44	446.08	1,075.84	-204.21
2004	2.03	2,111.08	541.80	411.21	1,115.66	-367.29
2005	-16.02	2,141.21	602.12	402.04	1,143.75	-565.43
2006	-45.19	2,160.25	658.16	384.82	1,182.51	-831.96
2002-2006 Average	26.64	2,094.55	550.36	411.38	1,110.38	-414.94
9						
Nominal Net Worth (\$1000	)					
2000	1,049.96	4,043.12	1,403.70	2,914.20	1,808.21	1,292.43
2001	1,025.74	4,370.26	1,512.48	3,124.39	1,926.56	1,249.80
2002	947.10	4,506.07	1,583.14	3,144.87	1,963.10	1,167.26
2003	872.43	4,664.51	1,648.09	3,151.94	2,023.20	1,066.01
2004	808.53	4,807.84	1,697.38	3,102.20	2,083.40	918.11
2005	793.73	4,978.77	1,763.43	3,118.32	2,157.90	734.18
2006	736.58	5,119.07	1,840.08	3,136.13	2,216.35	507.63
2002-2006 Average	831.67	4,815.25	1,706.42	3,130.69	2,088.79	878.64
LOUZ ZOUD AVEILAGE	551.07	7,010.20	1,700.72	0,100.00	2,000.70	370.04
Prob. of Losing Real Net W	/orth (%)					
2001	1	1	1	1	1	1
2002	1	1	1	1	1	1
2002	75	15	9	42	47	93
2003	75 78	15 8	8	42 45	34	99
2004	76 75	3	4	45 50	3 <del>4</del> 26	99
2005	75 83	3 4	1	50 46	26 25	99
2000	03	4	'	40	20	99

## Figure 14. Cotton Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Cotton Farms

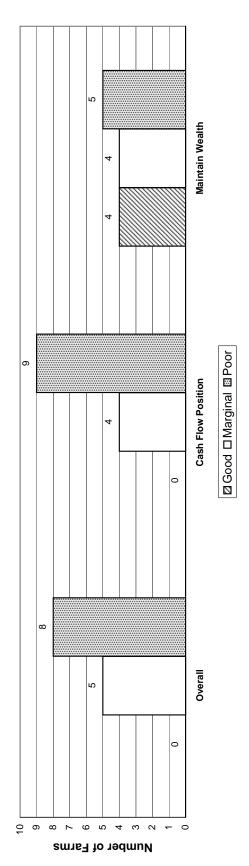


Figure 15. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cotton Farms, 2002-2006.

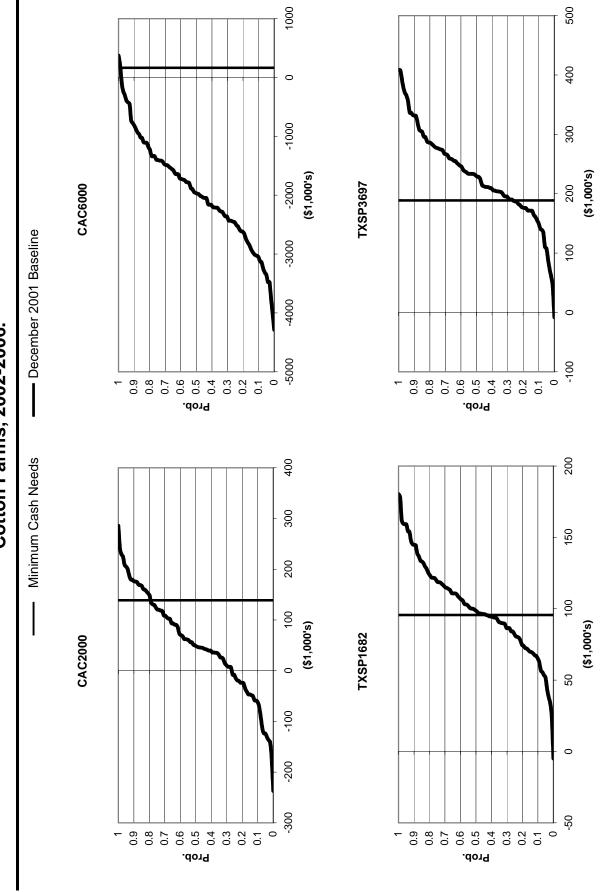


Figure 16. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cotton Farms, 2002-2006.

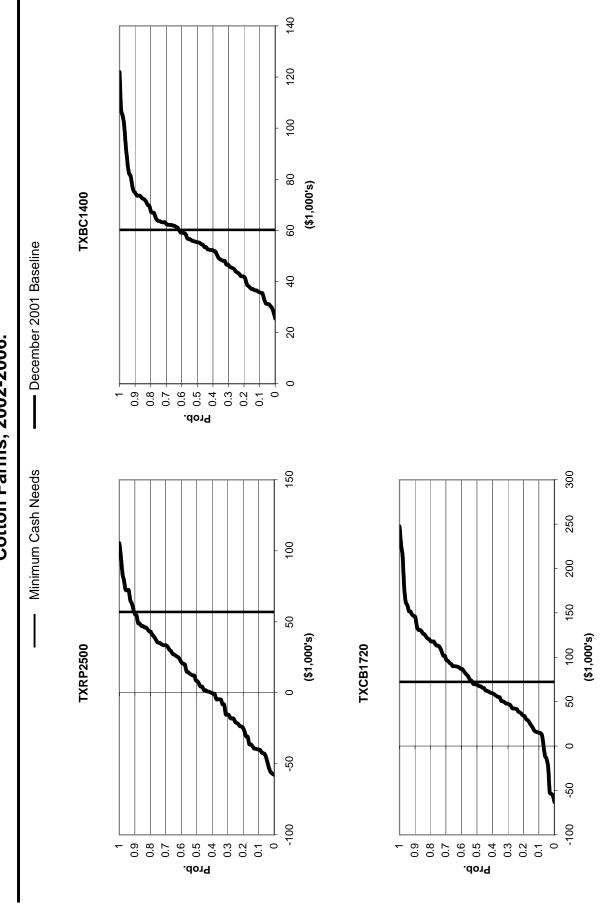


Figure 17. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cotton Farms, 2002-2006.

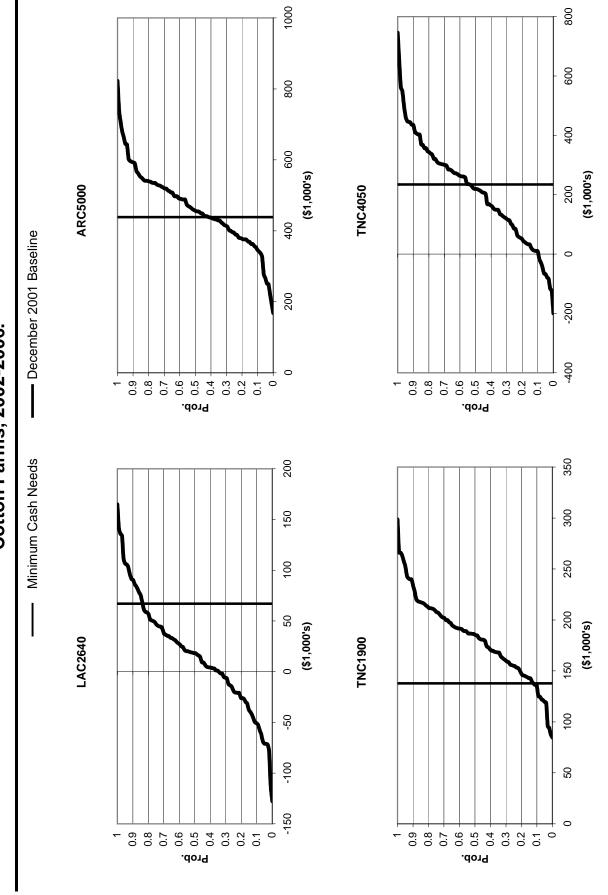
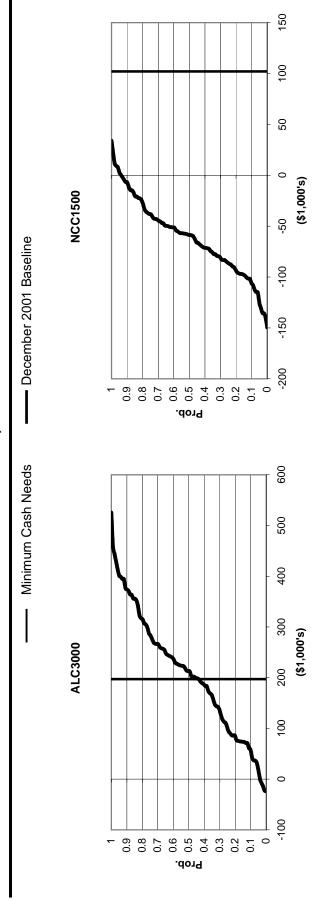
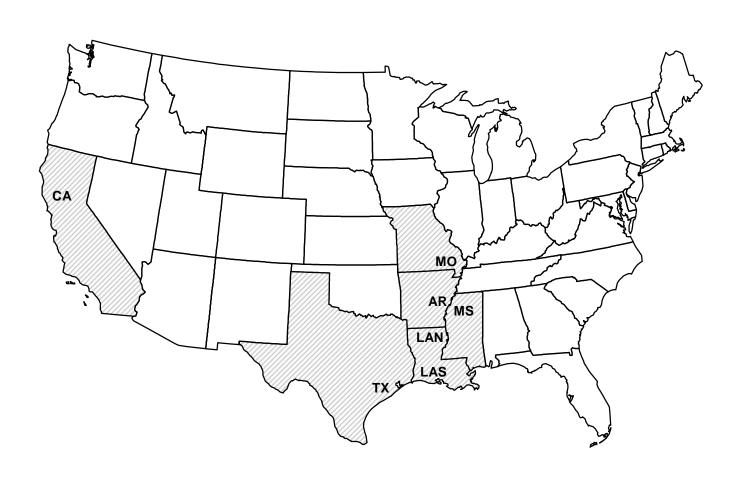


Figure 18. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cotton Farms, 2002-2006.



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### FIGURE 19. REPRESENTATIVE FARMS PRODUCING RICE



### **Rice Farm Impacts**

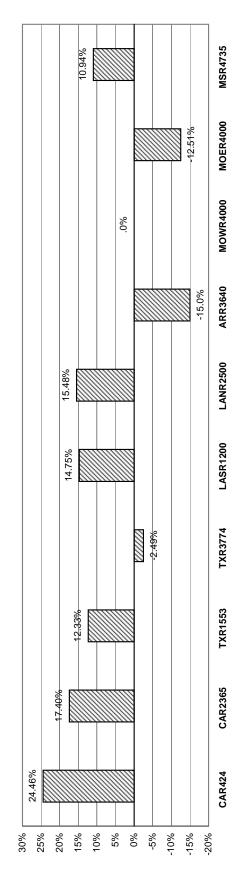
- # As with the other crops, a combination of low prices and input costs that increase steadily throughout the projection period contributes to liquidity problems for the 10 rice farms monitored by AFPC.
- # All farms are in an extremely vulnerable liquidity position without additional assistance. By 2006, all but two rice farms (ARR3640 and MOER4000) have greater than a 50 percent chance of a cash flow deficit (Figure 20 and Table 8).
- # Seven of the ten farms are projected to have greater than a 50 percent probability of losing real equity over the projection period. The average increase in additional income to maintain real equity over the period for these six farms ranges from 10 to 24 percent.
- # Overall, AFPC classes seven farms as extremely vulnerable without additional assistance. The remaining three farms are moderately vulnerable.

Table 9. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Rice.

	CAR424	CAR2365	TXR1553	TXR3774	LASR1200	LANR2500	ARR3640	MSR4735	MOWR4000	MOER4000
Overall Financial Position		_			_					
2002-2006 Ranking	Poor	Poor	Poor	Marginal	Poor	Poor	Marginal	Poor	Poor	Marginal
NIA to Maintain Real Net Worth (\$1,000)	65.92	276.69	40.44	-21.36	47.65	140.01	-173.17	173.64	0.00	-174.46
NIA to Maintain Real Net Worth (% Rec.)	24.46	17.40	12.33	-2.49	14.75	15.48	-15.00	10.94	0.00	-12.51
Change Real Net Worth (%) 2002-2006 Average	-8.43	-8.01	-5.45	1.71	-16.12	-6.78	1.64	-9.29	-0.19	1.58
Cost to Receipts Ratio (%) 2002-2006 Average	100.67	127.68	04.75	07.50	00.87	404.00	75.04	100.70	99.20	76.82
2002-2006 Average	126.67	127.00	94.75	87.58	99.87	104.88	75.04	100.78	88.30	70.02
Govt Payments/Receipts (%) 2002-2006 Average	46.03	45.90	43.82	42.75	38.23	33.34	37.83	32.35	36.07	26.90
Total Cash Receipts (\$1000)										
2000	347.80	2,038.08	429.58	1,082.57	387.61	1,060.71	1,333.45	1,768.94	1,780.69	1,514.29
2001	340.52	1,996.99	405.88	1,029.66	365.92	998.17	1,285.09	1,714.95	1,673.71	1,480.79
2002	269.33	1,584.38	329.68	852.74	316.19	876.16	1,110.91	1,531.41	1,467.28	1,348.60
2003	278.19	1,637.05	334.87	866.70	321.99	892.53	1,143.63	1,560.61	1,485.96	1,371.98
2004 2005	276.45	1,626.94	339.56	879.40	327.22	905.34	1,156.37	1,589.55	1,518.68 1,536.03	1,396.20
2005	280.75 280.46	1,652.71 1,650.99	341.94 347.23	885.85 900.17	330.54 334.89	918.37 929.47	1,170.64 1,190.78	1,612.64 1,638.76	1,536.03	1,415.63 1,439.05
2002-2006 Average	277.03	1,630.41	338.66	876.97	326.17	904.37	1,154.47	1,586.60	1,511.10	1,394.29
2002 2000 / Wordgo	200	.,000	555.55	0.0.0.	020	00	.,	1,000.00	.,00	1,001.20
Net Cash Farm Income (\$100	,									
2000	70.45	349.79	111.13	320.41	75.98	155.83	478.60	240.51	537.97	465.71
2001	68.69	351.92	100.60	286.27	61.95	101.69	454.86	195.15	447.62	447.31
2002	-0.16	-53.83	27.26	122.64	9.63	-27.43	288.08	11.64	234.36	314.77
2003 2004	-0.32 -9.89	-37.37 -74.66	28.09 26.27	133.62 130.52	10.20 4.59	-25.69 -34.33	314.82 316.25	11.70 3.27	241.13 246.76	325.15 337.21
2004	-18.23	-106.15	22.17	131.57	0.63	-34.53 -44.51	321.81	-13.43	250.00	336.11
2006	-10.23	-145.88	19.20	126.69	-3.14	-55.28	333.33	-38.63	246.20	349.03
2002-2006 Average	-11.54	-83.57	24.60	129.01	4.38	-37.45	314.86	-5.09	243.69	332.45
_										
Prob. of a Cash Flow Deficit (	,	44	00	45	40		40	25	20	
2001 2002	44 72	41 63	20 81	15 57	19 96	55 99	12 26	35 97	36 56	1 16
2002	83	70	78	48	94	99	24	96	51	17
2004	87	73	88	64	98	99	38	96	58	31
2005	94	84	93	52	99	99	45	99	64	53
2006	97	86	94	54	99	99	37	99	63	31
Ending Cash Reserves (\$100										
2000	61.03	345.31	132.11 157.89	529.82	25.90	96.11	1,226.46	450.79	1,275.14	1,224.53
2001	64.40	408.79		605.58	42.38	90.44	1,399.61	498.98	1,430.56	1,432.62
2002 2003	10.25 -46.91	150.95 -85.58	128.55 97.73	582.61 585.20	0.53 -42.02	-95.79 -255.63	1,471.01	340.19 180.48	1,394.86 1,358.63	1,532.34 1,633.31
2003	-129.64	-374.95	51.42	542.43	-102.63	-444.16	1,554.66 1,613.04	-29.66	1,277.64	1,724.46
2005	-123.04	-693.83	1.94	532.89	-168.39	-653.23	1,662.80	-283.43	1,151.99	1,777.71
2006	-320.17	-990.39	-47.43	507.32	-236.94	-838.59	1,749.20	-544.00	1,042.64	1,882.26
2002-2006 Average	-142.79	-398.76	46.44	550.09	-109.89	-457.48	1,610.14	-67.28	1,245.15	1,710.02
Nominal Net Worth (\$1000)			46							
2000	709.98	2,849.92	489.35	1,037.53	265.30	1,834.15	4,474.12	1,686.34	5,573.94	4,771.35
2001	722.10	2,938.41	509.42	1,131.37	277.22	1,840.53	4,691.96	1,707.12	5,790.01	5,003.02
2002	682.15	2,727.48	476.11	1,117.85	233.01	1,710.65	4,811.44	1,543.17	5,840.11	5,145.51
2003 2004	628.75 559.81	2,514.91 2,260.71	449.46 419.81	1,140.15 1,143.81	199.39 150.26	1,579.36 1,426.13	4,904.45 4,968.02	1,392.25 1,224.87	5,842.73 5,804.73	5,242.34 5,331.35
2004	484.43	1,994.70	391.20	1,143.61	105.86	1,426.13	5,046.68	1,053.25	5,770.37	5,406.60
2006	408.90	1,724.01	346.84	1,206.59	52.98	1,127.70	5,177.39	835.66	5,752.91	5,523.58
2002-2006 Average	552.81	2,244.36	416.69	1,158.94	148.30	1,423.07	4,981.60	1,209.84	5,802.17	5,329.87
Prob. of Losing Real Net World										
2001	1	1	1	1	1	1	1	1	1	1
2002	1	1	1	1	1	1	1	1	1	1
2003	68	51	74	42	91	98	16	94	49	6
2004 2005	83 86	73 70	86 01	40	98	99	11	98	53	1
2005	86 92	79 84	91 97	28 22	98 99	99 99	7 4	99 99	48 51	1
	34	04	31	22	55	55	4	99	31	<u>'</u>

### Figure 20. Rice Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Rice Farms

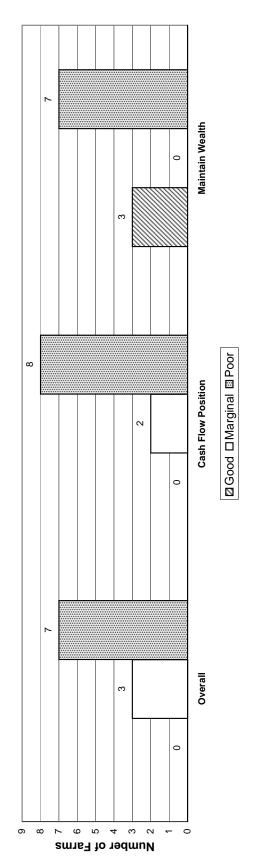


Figure 21. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Rice Farms, 2002-2006.

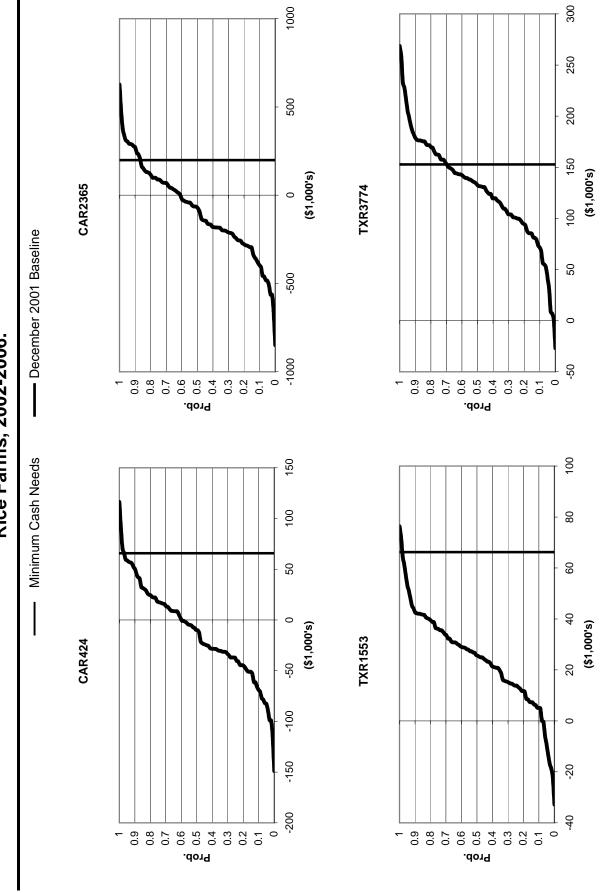


Figure 22. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Rice Farms, 2002-2006.

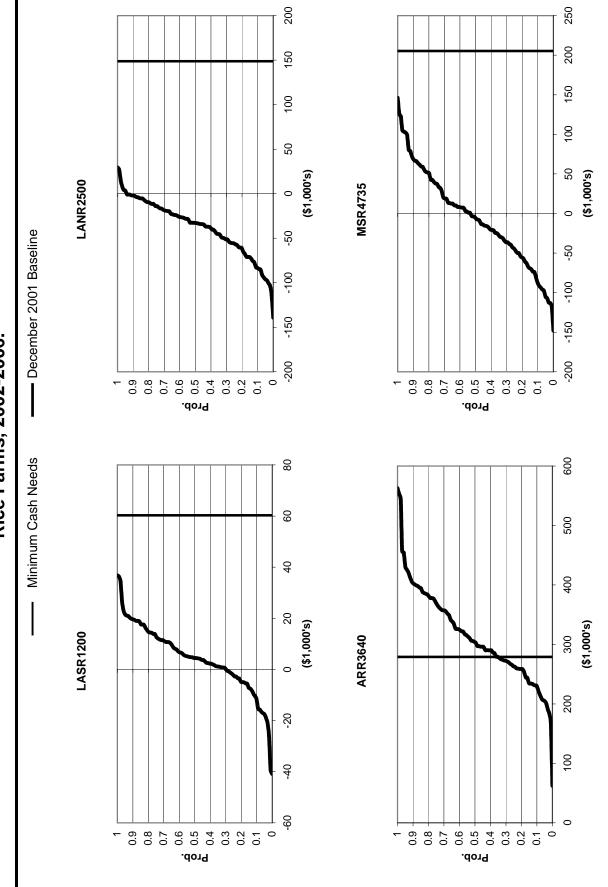
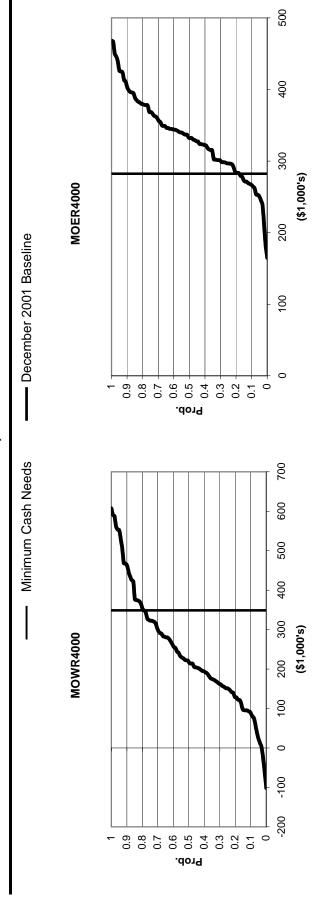
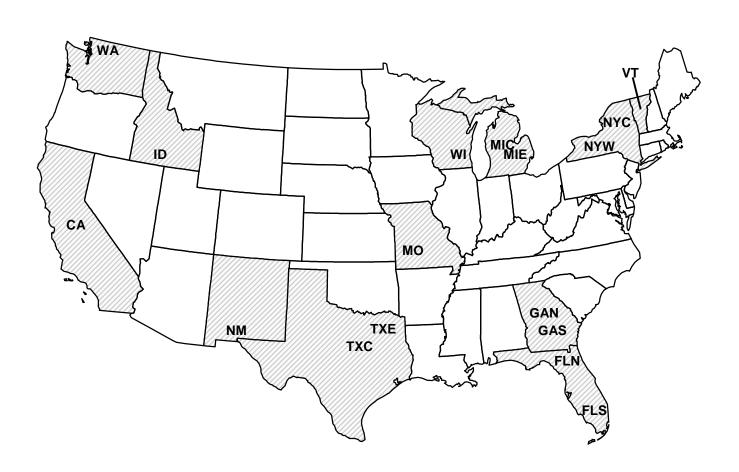


Figure 23. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Rice Farms, 2002-2006.



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### FIGURE 24. REPRESENTATIVE FARMS PRODUCING MILK



### **Dairy Impacts**

- # Nineteen of the 26 representative dairy farms increase real net worth over the 2002-2006 study period. The average increase in real net worth over the period ranges from 1.1 percent on the 350 cow large Vermont dairy (VTD350) to 8.8 percent on the 825 cow large Central Texas dairy (TXCD825). The increase is due, in part, to high cull cow prices through 2004 and a national average all milk price of \$15.16 per cwt. in 2001.
- # Seven of the 26 dairies (TXCD400, MIED200, MICD140, VTD134, MOD85, GAND200, FLSD1800) have a high probability (greater than 40 percent) of losing real net worth in 2006. The probability of losing real net worth is greater than 15 percent for an additional 7 dairies.
- # High milk prices in 2001 result in sharply higher net cash farm incomes for all the dairies.

  Increasing feed costs coupled with flat milk prices generates significant income risk for many of the dairies.
- # Seventeen of the 26 dairies have a 25 percent or greater probability of a cash flow deficit in 2006. Continued volatile milk prices, as experienced during the last few years, generate significant income risk.
- # Nine of the dairies are classified as being in a good overall financial position. Eight are in a marginal financial position and nine are in poor shape.

Table 10. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

	CAD1710	NMD2000	WAD185	WAD900	IDD750	IDD2100	TXCD400	TXCD825	TXED310	TXED750
Overall Financial Position 2002-2006 Ranking	Marginal	Poor	Marginal	Marginal	Marginal	Good	Poor	Good	Poor	Marginal
NIA to Maintain Real Net Worth (\$1,000)	-737.86	-135.83	-132.42	-191.57	-181.38	-1,566.32	130.90	-947.86	-19.70	-152.67
NIA to Maintain Real Net Worth (% Rec.)	-14.01	-2.12	-18.48	-5.77	-7.63	-23.74	11.29	-24.28	-2.31	-7.19
Change Real Net Worth (% 2002-2006 Average	3.89	1.27	6.07	2.92	3.13	6.54	-23.27	8.82	1.31	3.07
Cost to Receipts Ratio (%) 2002-2006 Average	83.02	94.19	76.05	89.93	88.18	72.87	106.79	72.16	90.64	86.96
Govt Payments/Receipts (9 2002-2006 Average	%) 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Receipts (\$100 2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	4,861.34 5,940.21 5,084.68 5,201.34 5,278.77 5,336.43 5,436.32 5,267.51	5,783.02 6,976.67 6,157.76 6,329.60 6,443.75 6,515.07 6,590.86 6,407.41	636.71 775.42 690.87 705.34 720.46 726.72 739.39 716.56	2,949.46 3,600.43 3,202.38 3,269.52 3,339.66 3,368.07 3,426.72 3,321.27	2,078.47 2,627.60 2,311.67 2,345.57 2,375.65 2,406.63 2,446.74 2,377.25	5,753.31 7,312.32 6,398.27 6,489.81 6,590.06 6,691.21 6,815.98 6,597.07	1,037.19 1,260.24 1,120.81 1,143.64 1,162.36 1,176.28 1,191.74 1,158.97	3,503.40 4,239.10 3,778.29 3,855.68 3,915.61 3,960.18 4,010.22 3,904.00	762.21 929.37 822.87 839.55 854.53 865.27 877.30 851.90	1,903.96 2,312.35 2,053.55 2,094.51 2,129.90 2,154.91 2,183.16 2,123.21
Net Cash Farm Income (\$1		0,407.41	710.00	0,021.27	2,017.20	0,007.07	1,100.07	0,004.00	301.00	2,120.21
2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	711.23 1,820.25 931.86 997.80 988.16 941.50 958.61 963.59	228.82 1,365.74 468.13 539.45 524.82 454.37 412.54 479.86	111.28 255.86 172.88 187.59 192.10 183.63 185.01 184.24	119.50 785.31 374.62 425.85 435.57 391.95 392.40 404.08	107.72 656.56 319.12 333.36 327.16 315.96 315.77 322.27	1,190.14 2,791.70 1,845.10 1,897.87 1,900.37 1,891.50 1,933.42 1,893.65	-79.99 103.89 -38.83 -40.14 -55.74 -80.98 -100.32 -63.20	818.12 1,574.08 1,084.84 1,130.41 1,137.89 1,122.83 1,127.94 1,120.78	24.95 190.38 89.83 98.93 99.89 92.01 91.93 94.52	155.31 569.20 298.74 317.04 320.53 311.55 312.65 312.10
Prob. of a Cash Flow Defic	it (%)									
2001 2002 2003 2004 2005 2006	1 41 26 35 44 28	10 59 55 58 57 53	1 27 21 26 30 25	14 52 46 41 49 42	5 41 39 44 47 37	1 15 7 16 20 17	99 99 99 99 99	1 5 1 4 4 3	64 74 73 69 74 65	13 50 46 45 51 29
Ending Cash Reserves (\$1		454.90	266 55	411.05	449.72	2 900 05	407.60	1 907 15	105.04	06.25
2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	2,397.74 3,390.79 3,686.74 4,107.99 4,527.86 4,926.81 5,497.19 4,549.32	454.80 1,177.04 1,112.84 1,187.15 1,206.34 1,139.31 1,224.13 1,173.95	366.55 503.43 561.49 638.32 718.58 792.32 884.03 718.95	411.85 811.36 825.94 928.11 1,028.79 1,087.32 1,248.50 1,023.73	448.73 776.85 842.51 919.62 977.43 1,010.37 1,115.20 973.03	3,899.95 5,392.20 6,111.79 6,921.01 7,724.45 8,509.71 9,530.18 7,759.43	-497.69 -465.85 -594.55 -713.76 -856.04 -1,027.34 -1,171.81 -872.70	1,897.15 2,808.89 3,320.91 3,898.07 4,491.19 5,085.94 5,804.69 4,520.16	-105.04 -22.39 -40.88 -42.70 -49.71 -73.25 -55.32 -52.37	96.35 352.39 361.36 416.91 461.81 490.32 636.71 473.42
Nominal Net Worth (\$1000) 2000	) 8,869.76	5,001.37	1,011.08	3,599.28	2,573.88	9,913.82	639.73	4,273.20	735.73	2,583.44
2001 2002 2003 2004 2005 2006 2002-2006 Average	10,128.69 10,686.67 11,281.90 11,723.82 12,163.68 12,707.96 11,712.81	5,977.59 6,153.74 6,427.99 6,483.93 6,492.40 6,518.04 6,415.22	1,180.16 1,266.62 1,365.92 1,453.34 1,541.39 1,640.14 1,453.48	4,135.55 4,287.34 4,496.15 4,632.41 4,744.10 4,886.28 4,609.25	3,028.25 3,216.14 3,403.30 3,500.83 3,588.74 3,688.65 3,479.53	11,785.45 12,874.81 14,003.17 14,948.20 15,906.88 16,970.49 14,940.71	713.45 621.62 538.53 406.02 249.69 82.28 379.63	5,293.81 5,898.21 6,565.13 7,164.01 7,778.43 8,434.35 7,168.02	867.73 891.97 931.95 939.62 939.70 943.90 929.43	2,953.58 3,069.52 3,231.39 3,320.77 3,411.28 3,512.29 3,309.05
Prob. of Losing Real Net W 2001 2002 2003 2004 2005 2006	/orth (%)  1 1 6 5 4 2	1 1 30 35 40 39	1 1 6 2 1 1	1 1 31 26 23 24	1 1 21 17 17 18	1 1 5 2 1 1	1 1 69 85 92 94	1 1 2 1 1	1 1 32 34 38 36	1 1 24 20 16 16

Table 11. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

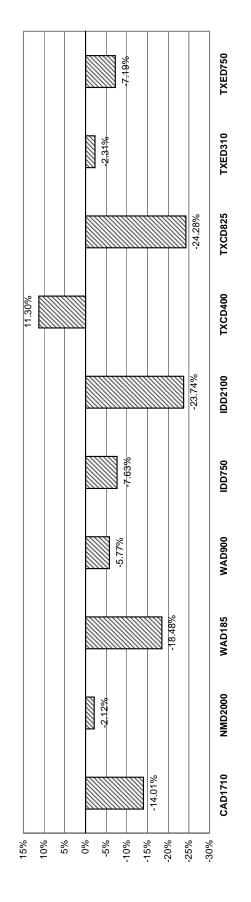
	WID70	WID600	MIED200	MICD140	NYWD800	NYWD1200	NYCD110	NYCD400	VTD134	VTD350
Overall Financial Position 2002-2006 Ranking	Marginal	Marginal	Poor	Poor	Good	Good	Good	Good	Poor	Marginal
NIA to Maintain Real Net Worth (\$1,000)	-38.27	-139.06	0.00	12.03	-523.72	-828.84	-111.33	-522.99	0.00	-37.76
NIA to Maintain Real Net Worth (% Rec.)	-15.00	-6.89	0.00	2.54	-16.68	-17.49	-26.04	-32.71	0.00	-2.99
Change Real Net Worth (%) 2002-2006 Average	3.30	3.12	-0.38	-1.01	5.72	6.24	6.45	7.63	-0.21	1.14
Cost to Receipts Ratio (%) 2002-2006 Average	71.71	87.46	89.68	88.48	79.07	79.44	64.94	63.39	86.98	88.84
Govt Payments/Receipts (%) 2002-2006 Average	0.00	0.00	0.14	0.15	0.00	0.00	0.00	0.00	0.00	0.00
Total Cash Receipts (\$1000) 2000 2001 2002 2002 2003 2004 2005 2006 2002-2006 Average	216.94 275.36 247.52 251.28 255.02 258.57 263.28 255.13	1,708.39 2,182.21 1,951.75 1,982.49 2,014.59 2,046.45 2,089.26 2,016.91	643.11 768.86 674.70 688.83 699.20 708.88 717.64 697.85	435.57 518.65 458.73 468.37 473.56 479.29 484.29 472.85	2,826.45 3,401.56 3,046.96 3,098.03 3,143.49 3,186.40 3,224.34 3,139.84	4,283.46 5,121.01 4,587.33 4,672.26 4,742.18 4,812.09 4,875.74 4,737.92	382.39 462.66 415.33 422.15 428.19 433.51 438.91 427.62	1,419.20 1,730.86 1,552.02 1,574.64 1,601.76 1,622.84 1,643.11 1,598.87	380.01 448.18 387.43 396.98 401.65 405.68 408.88 400.12	1,194.49 1,410.35 1,216.75 1,247.14 1,265.29 1,281.93 1,294.99 1,261.22
Net Cash Farm Income (\$100		2,010.01	007.00	472.00	0,100.04	4,707.32	427.02	1,000.07	400.12	1,201.22
2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	44.65 100.51 72.85 75.09 75.95 76.44 80.00 76.07	63.27 514.80 274.70 294.55 298.95 290.39 304.94 292.71	47.03 168.47 79.79 90.29 86.73 81.90 81.31 84.01	28.96 106.09 54.95 63.56 60.54 56.77 54.76 58.12	474.32 1,014.19 658.67 689.63 683.27 680.70 679.13 678.28	769.36 1,561.06 977.04 1,020.73 1,015.24 1,005.93 1,005.58 1,004.90	107.42 190.14 145.66 153.84 154.19 153.49 154.19 152.28	431.70 749.39 569.94 591.76 600.93 601.83 606.96 594.28	37.52 111.18 53.20 62.95 59.47 53.55 49.34 55.70	114.08 334.17 140.30 164.37 160.88 153.81 149.29 153.73
Prob. of a Cash Flow Deficit	. ,	•	40						_	
2001 2002 2003 2004 2005 2006	6 32 34 45 51 29	9 48 42 42 45 36	43 77 73 83 83 77	94 92 93 96 99	1 14 9 21 17 11	1 12 4 15 14 9	1 1 2 4 3	1 1 1 1 1	5 68 60 66 82 70	1 59 50 59 58 47
Ending Cash Reserves (\$100	,	205.04	22.42	90.44	4 070 72	2.450.44	477.50	024.75	4.54	456.05
2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	81.35 118.38 132.23 144.72 151.83 156.56 174.29 151.93	395.84 669.31 704.98 776.65 831.58 865.52 974.50 830.64	-33.43 25.03 -7.73 -25.51 -54.48 -99.80 -106.88 -58.88	-89.11 -54.85 -79.54 -94.53 -120.95 -158.60 -169.07 -124.54	1,070.73 1,608.81 1,831.17 2,102.43 2,355.06 2,610.78 2,956.75 2,371.24	2,159.41 3,041.40 3,421.03 3,889.84 4,325.07 4,774.23 5,366.26 4,355.29	177.53 266.50 315.32 368.16 425.23 474.91 540.46 424.82	924.75 1,305.96 1,541.44 1,806.59 2,077.67 2,352.31 2,685.20 2,092.64	-4.54 46.13 36.01 36.67 27.60 3.87 -1.05 20.62	156.85 315.64 306.02 330.77 323.26 314.63 340.64 323.06
Nominal Net Worth (\$1000)	522.27	2 420 54	4 477 57	044.07	2.776.52	E 042 C4	660.06	2 520 22	405.67	4 652 64
2000 2001 2002 2003 2004 2005 2006 2002-2006 Average	523.37 579.93 616.78 645.53 665.53 688.25 714.25 666.07	2,129.51 2,489.27 2,595.93 2,733.21 2,806.45 2,874.42 2,971.95 2,796.39	1,177.57 1,288.37 1,311.16 1,329.65 1,314.33 1,292.64 1,278.82 1,305.32	844.87 930.58 936.03 942.30 924.89 903.73 884.19 918.23	3,776.52 4,454.00 4,816.76 5,195.40 5,491.74 5,807.15 6,156.32 5,493.48	5,813.64 6,889.50 7,471.92 8,101.96 8,612.23 9,149.99 9,739.70 8,615.16	669.26 787.03 859.65 929.75 993.48 1,058.03 1,130.32 994.24	2,538.22 2,986.41 3,295.89 3,610.16 3,896.53 4,195.59 4,526.30 3,904.89	495.67 561.89 570.83 588.25 584.94 571.73 562.20 575.59	1,652.64 1,853.65 1,886.69 1,950.39 1,962.04 1,971.09 1,983.71 1,950.78
Prob. of Losing Real Net Wor 2001 2002 2003 2004 2005 2006	th (%) 1 1 13 7 6 5	1 1 29 24 18 20	1 1 42 40 48 55	1 1 42 51 65 68	1 1 6 1 1	1 1 4 1 1	1 1 2 1 1	1 1 1 1 1	1 1 29 37 43 53	1 1 26 29 26 30

Table 12. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Milk.

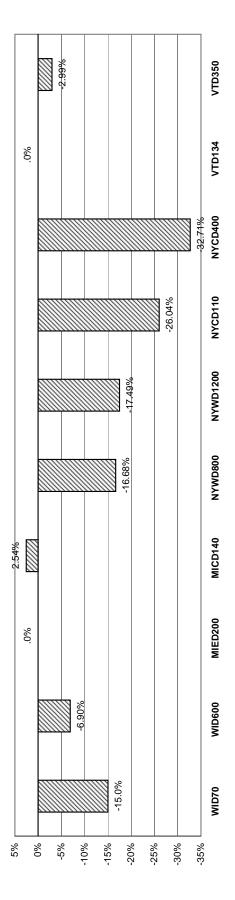
	MOD85	MOD330	GAND200	GASD700	FLND500	FLSD1800
Overell Figure del B. 19						
Overall Financial Position 2002-2006 Ranking	Poor	Good	Poor	Good	Good	Poor
NIA to Maintain Real						
Net Worth (\$1,000)	23.46	-239.87	113.07	-338.47	-341.71	90.23
NIA to Maintain Real						
Net Worth (% Rec.)	9.43	-23.50	18.62	-13.98	-19.46	1.55
Change Real Net Worth (%) 2002-2006 Average	4.40	5.00	00.00	0.74	7.00	4.70
2002-2006 Average	-4.49	5.80	-23.23	3.71	7.69	-1.79
Cost to Receipts Ratio (%) 2002-2006 Average	94.13	67.98	113.50	79.93	75.10	90.51
·		07.00	110.00	70.00	70.10	00.01
Govt Payments/Receipts (%) 2002-2006 Average	0.00	0.00	0.00	0.00	0.00	0.00
•						
Total Cash Receipts (\$1000) 2000	215.22	878.10	602.53	2,387.23	1,602.79	5,319.91
2001	272.28	1,121.40	665.40	2,612.23	1,867.30	6,214.57
2002	242.63	992.94	590.21	2,353.61	1,696.20	5,634.88
2003	246.10	1,007.23	599.58	2,391.09	1,741.48	5,788.01
2004	248.58	1,020.07	606.83	2,420.14	1,756.88	5,840.37
2005	251.63	1,035.18	615.75	2,455.48	1,785.91	5,937.57
2006	254.14	1,047.65	624.24	2,489.25	1,801.09	5,988.73
2002-2006 Average	248.62	1,020.62	607.32	2,421.91	1,756.31	5,837.91
Net Cash Farm Income (\$100	00)					
2000	-1.81	207.40	-46.64	525.01	250.44	270.10
2001	47.92	450.79	9.26	732.46	554.53	1,125.12
2002	23.15	331.32	-54.46	480.79	416.32	548.21
2003	26.59	346.54	-45.04	510.53	490.70	667.85
2004	21.19	344.39	-66.43	508.98	467.24	643.45
2005 2006	15.06	344.02 346.78	-92.95	507.22 518.39	450.58 440.64	639.74 612.53
2006 2002-2006 Average	10.59 19.32	340.76	-113.96 -74.57	505.18	453.10	622.36
_						
Prob. of a Cash Flow Deficit		4	00	2	4	70
2001 2002	99 99	1 17	99 99	3 27	1 21	79 87
2002	99	12	99	18	8	85
2004	99	26	99	24	19	88
2005	99	25	99	25	16	82
2006	99	14	99	16	13	82
Ending Cash Reserves (\$100	20)					
2000	-122.81	339.70	-314.97	1,182.88	458.86	-607.04
2001	-122.09	550.29	-358.35	1,509.52	737.26	-343.64
2002	-156.06	651.16	-472.00	1,636.58	885.14	-563.33
2003	-191.01	759.69	-576.60	1,804.00	1,098.08	-678.95
2004	-236.06	864.99	-704.92	1,962.22	1,289.70	-826.36
2005	-287.02	967.80	-864.06	2,115.86	1,475.58	-977.96
2006	-329.04	1,114.85	-1,019.11	2,355.04	1,718.81	-1,033.32
2002-2006 Average	-239.84	871.70	-727.34	1,974.74	1,293.46	-815.98
Nominal Net Worth (\$1000)						
2000	466.91	1,613.06	571.34	3,838.89	1,833.91	2,985.07
2001	491.26	1,875.22	571.76	4,249.41	2,182.73	3,443.08
2002	484.78	2,029.93	502.33	4,460.54	2,399.42	3,410.90
2003	472.31	2,184.28	428.62	4,692.85	2,665.86	3,431.74
2004	442.74	2,312.43	310.86	4,865.33	2,870.34	3,320.71
2005	411.90	2,451.05	166.67	5,048.15	3,080.66	3,229.50
2006	378.09	2,601.42	9.01	5,256.46	3,303.93	3,158.18
2002-2006 Average	437.97	2,315.82	283.50	4,864.67	2,864.04	3,310.21
Prob. of Losing Real Net Wor	rth (%)					
2001	1	1	1	1	1	1
2002	1	1	1	1	1	1
2003	65	4	80	11	4	46
2004	78	1	97	2	3	54
2005	86	1	97	3	1	59
2006	84	1	99	1	1	62

## Figure 25. Dairy Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth

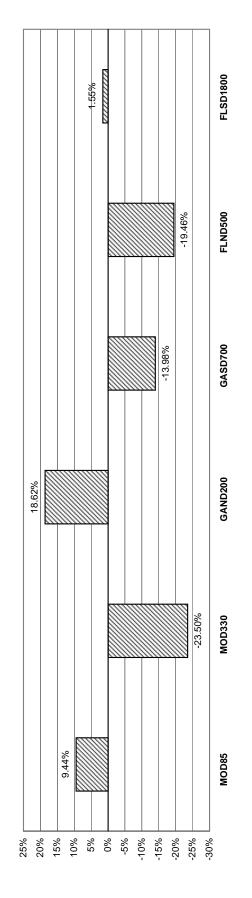


Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



## Figure 26. Dairy Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Dairy Farms

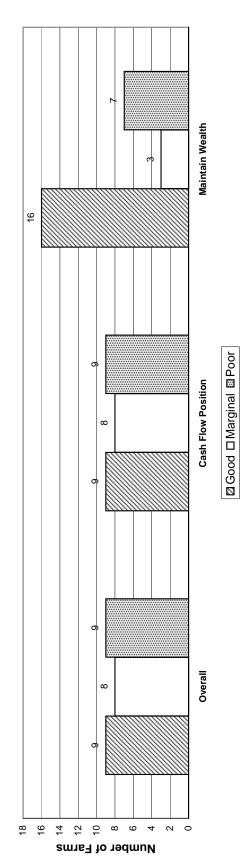


Figure 27. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

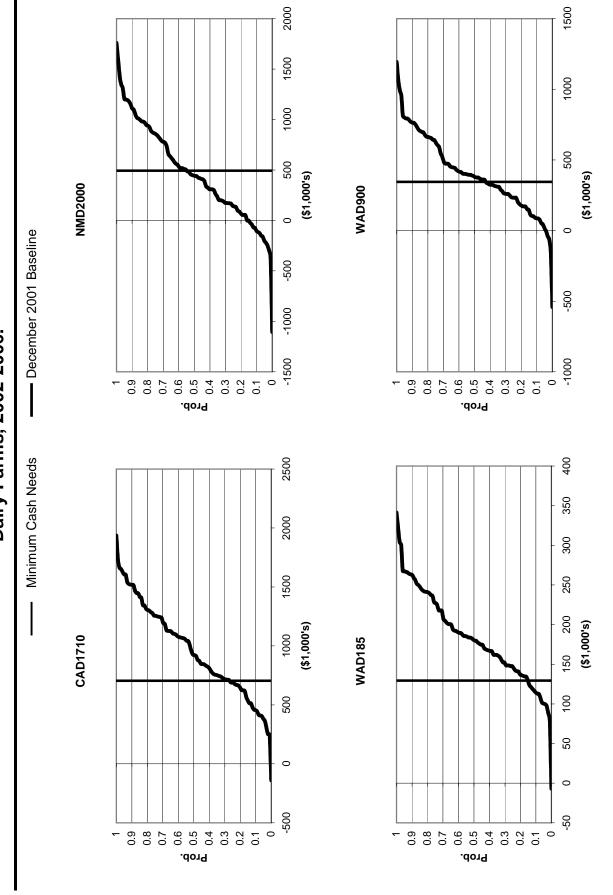


Figure 28. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

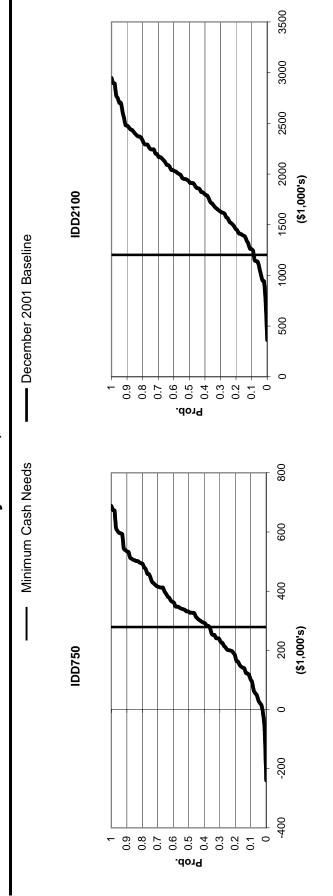


Figure 29. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

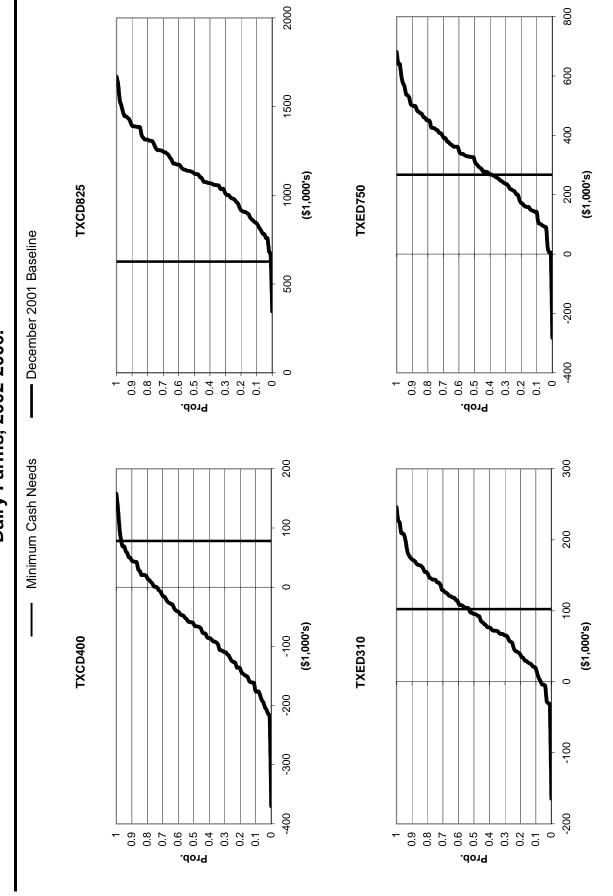


Figure 30. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

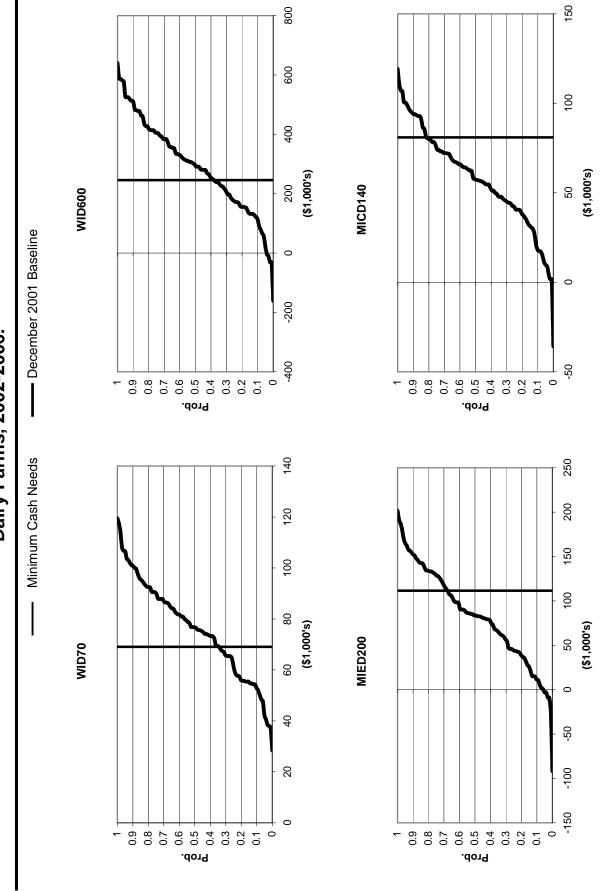


Figure 31. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

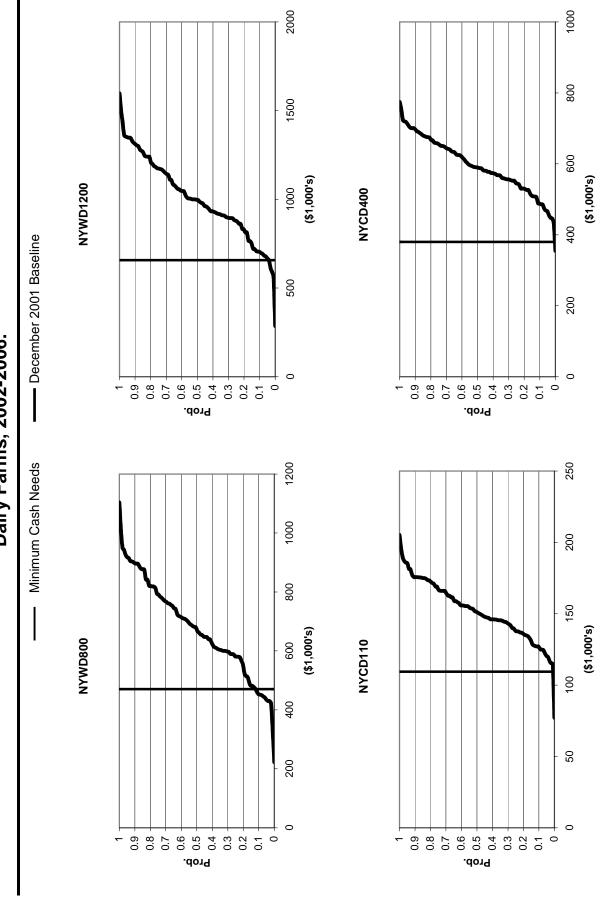


Figure 32. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.

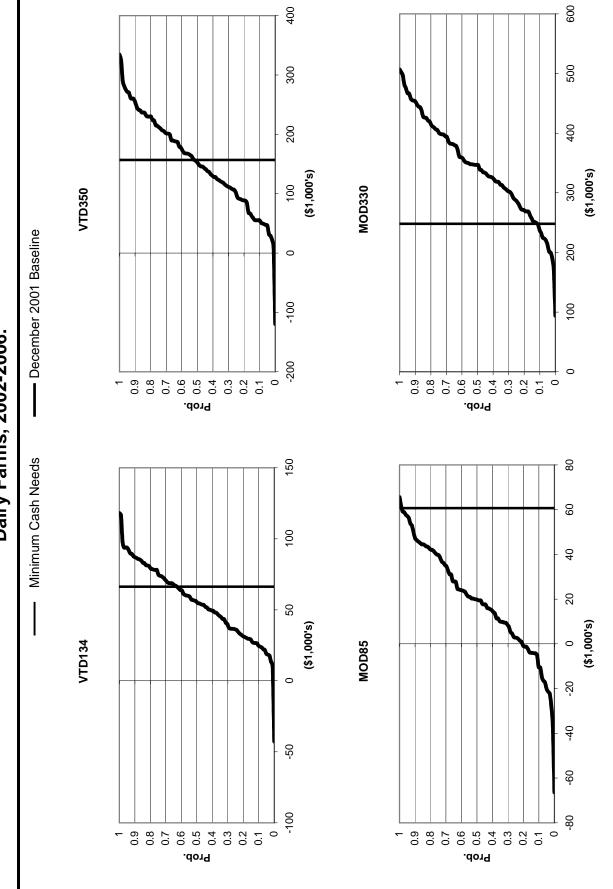
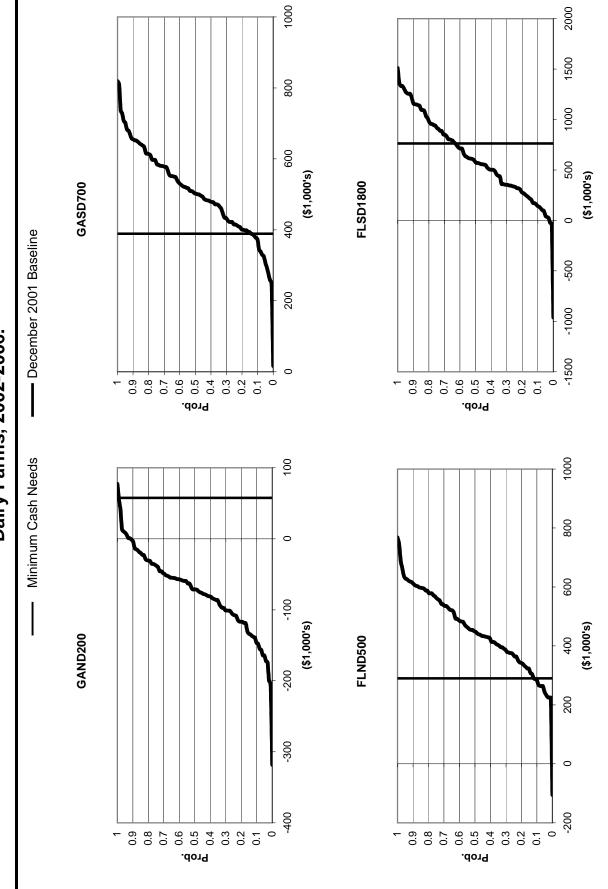
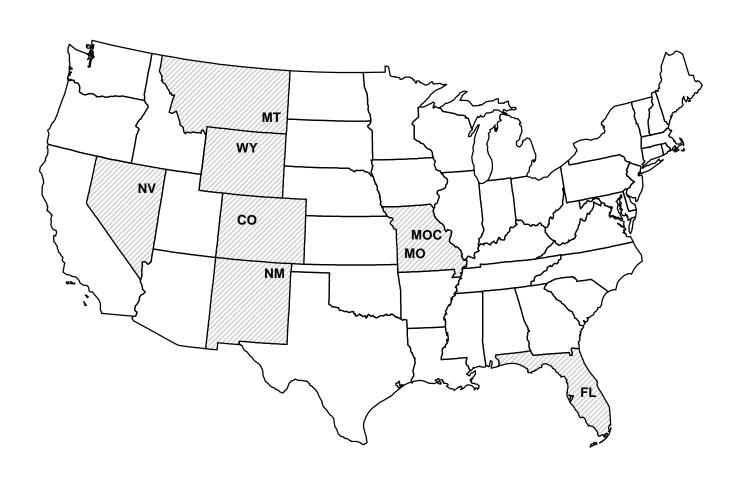


Figure 33. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Dairy Farms, 2002-2006.



### FIGURE 34. REPRESENTATIVE FARMS PRODUCING BEEF CATTLE



### **Beef Cattle Impacts**

- # The beef cattle price outlook is good with feeder cattle prices increasing through 2003 to \$98.84 per cwt. Prices decline, cyclically, to \$85.02 by 2006.
- # Initial debt for the cattle ranches was set at 10 percent on land and 20 percent for intermediate debt. This level of debt is based on a stratified analysis of debt for beef cattle operations in the states where AFPC has representative ranches.
- # Ending cash reserves increase for only the Montana (MTB500) and 150 cow Missouri (MOB150) operations.
- # Net cash farm income generally increases annually through 2003 as cattle prices increase. The exception is the Colorado ranch that experiences a decline in net cash farm income due to high cash flow deficits and the resulting increased debt loads.
- # The probability of a cash flow deficit is greater than 90 percent on six of the eight ranches. This is particularly ominous given that cattle prices are increasing through the early part of the period.
- # The probability of losing real net worth is greater than 37 percent on six of the eight operations. The high probabilities of cash flow deficits and losing real net worth leaves six of the eight ranches in poor financial condition.

Table 13. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Beef Cattle.

Part   Francial Position   Good   Poor   P	MTB500
March   Poor	erall Financial Position
At World (\$1,000)	
At Worth (F, Rac.)  At Wor	to Maintain Real
at Worth (% Roc.)	Worth (\$1,000) -99.87
Parage Real Net Worth (%) 02 2006 Average  2 00 0.10 -1.98 -1.53 0.04 1.99 -1.57 -0.32  2016 Receipts Ratio (%) 02 2006 Average  49.46 71.78 93.44 124.45 71.36 59.12 94.10 75.01  2017 Payments/Raccipts (%) 02 2006 Average  0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
002-0006 Average 200 0.10 -1.98 -1.53 0.04 1.99 -1.57 -0.32 bits for Receipts Ratio (%) 002-2006 Average 49.46 71.78 93.44 124.45 71.36 59.12 94.10 75.01 pay Payments/Receipts (%) 002-2006 Average 0.00 0.00 0.00 0.00 0.00 0.00 6.04 0.00 0.00	Worth (% Rec.) -36.89
set to Receipts Ratio (%) 102-2006 Average	• ,
002-2006 Average	2-2006 Average 2.00
Table Payments/Receipts (%) 002-2006 Average 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	
002-2006 Average	2-2006 Average 49.46
tal Cash Receipts (\$1000)  270	
2000 271,60 158,49 283,38 130,84 172,12 130,88 199.58 444,51 2001 2798,4 164,05 292,75 136,28 177,74 133,18 20.012 498,12 2002 283,86 166,30 300,66 140,34 184,27 135,13 49 203,39 466,83 2003 286,94 168,04 306,66 140,34 184,27 135,13 49 203,39 466,83 2003 286,94 168,04 306,66 140,34 184,27 135,13 275 195,92 450,46 2005 259,07 151,71 279,67 126,05 170,37 122,75 195,92 450,46 2005 259,07 151,71 279,67 126,05 170,37 128,54 185,50 421,14 2006 248,69 145,62 288,56 119,42 164,36 126,61 177,95 401,95 2002,2006 Average 270,70 158,55 290,70 131,40 175,65 131,30 193,70 442,51 210,2006 248,69 145,62 288,56 119,42 164,36 126,61 177,95 401,95 2002,2006 Average 270,70 158,55 290,70 131,40 175,65 131,30 193,70 442,51 2002 2001 142,46 51,33 38,71 4,03 46,04 47,05 37,50 100,04 2001 152,86 47,25 27,86 -11,20 46,92 49,60 27,34 119,49 2002 156,78 51,88 40,53 -12,68 55,22 53,55 31,54 137,64 2003 153,72 57,81 45,85 122,78 60,13 57,65 20,20 41,43,52 2004 143,52 51,74 33,16 -20,83 55,63 57,01 21,23 128,13 2005 125,49 38,82 138,3 40,08 47,63 54,31 69,39 99,19 2006 117,13 35,09 4,13 55,01 41,51 52,92 3,94 80,83 2002,2006 Average 139,3 47,07 25,85 27,29 51,62 55,09 17,57 118,28 200,00 14,00 175,00 17,57 18,28 200,00 14,00 17,0	2-2006 Average 0.00
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2006 248.69 145.62 268.56 119.42 164.36 126.61 177.95 401.95 2002-2006 Average 270.70 158.55 290.70 131.40 175.65 131.30 193.70 442.51 at Cash Farm Income (\$1000)  **Cash Farm Income (\$1000)**  2000 142.46 51.33 38.71 4.03 46.04 47.05 37.50 100.04 2001 152.86 47.25 27.86 -11.20 46.92 49.60 27.34 119.49 2002 156.78 51.88 40.53 -12.68 55.22 53.55 31.54 137.04 2003 153.72 57.81 45.85 -12.78 60.13 57.65 32.05 131.54 137.04 2003 153.72 57.81 45.85 -12.78 60.13 57.65 32.08 146.22 2004 143.52 51.74 33.16 -20.83 53.63 57.01 21.23 128.13 2005 125.49 38.82 13.83 -40.08 47.63 54.31 6.93 99.19 2006 117.13 35.09 4.13 -50.10 41.51 52.92 3.94 80.83 2002-2006 Average 139.33 47.07 25.85 -27.29 51.62 55.09 17.57 118.28 bb. of a Cash Flow Deficit (%)  2001 1 98 99 99 99 99 99 33 99 99 99 99 99 99 99	2005 259.07
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Cash Farm Income (\$1000) 2000	
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2002 156.78 51.88 40.53 -12.68 55.22 53.55 31.54 137.04 2003 153.72 57.81 45.85 -12.78 60.13 57.65 22.08 146.22 2004 143.52 51.74 33.16 -20.83 53.63 57.01 21.23 128.13 2005 125.49 38.82 13.83 -40.08 47.63 54.31 6.93 99.19 2006 117.13 35.09 -4.13 -50.10 41.51 52.92 -3.94 80.83 2002-2006 Average 139.33 47.07 25.85 -27.29 51.62 55.09 17.57 118.28  b. of a Cash Flow Deficit (%) 2001 1 98 99 99 99 99 25 99 33 99 99 2002 1 98 99 99 99 33 99 99 99 99 99 99 99 99 99	
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2002-2006 Average 139.33 47.07 25.85 -27.29 51.62 55.09 17.57 118.28 ab. of a Cash Flow Deficit (%) 2001 1 99 99 99 99 99 33 99 99 99 99 99 99 99	2005 125.49
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b. of Losing Real Net Worth (%) 2001 1 1 1 1 1 1 1 1 1 1 2002 1 1 1 1 1 1 1 1 1 1 1 2003 21 29 44 70 31 21 45 35 2004 11 34 54 97 41 18 67 53	
2001     1     1     1     1     1     1     1     1       2002     1     1     1     1     1     1     1     1       2003     21     29     44     70     31     21     45     35       2004     11     34     54     97     41     18     67     53	002-2006 Average 2,367.47
2001     1     1     1     1     1     1     1     1       2002     1     1     1     1     1     1     1     1       2003     21     29     44     70     31     21     45     35       2004     11     34     54     97     41     18     67     53	b. of Losing Real Net Worth (%)
2002     1     1     1     1     1     1     1     1       2003     21     29     44     70     31     21     45     35       2004     11     34     54     97     41     18     67     53	
2003     21     29     44     70     31     21     45     35       2004     11     34     54     97     41     18     67     53	
2004 11 34 54 97 41 18 67 53	
2005 12 44 76 99 53 6 86 70	
2006 5 37 85 99 44 3 92 75	

# Figure 35. Cattle Ranches

Economic and Financial Position Over the Period, 2002-2006, for all Cattle Ranches

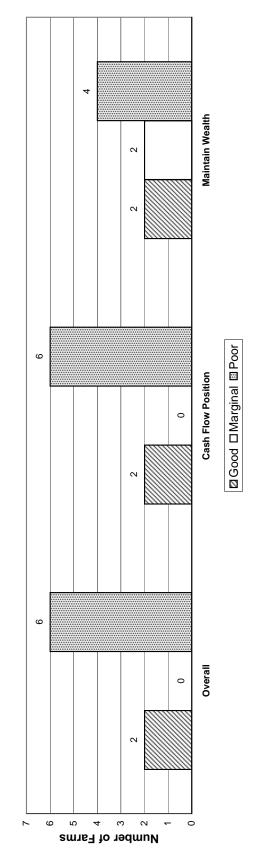


Figure 36. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cattle Ranches, 2002-2006.

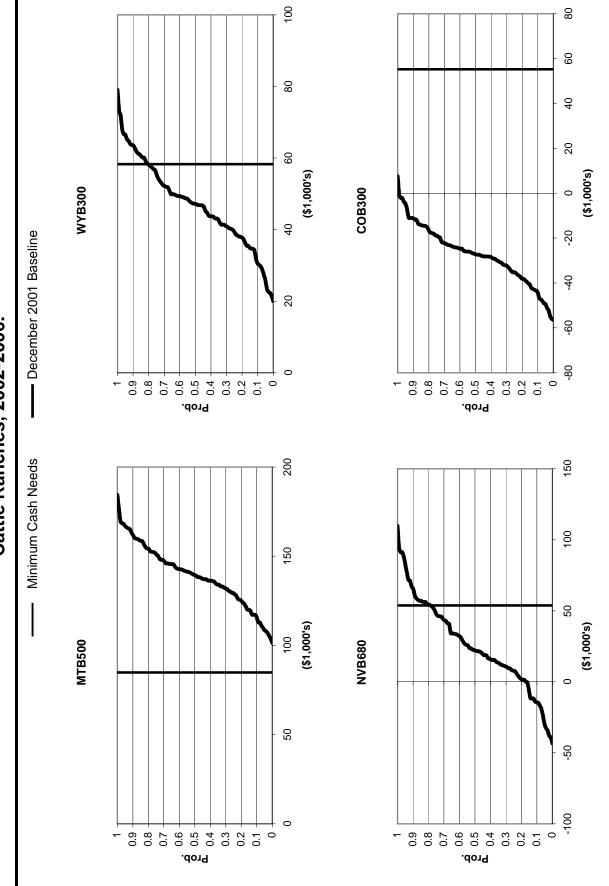
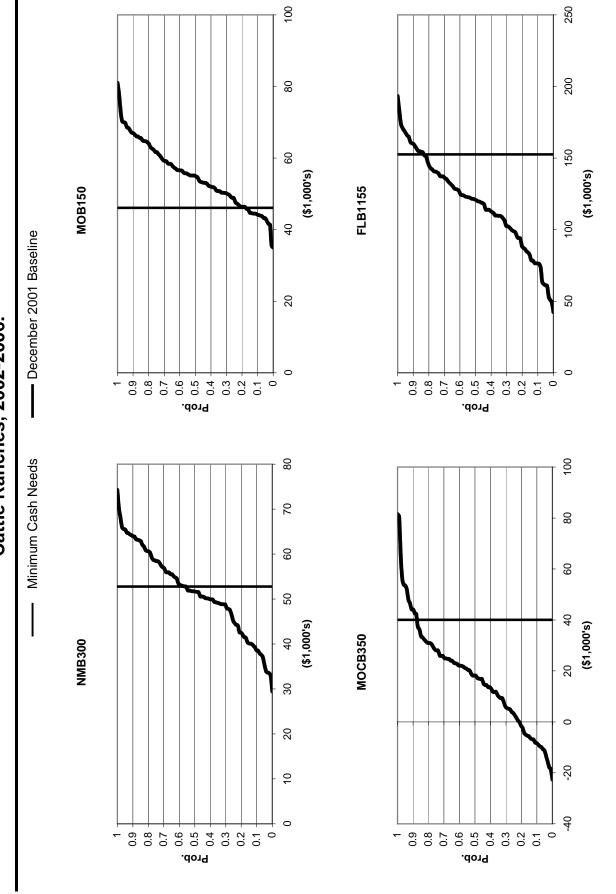


Figure 37. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Cattle Ranches, 2002-2006.



### FIGURE 38. REPRESENTATIVE FARMS PRODUCING HOGS



### **Hog Farm Impacts**

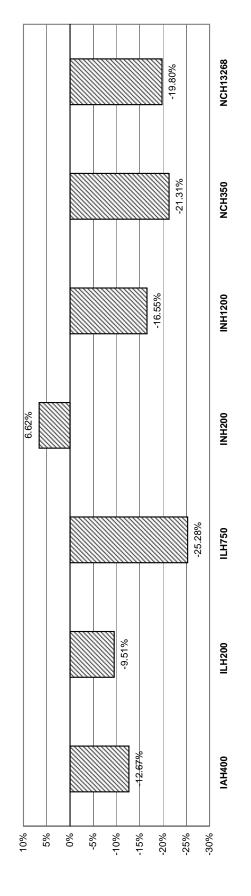
- # Only one (INH200) of the seven representative hog farms is in poor overall financial condition. The others are in good financial shape.
- # Hog prices move cyclically with peaks in 2001 at \$46.26 and in 2006 at \$46.97 per cwt. Hog prices reach a low of \$41.02 in 2003.
- # The probabilities of cash flow deficits increase as hog prices decline for each farm. All but one of the farms is able to reduce that probability of a deficit when prices increase later in the period. These results indicate those farms are able to recover financially from lower prices and pay off any accumulated debt. The probability of a cash flow deficit is below 25 percent on all but one farm in 2006.
- # Similarly, those farms are able to reduce the probability of losing real net worth to less than 10 percent by 2006.

Table 14. Implications of the 1996 Farm Bill and the December 2001 FAPRI Baseline on the Economic Viability of Representative Farms Primarily Producing Hogs.

	IAH400	ILH200	ILH750	INH200	INH1200	NCH350	NCH13268	
Overall Financial Position								
2002-2006 Ranking	Good	Good	Good	Poor	Good	Good	Good	
NIA to Maintain Real								
Net Worth (\$1,000)	-121.53	-55.18	-510.22	31.82	-551.88	-169.82	-5,830.66	i
NIA to Maintain Real								
Net Worth (% Rec.)	-12.67	-9.51	-25.28	6.62	-16.55	-21.31	-19.80	1
Change Real Net Worth (%)								
2002-2006 Average	7.46	2.62	5.33	-2.06	6.09	8.27	14.62	
Cost to Receipts Ratio (%) 2002-2006 Average	80.29	77.09	67.19	93.21	77.79	70.82	78.92	
· ·		77.09	07.19	93.21	11.19	70.02	70.92	
Govt Payments/Receipts (% 2002-2006 Average	5) 2.98	10.33	5.62	6.97	5.31	0.00	0.00	,
•		. 0.00	0.02	0.07	0.01	0.00	0.00	
Total Cash Receipts (\$1000 2000	980.62	646.11	2,043.69	548.14	3,406.50	798.72	29,537.51	
2001	1,004.00	603.56	2,109.33	505.27	3,475.61	822.80	30,411.97	
2002	967.04	578.65	2,022.69	476.87	3,324.49	801.42	29,622.79	
2003	896.64	551.91	1,884.29	449.78	3,117.35	740.06	27,342.80	
2004	950.23	578.24	1,985.46	473.22	3,276.69	782.08	28,903.12	
2005	984.16	592.92	2,055.82	492.00	3,403.28	811.67	29,998.70	)
2006	1,009.59	613.25	2,142.13	511.90	3,551.72	848.78	31,372.51	
2002-2006 Average	961.53	582.99	2,018.08	480.76	3,334.71	796.80	29,447.98	3
Net Cash Farm Income (\$10	000)							
2000	199.61	191.62	641.78	108.73	715.52	139.24	5,432.30	)
2001	239.35	143.46	614.66	43.44	601.42	176.43	4,722.03	
2002	213.02	145.00	684.57	51.80	772.67	247.67	7,089.65	
2003	145.46	116.19	587.47	31.96	638.02	198.46	5,034.19	
2004	187.33	136.47	662.84	39.60	760.15	233.92	6,276.35	
2005	212.91	144.14	704.59	42.08	847.78	255.46	7,098.64	
2006	231.81	158.44	773.38	46.27	949.41	288.49	8,275.88	,
2002-2006 Average	198.11	140.05	682.57	42.34	793.61	244.80	6,754.94	
Prob. of a Cash Flow Deficit	t (%)							
2001	6	31	16	78	32	27	27	
2002	21	35	9	94	22	13	14	
2003	48	65	14	99	34	21	21	
2004	34	65	18	99	28	21	20	1
2005	21	64	7	99	20	7	12	
2006	8	22	1	99	10	3	5	
Ending Cash Reserves (\$10	000)							
2000	220.50	312.03	1,084.80	-1.27	768.76	209.16	10,937.17	
2001	307.80	334.72	1,302.44	-44.94	883.79	258.76	12,915.07	
2002	364.85	353.71	1,538.33	-98.09	1,113.12	348.70	16,686.09	
2003	371.32	329.38	1,714.83	-171.01	1,209.75	400.29	18,865.79	
2004	408.93	316.21	1,906.76	-255.64	1,384.28	478.37	22,054.59	
2005	466.18	309.55	2,182.23	-339.90	1,658.62	577.79	25,735.04	
2006	557.96	347.10	2,569.85	-405.37	2,102.79	716.19	30,956.24	
2002-2006 Average	433.85	331.19	1,982.40	-254.00	1,493.71	504.27	22,859.55	)
Nominal Net Worth (\$1000)								
2000	704.31	1,100.57	4,510.81	1,208.99	4,340.59	936.03	18,194.33	
2001	819.40	1,141.25	4,856.35	1,207.87	4,634.03	1,012.93	21,186.19	
2002	902.34	1,185.97	5,198.73	1,203.07	4,997.35	1,111.98	25,219.19	
2003	924.75	1,180.39	5,393.88	1,152.78	5,149.32	1,160.92	27,216.04	
2004	1,014.14	1,218.83	5,721.78	1,116.48	5,508.66	1,274.28	31,652.38	
2005	1,127.12	1,272.15	6,120.02	1,094.34	5,977.39	1,409.12	36,489.34	
2006 2002-2006 Average	1,225.70 1,038.81	1,332.72 1,238.01	6,541.11 5,795.10	1,075.94 1,128.52	6,462.79 5,619.10	1,553.71 1,302.00	42,244.05 32,564.20	
Prob. of Losing Real Net Wo 2001	ortn (%) 1	1	1	1	1	1	1	
2002	1	1	1	1	1	1	1	
	39	51	19	68	36	29	29	1
2003								
2003 2004	15	29	5	77	17	14	15	'
	15 2 1	29 20 8	5 1 1	77 77 73	17 8 4	14 4 1	15 4 2	

# Figure 39. Hog Farms

Minimum Annual Percentage Change in Receipts, 2002-2006, Needed to Maintain Real Net Worth



Economic and Financial Position Over the Period, 2002-2006, for all Hogs Farms

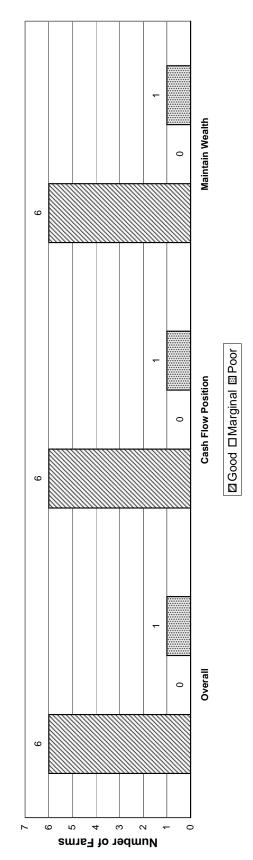


Figure 40. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Hog Farms, 2002-2006.

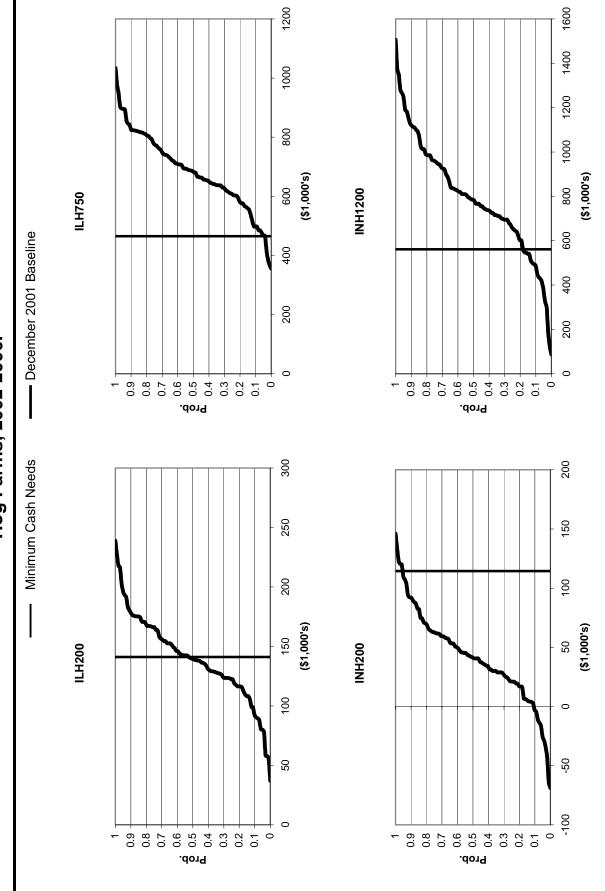
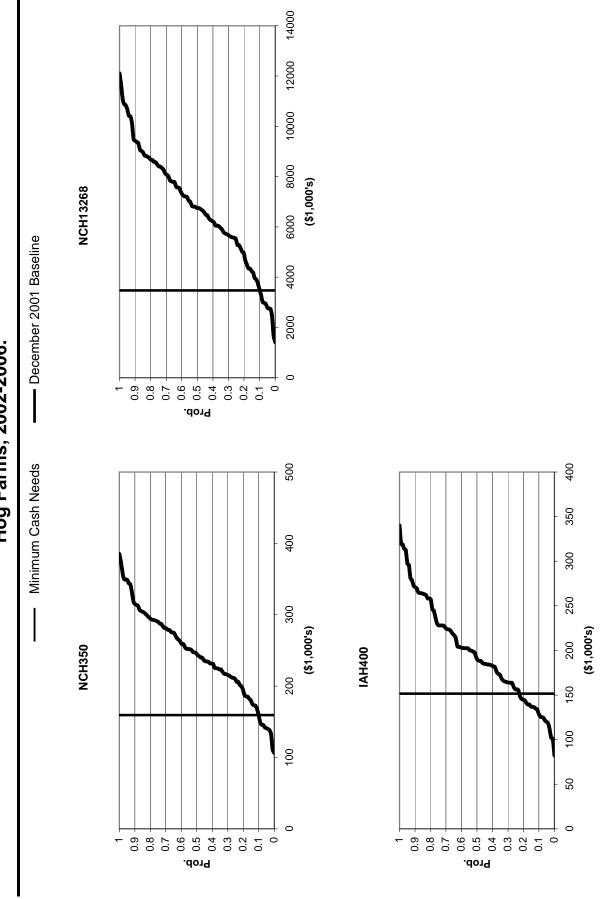


Figure 41. Net Cash Income Distribution and Cash Needs for December 2001 FAPRI Baseline: Hog Farms, 2002-2006.



### **APPENDIX A:**

## CHARACTERISTICS OF REPRESENTATIVE FARMS

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS

IAG950 is a 950-acre northwestern Iowa (Webster County). This is a moderate-sized grain farm for region and plants 475 acres of corn and 475 acres of soybeans annually. Fifty-seven

percent of this farm's cash receipts are derived from corn production.

IAG2400 This 2,400-acre large-sized grain farm is located in northwestern Iowa (Webster County). It

plants 1,200 acres of corn and 1,200 acres of soybeans each year, realizing 58 percent of

receipts from corn production.

NEG900 South central Nebraska (York County) is home to this 900-acre grain farm. Six hundred

acres of corn and 300 acres of soybeans are planted annually with 75 percent of gross receipts

coming from corn sales.

**NEG1300** This is a 1,300-acre grain farm located in south central Nebraska (Hamilton County). This

operation plants 871 acres of corn and 429 acres of soybeans each year. In 2001, 74 percent

of total receipts were generated from corn production.

**MOCG1700** MOCG1700 is a 1,700-acre grain farm that is located in central Missouri (Carroll County)

and plants 808 acres of corn, 808 acres of soybeans, and 85 acres of wheat annually. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows grain producers in this area to supply feed to livestock producers at a premium to other areas of Missouri. This farm generated 55 percent of its total

revenue from corn and 39 percent from soybeans during 2001.

MOCG3300 A 3,300-acre central Missouri (Carroll County) grain farm with 1,319 acres of corn, 1,881

acres of soybeans, and 100 acres of wheat. This farm is located in the Missouri River bottom, an area with a large concentration of livestock production. This proximity allows area grain producers to supply feed to livestock producers at a premium to other areas of Missouri. Corn sales accounted for 48 percent of farm receipts and soybeans accounted for 48 percent

in 2001.

MONG2050 is a 2,050-acre diversified northwest Missouri grain farm centered on Nodaway

County. MONG2050 plants 900 acres of corn, 900 acres of soybeans, and 200 acres of hay annually. The farm also has a 200-head cow-calf herd. Proximity to the Missouri River increases marketing options for area grain farmers due to easily accessible river grain terminals. In 2001, 45 percent of the farm's total receipts were from corn, 33 percent from

soybeans, and 20 percent from cattle sales.

Appendix Table A1. Characteristics of Panel Farms Producing Feed Grains.

	IAG950	IAG2400	NEG900	NEG1300	MOCG1700	MOCG3300	MONG2050
County	Webster	Webster	York	Hamilton	Carroll	Carroll	Nodaway
Total Cropland	950	2,400	900	1,300	1,700	3,300	2,050
Acres Owned	240	380	180	260	850	1,600	1,050
Acres Leased	710	2,020	720	1,040	850	1,700	1,000
Pastureland	0	0	0	0	0	0	400
Acres Owned Acres Leased	0	0	0	0	0	0	400 400
	U	U	U	U	U	U	400
Assets (\$1000)							
Total	1,275	2,152	1,402	1,695	2,501	4,568	2,926
Real Estate	917	1,376	718	816	1,772	3,253	2,123
Machinery	210 148	500	382 302	533 346	492	736	379 424
Other & Livestock	148	276	302	346	237	579	424
Debt/Asset Ratios							
Total	0.19	0.23	0.21	0.17	0.18	0.19	0.16
Intermediate	0.21	0.32	0.24	0.16	0.18	0.21	0.18
Long Run	0.18	0.18	0.19	0.18	0.18	0.18	0.15
Number of Livestock							
Beef Cows	0	0	0	0	0	0	200
2001 Gross Receipts (\$1,000	n)*						
Total	274.4	597.8	335.3	472.4	360.0	696.1	593.2
0-111-	0.0	0.0	0.0				445 1
Cattle	0.0	0.0	0.0	0.0	0.0	0.0	115.4
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	19.50%
Corn	156.1	348.2	251.2	347.5	199.3	335.6	269.6
	56.90%	58.30%	74.90%	73.50%	55.40%	48.20%	45.40%
Wheat	0.0	0.0	0.0	0.0	14.1	26.3	0.0
····oat	0.00%	0.00%	0.00%	0.00%	3.90%	3.80%	0.00%
Soybeans	116.3	249.6	84.1	125.0	141.7	334.3	200.4
	42.40%	41.70%	25.10%	26.50%	39.30%	48.00%	33.80%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	4.1
**	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.70%
			/0	2.2270			2 370
Other Receipts	2.0	0.0	0.0	0.0	5.0	0.0	3.8
	0.70%	0.00%	0.00%	0.00%	1.40%	0.00%	0.60%
2001 Planted Acres**							
Total	950.0	2,400.0	900.0	1,300.0	1,700.0	3,300.0	2,050.0
• • • • • • • • • • • • • • • • • • • •		-,		.,	.,. 23.0	2,223.0	_,,
Corn	475.0	1,200.0	600.0	871.0	807.5	1,319.0	900.0
	50.00%	50.00%	66.70%	67.00%	47.50%	40.00%	43.90%
Wheat	0.0	0.0	0.0	0.0	05.0	100.0	0.0
Wheat	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	85.0 5.00%	100.0 3.00%	0.0 0.00%
	0.00%	0.00%	0.00%	0.00%	5.00%	3.00%	0.00%
Soybeans	475.0	1,200.0	300.0	429.0	807.5	1,881.0	900.0
,	50.00%	50.00%	33.30%	33.00%	47.50%	57.00%	43.90%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	200.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	9.80%
000							
CRP	0.0	0.0	0.0	0.0	0.0	0.0	50.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.40%

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops. 
\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### PANEL FARMS PRODUCING FEED GRAIN AND OILSEEDS (CONTINUED)

**TXNP1600** 

This is a 1,600-acre grain farm located on the northern High Plains of Texas (Moore County). This 100 percent irrigated farm is moderate-sized for the region and plants 800 acres of corn, 240 acres of sorghum, and 528 acres of wheat annually. Eighty-three percent of total receipts are generated from feedgrain sales.

**TXNP6700** 

TXNP6700 is a large-sized, 80 percent irrigated, grain farm located in the northern Texas Panhandle (Moore County). This farm annually plants 3,350 acres of irrigated corn, 335 acres of irrigated sorghum, 670 acres of irrigated soybeans, 1,005 acres of irrigated wheat, and 670 acres of dryland wheat (the corners of all pivot-irrigated fields). Nearly 79 percent of 2001 cash receipts were derived from feedgrain sales.

**TXBG2000** 

This 2,000-acre grain farm is located on the Blackland Prairie of Texas (Hill County). On this farm, 600 acres of corn, 750 acres of sorghum, 400 acres of cotton, and 250 acres of wheat are planted annually. Feedgrain sales accounted for 58 percent of 2001 receipts with cotton accounting for one-third of sales. Twenty beef cows live on 150 acres of improved pasture and contribute less than three percent of total receipts.

**TXBG2500** 

TXBG2500 is located on the Blackland Prairie of Texas (Falls County) and plants 750 acres of corn, 250 acres each of sorghum and wheat, and 625 acres of oats each year. Feedgrain receipts comprised 62 percent of the farm's total receipts during 2001. Twenty head of beef cows contributed less than three percent of gross receipts.

**TNG900** 

This is a 900-acre, moderate-sized grain farm in West Tennessee (Henry County). Annually, this farm plants 400 acres of corn, 500 acres of soybeans, 200 acres of wheat, and 250 acres of hay in a region of Tennessee recognized for the high level of implementation of conservation practices by farmers. Nearly 77 percent of 2001 farm receipts were from sales of corn and soybeans. Additionally, 50 head of beef cows contribute nine percent of receipts.

**TNG2400** 

West Tennessee (Henry County) is home to this 2,400-acre, large-sized grain farm. Farmers in this part of Tennessee are known for their early and continued adoption of conservation practices, including widespread implementation of no-till farming. TNG2400 plants 1,200 acres of corn, 600 acres of wheat, and 1,200 acres of soybeans (600 of which are double-cropped after wheat). The farm generated about 88 percent of its 2001 gross receipts from feedgrains.

SCG1500

SCG1500 is a moderate-sized, 1500-acre grain farm in South Carolina (Clarendon County) consisting of 846 acres of corn, 654 acres of soybeans (454 acres double-cropped after wheat), and 454 acres of wheat. Close to 83 percent of the farm's receipts were realized from feedgrain sales during 2001. This farm enjoys significant returns on double-cropped acreage, but timing does not allow for more than 454 acres.

SCG3500

A 3,500-acre, large-sized South Carolina (Clarendon County) grain farm with 1,400 acres of corn, 900 acres of wheat, 1,260 acres of soybeans (900 double-cropped after wheat), and 840 acres of cotton. The farm generated 48 percent of 2001 receipts from feedgrain sales. Timing precludes further expansion of relatively lucrative double-cropped acres.

Appendix Table A2. Characteristics of Panel Farms Producing Feed Grains.

	TXNP1600	TXNP6700	TXBG2000	TXBG2500	TNG900	TNG2400	SCG1500	SCG3500	
County	Moore	Moore	Hill	Falls	Henry	Henry	Clarendon	Clarendon	
Total Cropland	1,600	6,700	2,000	1,250	900	2,400	1,500	3,500	
Acres Owned	160	1,100	200	312	207	482	500	1,400	
Acres Leased	1,440	5,600	1,800	938	693	1,918	1,000	2,100	
Pastureland									
Acres Owned	0	0	15	312	57	0	300	1,400	
Acres Leased	0	0	135	700	190	0	0	0	
Assets (\$1000) Total	613	2,940	620	1,003	744	1,850	1,115	4,296	
Real Estate	130	910	329	817	416	891	729	2,594	
Machinery	366	1,429	278	163	254	576	385	943	
Other & Livestock	117	602	13	23	74	382	0	759	
Debt/Asset Ratios									
Total	0.24	0.22	0.40	0.28	0.37	0.10	0.26	0.20	
Intermediate	0.24	0.24	0.66	0.26	0.67	0.15	0.41	0.25	
Long Run	0.18	0.17	0.18	0.17	0.18	0.05	0.18	0.17	
Number of Livestock		•	00	20	50			•	
Beef Cows	0	0	20	20	50	0	0	0	
2001 Gross Receipts (\$1,000	0)*								
Total	420.8	1,678.6	345.8	304.7	272.5	682.8	477.0	1,506.2	
0	0	0.7	0	7.0	04.5	0.7	0.7	0.5	
Cattle	0.0 0.00%	0.0 0.00%	8.6 2.50%	7.3 2.40%	24.3 8.90%	0.0 0.00%	0.0 0.00%	0.0 0.00%	
	0.00%	0.00%	2.50%	∠.40%	0.90%	0.00%	0.00%	0.00%	
Corn	290.6	1,260.3	98.9	150.0	99.5	337.9	264.8	507.3	
	69.10%	75.10%	28.60%	49.20%	36.50%	49.50%	55.50%	33.70%	
Corabum	54.0	75.7	400.7	07.7	0.0	0.0	0.0	0.0	
Sorghum	54.2 12.90%	75.7 4.50%	103.7 30.00%	37.7 12.40%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	
	12.30/0	+.JU /0	55.00 /6	12.40/0	0.0076	0.0076	3.0076	0.0076	
Wheat	75.9	193.0	24.1	36.1	23.8	88.2	79.3	230.0	
	18.00%	11.50%	7.00%	11.90%	8.70%	12.90%	16.60%	15.30%	
Soybeans	0.0	134.6	0.0	0.0	109.7	256.7	132.9	218.0	
Coybeans	0.00%	8.00%	0.00%	0.00%	40.30%	256.7 37.60%	27.90%	14.50%	
	/0	/0	/0						
Cotton	0.0	0.0	110.4	0.0	0.0	0.0	0.0	550.9	
	0.00%	0.00%	31.90%	0.00%	0.00%	0.00%	0.00%	36.60%	
Hay	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	
	0.00%	0.00%	0.00%	0.00%	3.00%	0.00%	0.00%	0.00%	
Oats	0.0	0.0	0.0	24.9	0.0	0.0	0.0	0.0	
	0.00%	0.00%	0.00%	8.20%	0.00%	0.00%	0.00%	0.00%	
Other Receipts	0.0	15.0	0.0	48.7	7.0	0.0	0.0	0.0	
	0.00%	0.90%	0.00%	16.00%	2.60%	0.00%	0.00%	0.00%	
0004 PL + 1 * **									
2001 Planted Acres** Total	1 569 0	6 030 0	2,150.0	1,875.0	1,350.0	3,000.0	1 05/10	4.400.0	
ı udl	1,568.0	6,030.0	∠,150.0	1,875.0	1,350.0	3,000.0	1,954.0	4,400.0	
Corn	800.0	3,350.0	600.0	750.0	400.0	1,200.0	846.0	1,400.0	
	51.00%	55.60%	27.90%	40.00%	29.60%	40.00%	43.30%	31.80%	
Carabana	0400	205.2	750.0	050.0	2.2	2.2	2.5	2.2	
Sorghum	240.0 15.30%	335.0 5.60%	750.0 34.90%	250.0 13.30%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	
	10.0070	3.0076	J-1.3U /0	10.0076	0.0076	0.0076	3.0076	0.0076	
Wheat	528.0	1,675.0	250.0	250.0	200.0	600.0	454.0	900.0	
	33.70%	27.80%	11.60%	13.30%	14.80%	20.00%	23.20%	20.50%	
Soybeans	0.0	670.0	0.0	0.0	500.0	1,200.0	654.0	1,260.0	
Juypediis	0.00%	11.10%	0.00%	0.00%	37.00%	40.00%	33.50%	1,260.0 28.60%	
	0.0070	. 7.1070	3.0070	5.0070	30070	.5.0070	33.0070	25.0070	
Cotton	0.0	0.0	400.0	0.0	0.0	0.0	0.0	840.0	
	0.00%	0.00%	18.60%	0.00%	0.00%	0.00%	0.00%	19.10%	
Hay	0.0	0.0	0.0	0.0	250.0	0.0	0.0	0.0	
Hay	0.00%	0.00%	0.00%	0.00%	18.50%	0.00%	0.00%	0.0%	
	0.0070	3.3376	3.3370	0.0070	. 0.00 /0	0.0070	3.3376	0.0070	
Oats	0.0	0.0	0.0	625.0	0.0	0.0	0.0	0.0	
	0.00%	0.00%	0.00%	33.30%	0.00%	0.00%	0.00%	0.00%	
Improved Pasture	0.0	0.0	150.0	0.0	0.0	0.0	0.0	0.0	
provou i asture	0.00%	0.00%	7.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
*Pacainte for 2001 are inclu									

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING WHEAT

WAW1725

This is a 1,725-acre moderate-sized grain farm in the Palouse of southeastern Washington (Whitman County). It plants 1,035 acres of wheat and 345 acres each of barley and dry peas. Disease concerns dictate rotating a minimum acreage of barley and peas to maintain wheat yields. This farm generated 77 percent of 2001 receipts from wheat.

**WAW4675** 

A 4,675-acre, large-sized grain farm in the Palouse of southeastern Washington (Whitman County). Annually, this farm allocates 3,042 acres to wheat, 340 acres to barley, and 1,293 acres to dry peas. Diseases that inhibit wheat yield dictate the rotation of a minimum acreage of barley and peas. Wheat sales account for 77 percent of receipts.

**NDW1760** 

NDW1760 is a 1,760-acre, moderate-sized, south central North Dakota (Barnes County) grain farm that plants 704 acres of wheat, 176 acres of corn, 176 acres of barley, and 352 acres each of soybeans and sunflowers. The farm generated 50 percent of 2001 receipts from small grains sales (wheat and barley) and about 40 percent from oilseeds.

NDW4850

This is a 4,850-acre, large-sized grain farm in south central North Dakota (Barnes County) that grows 2,585 acres of wheat, 470 acres of barley, 705 acres of soybeans, and 940 acres of sunflowers annually. Small grains (wheat and barley) sales total 63 percent of 2001 receipts with oilseeds (soybeans and sunflowers) making up 35 percent.

KSCW1385

South central Kansas (Sumner County) is home to this 1,385-acre, moderate-sized grain farm. KSCW1385 plants 928 acres of winter wheat, 319 acres of sorghum, and 138 acres of soybeans each year. For 2001, nearly 84 percent of gross receipts came from wheat.

KSCW4000

A 4,000-acre, large-sized grain farm in south central Kansas (Sumner County) that plants 2,845 acres of winter wheat, 975 acres of sorghum, 50 acres of corn, 55 acres of soybeans, and 75 acres of hay. KSCW4000 also runs 67 head of beef cows. Seventy-five percent of this farm's 2001 total receipts were generated from sales of winter wheat.

**KSNW2325** 

This is a 2,325-acre, moderate-sized northwest Kansas (Thomas County) grain farm. This farm plants 775 acres of winter wheat (wheat-fallow rotation), 620 acres of corn, and 155 acres of sorghum. This farm generated 39 percent of 2001 receipts from wheat and 42 percent of its receipts from corn.

KSNW4300

KSNW4300 is a 4,300-acre, large-sized northwest Kansas (Thomas County) grain farm that annually plants 1,948 acres of winter wheat, 549 acres of corn, 465 acres of sorghum, 262 acres of sunflowers, 75 acres of hay, and has 1,001 acres that lie fallow. This farm also runs 100 head of beef cows. The farm generated 45 percent of receipts from wheat, 30 percent from corn, and 10 percent from cattle during 2001.

COW3000

A 3,000-acre northeast Colorado (Washington County), moderate-sized grain farm that plants 1,125 acres of winter wheat, 605 acres of millet, and 445 acres of corn each year. COW3000 has adopted minimum tillage practices on most of its acres, and has a 65 head beef cow herd. This farm generated 46 percent of its receipts from wheat and 15 percent from millet.

COW5440

A 5,440-acre, large-sized northeast Colorado (Washington County) grain farm. It plants 1,900 acres of wheat, 1,300 acres of millet, and 500 acres of corn. During 2001, 59 percent of gross receipts came from wheat sales and 22 percent came from millet sales.

Appendix Table A3. Characteristics of Panel Farms Producing Wheat.

	WAW1725	WAW4675	NDW1760	NDW4850	KSCW1385	KSCW4000	KSNW2325	KSNW4300	COW3000	COW5440
County	Whitman	Whitman	Barnes	Barnes	Sumner	Sumner	Thomas	Thomas	Washington	Washington
Total Cropland	1,725	4,675	1,760	4,850	1,385	4,000	2,325	4,300	3,000	5,440
Acres Owned Acres Leased	518 1,207	2,125 2,550	176 1,584	1,701 3,149	485 900	500 3,500	930 1,395	1,147 3,153	1,137 1,863	3,020 2,420
Pastureland										
Acres Owned Acres Leased	0 0	0	0 0	0	0	50 400	500 500	500 500	960 0	0
Assets (\$1000)										
Fotal Real Estate	1,224 793	4,068 2,780	474 133	2,569 1,044	807 389	1,972 540	628 183	905 189	1,271 755	2,597 1,602
Machinery	393	877	258	988	275	721	421	505	242	562
Other & Livestock	38	411	83	537	143	711	24	211	274	433
Debt/Asset Ratios Total	0.24	0.22	0.19	0.21	0.15	0.13	0.35	0.16	0.18	0.18
ntermediate ∟ong Run	0.22 0.25	0.24 0.21	0.19 0.18	0.22 0.19	0.13 0.18	0.11 0.18	0.42 0.16	0.16 0.16	0.19 0.17	0.17 0.18
Number of Livestock										
Beef Cows	0	0	0	0	0	67	0	100	65	0
2001 Gross Receipts (\$1,00 Fotal	00)* 375.0	1,002.1	229.7	728.6	156.3	427.0	222.0	468.8	282.2	492.3
Cattle	0.0	0.0	0.0	0.0	0.0	34.4	0.0	44.3	41.1	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	8.10%	0.00%	9.50%	14.60%	0.00%
Wheat	289.3 77.10%	771.0 76.90%	93.5 40.70%	374.1 51.30%	132.5 84.80%	322.4 75.50%	86.9 39.10%	211.0 45.00%	128.8 45.70%	290.4 59.00%
Sorghum	0.0	0.0	0.0	0.0	17.8	60.7	23.2	55.9	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	11.40%	14.20%	10.40%	11.90%	0.00%	0.00%
Barley	46.2 12.30%	56.3 5.60%	25.0 10.90%	84.8 11.60%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%
Corn	0.0	0.0	22.6	0.0	0.0	3.0	93.9	136.6	53.5	68.6
	0.00%	0.00%	9.80%	0.00%	0.00%	0.70%	42.30%	29.10%	19.00%	13.90%
Soybeans	0.0 0.00%	0.0 0.00%	52.6 22.90%	129.5 17.80%	6.0 3.80%	2.8 0.60%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%
Dry Peas	39.6	174.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
•	10.50%	17.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sunflowers	0.0 0.00%	0.0 0.00%	35.9 15.60%	130.9 18.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	19.4 4.10%	0.0 0.00%	0.0 0.00%
Millet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.3	110.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.00%	22.30%
Hay	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	3.8 0.90%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%
Other Receipts	0.0	0.0	0.0	9.3	0.0	0.0	18.0	1.5	16.5	23.4
	0.00%	0.00%	0.00%	0.50%	0.00%	0.00%	8.10%	0.30%	5.80%	4.70%
2001 Planted Acres** Total	1,725.0	4,675.0	1,760.0	4,700.0	1,385.0	4,000.0	2,325.0	4,300.0	2,475.0	4,340.0
Vheat	1,035.0	3,042.0	704.0	2,585.0	928.0	2,845.0	775.0	1,948.0	1,125.0	1,900.0
	60.00%	65.10%	40.00%	55.00%	67.00%	71.10%	33.30%	45.30%	45.50%	43.80%
Sorghum	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	319.0 23.00%	975.0 24.40%	155.0 6.70%	465.0 10.80%	0.0 0.00%	0.0 0.00%
Barley	345.0	340.0	176.0	470.0	0.0	0.0	0.0	0.0	0.0	0.0
•	20.00%	7.30%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Corn	0.0 0.00%	0.0 0.00%	176.0 10.00%	0.0 0.00%	0.0 0.00%	50.0 1.30%	620.0 26.70%	549.0 12.80%	445.0 18.00%	500.0 11.50%
Soybeans	0.0	0.0	352.0	705.0	138.0	55.0	0.0	0.0	0.0	0.0
ooyooane	0.00%	0.00%	20.00%	15.00%	10.00%	1.40%	0.00%	0.00%	0.00%	0.00%
Dry Peas	345.0 20.00%	1,293.0 27.70%	0.0 0.00%							
Sunflowers	0.0	0.0	352.0	940.0	0.0	0.0	0.0	262.0	0.0	0.0
Julilowers	0.00%	0.00%	20.00%	20.00%	0.00%	0.00%	0.00%	6.10%	0.00%	0.00%
Millet	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	605.0 24.40%	1,300.0 30.00%
le										
Hay	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	75.0 1.90%	0.0 0.00%	75.0 1.70%	0.0 0.00%	0.0 0.00%
allow	0.0	0.0	0.0	0.0	0.0	0.0	775.0	1,001.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.30%	23.30%	0.00%	0.00%
CRP	0.0 0.00%	0.0	0.0 0.00%	0.0	0.0	0.0	0.0 0.00%	0.0 0.00%	300.0 12.10%	640.0

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

**CAC2000** 

CAC2000 is a 2,000-acre, moderate-sized cotton farm located in the central San Joaquin Valley of California (Kings County). This farm plants 600 acres of cotton, 1,000 acres of hay, 400 acres of wheat, and 200 acres of corn. During 2001, CAC2000 generated 44 percent of total receipts from cotton and 37 percent from hay.

**CAC6000** 

This is a 6,000-acre, large-sized cotton farm in the central San Joaquin Valley of California (Kings County) that grows 2,700 acres of cotton, 1,800 acres of vegetables and almonds, 600 acres each of wheat and hay, and 300 acres of corn. Vegetables grown on this farm vary annually depending on prices; however, the returns to these 1,800 acres are fairly stable over time. Cotton sales accounted for 43 percent of 2001 receipts while vegetables and almonds contributed 45 percent.

**TXSP1682** 

A 1,682-acre Texas South Plains (Dawson County) cotton farm that is moderate-sized for the area. TXSP1682 plants 1,185 acres of cotton (866 dryland, 319 irrigated), 196 acres of peanuts, and has 183 acres in CRP. For 2001, 67 percent of receipts came from cotton.

**TXSP3697** 

The Texas South Plains (Dawson County) is home to this 3,697-acre, large-sized cotton farm that grows 2,665 acres of cotton (2,095 dryland, 570 irrigated), 285 acres of peanuts, and has 214 acres in CRP. Cotton sales comprised 82 percent of 2001 receipts.

**TXRP2500** 

TXRP2500 is a 2,500-acre cotton farm located in the Rolling Plains of Texas (Jones County). This farm plants 1,240 acres of cotton and 825 acres of winter wheat each year. Seventy-nine percent of 2001 farm receipts came from cotton sales. Wheat sales accounted for 19 percent of receipts.

**TXBC1400** 

This 1,400-acre farm is located on the Blackland Prairie of Texas (Williamson County). TXBC1400 plants 350 acres of cotton, 550 acres of corn, 400 acres of sorghum, and 100 acres of winter wheat annually. Additionally, this farm has a 50-head beef cow herd that is pastured on rented ground that cannot be farmed. Cotton generated 38 percent of 2001 total receipts, corn generated 31 percent, and sorghum generated 18 percent.

**TXCB1720** 

A 1,720-acre cotton farm located on the Texas Coastal Bend (San Patricio County) that farms 700 acres of cotton, 870 acres of sorghum, and 150 acres of corn annually. Sixty-one percent of 2001 cash receipts were generated by cotton.

Appendix Table A4. Characteristics of Panel Farms Producing Cotton.

	CAC2000	CAC6000	TXSP1682	TXSP3697	TXRP2500	TXBC1400	TXCB1720	
County	Kings	Kings	Dawson	Dawson	Jones	Williamson	San Patricio	
Total Cropland	2,000	6,000	1,682	3,697	2,500	1,400	1,720	
Acres Owned Acres Leased	1,000 1,000	4,800 1,200	606 1,076	1,627 2,070	400 2,100	150 1,250	360 1,360	
Acres Leaseu	1,000	1,200	1,070	2,070	2,100	1,230	1,300	
Pastureland Acres Owned	0	0	0	0	0	30	50	
Acres Leased	0	0	0	0	500	210	0	
(04000)								
Assets (\$1000) Total	4,077	14,893	780	1,949	415	668	1,151	
Real Estate	3,451	14,885	338	986	179	284	469	
Machinery Other & Livestock	489 138	9	367 74	705 258	223 13	241 144	394 288	
	100	· ·	7-7	200	10	144	200	
Debt/Asset Ratios Total	0.19	0.41	0.21	0.22	0.27	0.14	0.16	
Intermediate	0.19	392.26	0.24	0.27	0.33	0.14	0.15	
Long Run	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Number of Livestock								
Beef Cows	0	0	0	0	12	50	0	
2001 Gross Receipts (\$1,00)	0)*							
Zuu i Gross Receipis (\$1,00) Total	1,466.9	6,921.4	511.2	1,014.7	233.8	244.9	333.4	
Cattle	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	4.4 1.90%	20.4 8.30%	0.0 0.00%	
Cotton	639.0 43.60%	2,991.4	342.4	831.7	184.1	92.7	202.0	
	43.60%	43.20%	67.00%	82.00%	78.70%	37.80%	60.60%	
Sorghum	0.0	0.0	0.0	0.0	0.0	45.0	114.0	
	0.00%	0.00%	0.00%	0.00%	0.00%	18.40%	34.20%	
Wheat	159.1	285.8	0.0	0.0	45.4	8.4	1.0	
	10.80%	4.10%	0.00%	0.00%	19.40%	3.40%	0.30%	
Corn	122.6	102.1	0.0	0.0	0.0	76.5	16.4	
	8.40%	1.50%	0.00%	0.00%	0.00%	31.20%	4.90%	
Hay	546.1	476.4	0.0	0.0	0.0	0.0	0.0	
iay	37.20%	6.90%	0.00%	0.00%	0.00%	0.00%	0.00%	
Ourte Bereite	0.0	0.0	74.4	0.0	0.0	0.0	0.0	
Quota Peanuts	0.0 0.00%	0.0 0.00%	71.4 14.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	
Additional Peanuts	0.0 0.00%	0.0 0.00%	81.8 16.00%	175.9 17.30%	0.0 0.00%	0.0 0.00%	0.0 0.00%	
	0.0070	0.0070	10.0070	17.5070	0.0070	0.0070	0.0070	
Other Receipts	0.0	3,065.7	15.6	7.1	0.0	2.0	0.0	
	0.00%	44.30%	3.10%	0.70%	0.00%	0.80%	0.00%	
2001 Planted Acres**								
Γotal	2,200.0	6,000.0	1,564.0	3,164.0	2,065.0	1,400.0	1,720.0	
Cotton	600.0	2,700.0	1,185.0	2,665.0	1,240.0	350.0	700.0	
	27.30%	45.00%	75.80%	84.20%	60.00%	25.00%	40.70%	
Sorghum	0.0	0.0	0.0	0.0	0.0	400.0	870.0	
•	0.00%	0.00%	0.00%	0.00%	0.00%	28.60%	50.60%	
Wheat	400.0	600.0	0.0	0.0	825.0	100.0	0.0	
TTHOAL	18.20%	10.00%	0.00%	0.00%	40.00%	7.10%	0.00%	
0								
Corn	200.0 9.10%	300.0 5.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%	550.0 39.30%	150.0 8.70%	
Hay	1,000.0	600.0	0.0	0.0	0.0	0.0	0.0	
	45.50%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Quota Peanuts	0.0	0.0	65.0	0.0	0.0	0.0	0.0	
	0.00%	0.00%	4.20%	0.00%	0.00%	0.00%	0.00%	
Additional Peanuts	0.0	0.0	131.0	285.0	0.0	0.0	0.0	
	0.00%	0.00%	8.40%	9.00%	0.00%	0.00%	0.00%	
Vegetables	0.0	1,800.0	0.0	0.0	0.0	0.0	0.0	
55.0000	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
CRP	0.0	0.0	183.0	214.0	0.0	0.0	0.0	
OIV.	0.00%	0.0 0.00%	183.0	6.80%	0.00%	0.00%	0.00%	
*Pacainte for 2001 are inclu								

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING COTTON

LAC2640 This is a 2,640 cotton farm located in north Louisiana (Morehouse Parish). LAC2640 plants 1,498 acres of cotton, 686 acres of corn, and 456 acres of soybeans each year. During 2001, 49 percent of farm receipts were generated from cotton sales.

ARC5000 ARC5000 is a 5,000-acre cotton farm in northeast Arkansas (Desha County) that plants 1,800 acres of cotton, 1,500 acres of rice, 1,400 acres of soybeans, and 300 acres of corn. For 2001, 49 percent of gross receipts came from cotton sales, 37 percent from rice sales, and 12 percent from soybean sales.

TNC1900 A 1,900-acre, moderate-sized West Tennessee (Fayette County) cotton farm. TNC1900 consists of 915 acres of cotton, 370 acres each of soybeans and corn, 150 acres of sorghum, 65 acres of wheat, and 30 acres enrolled in CRP. This farm increased in size from 1,675 acres to 1,900 acres in the past three years. Cotton accounted for 70 percent of 2001 gross receipts, with corn and soybeans contributing 14 percent and 9 percent, respectively.

TNC4050 TNC4050 is a 4,050-acre, large-sized West Tennessee (Haywood County) cotton farm. This farm plants 2,670 acres of cotton, 820 acres of soybeans, 560 acres of corn, and 328 acres of wheat each year. This farm increased in size by 250 acres in the past three years. During 2001, cotton sales generated 78 percent of gross receipts.

ALC3000 A 3,000-acre cotton farm located in north central Alabama (Lawrence County) that plants 2,075 acres to cotton, 750 acres to corn, and 175 acres to soybeans annually. ALC3000 has been under a no-till regime for several years. Additionally, cotton produced on this farm is marketed through a cooperative gin. This gin has implemented ginning and marketing innovations that return a higher lint price than would be realized through conventional marketing channels. Cotton sales accounted for 79 percent of total farm receipts during 2001.

NCC1500 This is a 1,500-acre cotton farm located on the upper coastal plain of North Carolina (Wayne County). NCC1500 plants 1,000 acres of cotton, 500 acres of wheat, and 500 acres of double-cropped soybeans annually. This farm was added during 2001 to reflect the return of large-scale cotton production to North Carolina. Cotton accounted for 66 percent of this farm's 2001 receipts with 21 percent coming from soybean sales.

Appendix Table A5. Characteristics of Panel Farms Producing Cotton.

	LAC2640	ARC5000	TNC1900	TNC4050	ALC3000	NCC1500
County	Morehouse	Desha	Fayette	Haywood	Lawrence	Wayne
Total Cropland	2,640	5,000	1,900	4,050	3,000	1,500
Acres Owned	0	1,000	225	1,000	3 000	225
Acres Leased	2,640	4,000	1,675	3,050	3,000	1,275
Pastureland	0	0	0	0	0	0
Acres Owned Acres Leased	0	0 0	0	0 0	0	0
Assets (\$1000)	0	U	U	0	U	0
Total	1,170	5,151	1,714	3,642	2,267	1,539
Real Estate	196	1,670	665	1,680	147	1,070
Machinery	732	1,556	343	1,378	1,090	469
Other & Livestock	242	1,925	706	584	1,029	0
Debt/Asset Ratios	0.40	0.45	0.40	0.47	0.44	0.00
Total Intermediate	0.13	0.15 0.14	0.12	0.17	0.14	0.20
Long Run	0.17 0.00	0.14	0.05 0.17	0.16 0.17	0.14 0.19	0.24 0.18
	0.00	0.17	0.17	0.17	0.19	0.16
Number of Livestock Beef Cows	0	0	0	0	0	0
2001 Gross Receipts (\$1,0	100)*					
Total	841.4	2,381.3	632.9	1,315.1	1,162.4	586.8
Cattle	0.0	0.0	0.0	0.0	0.0	0.0
Camo	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cotton	415.2	1,157.8	445.1	1,028.6	921.9	391.6
COMOTI	49.30%	48.60%	70.30%	78.20%	79.30%	66.70%
Sorghum	0.0 0.00%	0.0 0.00%	25.1 4.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%
Wheat	0.0	0.0	14.0	50.9	0.0	74.6
	0.00%	0.00%	2.20%	3.90%	0.00%	12.70%
Soybeans	211.8	294.7	56.8	120.9	91.5	120.6
. ,	25.20%	12.40%	9.00%	9.20%	7.90%	20.60%
Corn	214.5	39.6	90.3	110.7	149.1	0.0
	25.50%	1.70%	14.30%	8.40%	12.80%	0.00%
Pico	0.0	889.2	0.0	0.0	0.0	0.0
Rice	0.0 0.00%	889.2 37.30%	0.0 0.00%	0.0 0.00%	0.0 0.00%	0.0 0.00%
	0.0070	00070	5.0070	5.0070	5.0070	3.0076
Other Receipts	0.0	0.0	1.6	4.0	0.0	0.0
	0.00%	0.00%	0.30%	0.30%	0.00%	0.00%
2001 Planta - A**						
2001 Planted Acres** Total	2,640.0	5,000.5	1,900.0	4,378.0	3,000.0	2,000.0
1041	2,040.0	5,500.0	.,500.0	.,57 0.0	5,500.0	2,000.0
Cotton	1,498.0	1,800.5	915.0	2,670.0	2,075.0	1,000.0
	56.70%	36.00%	48.20%	61.00%	69.20%	50.00%
Carabina	0.0	0.0	450.0	0.0	0.0	
Sorghum	0.0 0.00%	0.0 0.00%	150.0 7.90%	0.0 0.00%	0.0 0.00%	0.0 0.00%
	0.00%	0.00%	7.90%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	65.0	328.0	0.0	500.0
	0.00%	0.00%	3.40%	7.50%	0.00%	25.00%
Soybeans	456.0	1,400.0	370.0	820.0	175.0	500.0
	17.30%	28.00%	19.50%	18.70%	5.80%	25.00%
Corn	686.0	300.0	370.0	560.0	750.0	0.0
	26.00%	6.00%	19.50%	12.80%	25.00%	0.00%
Hay	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CRP	0.0	0.0	30.0	0.0	0.0	0.0
ONF	0.00%	0.00%	1.60%	0.00%	0.0 0.00%	0.00%
	0.00%	0.00 /6	1.00 /6	0.00 /6	0.00 /6	0.00%
Rice	0.0	1,500.0	0.0	0.0	0.0	0.0
	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%
*Pagainta for 2001 are in	L L L L L L L L L L L L L L L L L L L				, 5	

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING RICE

CAR424 is a 424-acre Sacramento Valley, California (Sutter and Yuba counties) moderatesized rice farm that plants 400 acres of rice annually. This farm generated 97 percent of 2001 gross receipts from rice sales.

CAR2365 This is a 2,365-acre rice farm located in the Sacramento Valley of California (Sutter and Yuba counties) that is large-sized for the region. CAR2365 plants 2,240 acres of rice annually. Ninety-eight of 2001's total receipts were generated from rice sales.

TXR1553 This 1,553-acre west-of-Houston, Texas (Colorado County) rice farm is moderate-sized for the region. TXR1553 harvests 450 acres of first-crop rice and 405 acres of ratoon rice. The farm generated 97 percent of its receipts from rice during 2001.

TXR3774 is a 3,774-acre, large-sized rice farm located west of Houston, Texas (Colorado County). This farm harvests 1,589 acres of first-crop rice and 1,351 acres of ratoon rice annually. TXR3774 realized 98 percent of 2001 gross receipts from rice sales.

LASR1200 A 1,200-acre southwest Louisiana (Acadia, Jeff Davis, and Vermilion parishes) rice farm, LASR1200 is moderate-sized for the area. This farm harvests 660 acres of long grain rice and 324 acres of soybeans. During 2001, 84 percent of gross receipts were generated from rice sales.

LANR2500 This is a 2,500-acre, large-sized northeast Louisiana (Ouachita Parish) rice farm. This farm harvests 1,000 acres of long grain rice, 750 acres of soybeans, 325 acres of cotton, 200 acres of corn, and 100 acres of sorghum. For 2001, 63 percent of farm receipts came from rice, 14 percent from soybeans, and 14 percent from cotton.

ARR3640 ARR3640 is a 3,640-acre, large-sized Arkansas (Arkansas County) rice farm that harvests 122 acres of medium grain rice, 1620 acres of long grain rice, 1,498 acres of soybeans, and 615 acres of wheat each year. Nearly 73 percent of this farm's 2001 receipts came from rice sales.

MSR4735 This is a 4,735-acre Mississippi Delta (Tunica County, MS) rice farm that plants 1,335 acres of rice, 2,700 acres of soybeans, and 500 acres of cotton annually. During 2001, MSR4735 realized 54 percent of total receipts from rice, 30 percent from soybeans, and 15 percent from cotton.

MOWR4000 A 4,000-acre rice farm located in southeast Missouri (Butler County), MOWR4000 is large-sized for the region. Annually, this farm plants 2,000 acres of rice and 2,000 acres of soybeans. More than 70 percent of annual receipts for this farm come from rice sales.

MOER4000 is a 4,000-acre, large-sized rice farm located in southeast Missouri (Stoddard County) that plants 1,334 acres of rice and 1,333 acres each of corn and soybeans each year. During 2001, 49 percent of MOER4000's cash receipts were generated by rice, 32 percent by corn, and 18 percent by soybeans.

Appendix Table A6. Characteristics of Panel Farms Producing Rice.

	CAR424	CAR2365	TXR1553	TXR3774	LASR1200	LANR2500	ARR3640	MSR4735	MOWR4000	MOER4000
County	Sutter	Sutter	Wharton	Wharton	Acadia	Ouachita	Arkansas	Tunica	Butler	Stoddard
Total Cropland	424	2,365	1,553	3,774	1,200	2,500	3,640	4,736	4,000	4,000
Acres Owned	212	769	129	0	50	1,250	1,456	0	2,000	1,400
Acres Leased	212	1,596	1,424	3,774	1,150	1,250	2,184	4,735	2,000	2,600
Assets (\$1000)										
Total	919	3,697	617	1,484	347	2,286	5,527	2,100	7,282	5,909
Real Estate	559	2,221	113	17	74	1,372	2,860	228	4,042	3,083
Machinery	299	1,055	345	851	225	818	1,264	1,387	1,768	1,406
Other & Livestock	62	422	159	616	49	96	1,403	485	1,472	1,420
Debt/Asset Ratios										
Total	0.22	0.20	0.17	0.23	0.18	0.19	0.15	0.19	0.20	0.16
Intermediate	0.26	0.23	0.17	0.23	0.18	0.23	0.12	0.19	0.22	0.13
Long Run	0.19	0.19	0.18	0.19	0.18	0.17	0.18	0.19	0.18	0.18
2001 Gross Receipts (\$1,000	)*									
Total	328.3	1,925.9	409.7	1,040.8	370.3	1,002.2	1,289.4	1,700.7	1,688.4	1,458.9
Rice	320.8	1,885.9	399.0	1,020.8	310.1	634.8	943.7	920.0	1,190.6	716.8
	97.70%	97.90%	97.40%	98.10%	83.70%	63.30%	73.20%	54.10%	70.50%	49.10%
Soybeans	0.0	0.0	0.0	0.0	45.2	136.0	251.9	509.8	430.9	266.0
•	0.00%	0.00%	0.00%	0.00%	12.20%	13.60%	19.50%	30.00%	25.50%	18.20%
Corn	0.0	0.0	0.0	0.0	0.0	72.0	0.0	0.0	44.3	476.2
	0.00%	0.00%	0.00%	0.00%	0.00%	7.20%	0.00%	0.00%	2.60%	32.60%
Sorghum	0.0	0.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	0.00%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	0.0	0.0	0.0	0.0	93.8	10.4	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.30%	0.60%	0.00%	0.00%
Cotton	0.0	0.0	0.0	0.0	0.0	138.7	0.0	260.5	22.6	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	13.80%	0.00%	15.30%	1.30%	0.00%
Other Receipts	7.5	40.0	10.7	20.0	3.0	0.0	0.0	0.0	0.0	0.0
	2.30%	2.10%	2.60%	1.90%	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%
2001 Planted Acres**										
Total	400.0	2,240.0	855.0	2,940.2	1,044.0	2,375.0	3,855.0	4,535.0	4,000.0	4,000.0
Rice	400.0	2,240.0	855.0	2,940.2	660.0	1,000.0	1,742.0	1,335.0	2,000.0	1,334.0
	100.00%	100.00%	100.00%	100.00%	63.20%	42.10%	45.20%	29.40%	50.00%	33.30%
Soybeans	0.0	0.0	0.0	0.0	324.0	750.0	1,498.0	2,700.0	2,000.0	1,333.0
	0.00%	0.00%	0.00%	0.00%	31.00%	31.60%	38.90%	59.50%	50.00%	33.30%
Corn	0.0	0.0	0.0	0.0	0.0	200.0	0.0	0.0	0.0	1,333.0
	0.00%	0.00%	0.00%	0.00%	0.00%	8.40%	0.00%	0.00%	0.00%	33.30%
Sorghum	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	4.20%	0.00%	0.00%	0.00%	0.00%
Wheat	0.0	0.0	0.0	0.0	0.0	0.0	615.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	0.00%	0.00%	0.00%
Cotton	0.0	0.0	0.0	0.0	0.0	325.0	0.0	500.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	13.70%	0.00%	11.00%	0.00%	0.00%
Fallow	0.0	0.0	0.0	0.0	60.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	5.70%	0.00%	0.00%	0.00%	0.00%	0.00%

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING MILK

CAD1710 A 1,710-cow, large-sized central California (Tulare County) dairy farm that produces 23,141 pounds of milk per cow. The farm plants 525 acres of for which it employs custom harvesting. Milk receipts generated 92 percent of 2001 receipts.

NMD2000 A 2,000-cow, large-sized southern New Mexico (Doña Ana and Chaves counties) dairy farm that averages 21,154 pounds of milk per cow. This farm purchases all commodities necessary for blending its own total mixed ration and plants no crops. Milk sales accounted for 92 percent of 2001 total receipts.

WAD185 A 185-cow, moderate-sized northern Washington (Whatcom County) dairy farm that produces an average of 24,259 pounds of milk per cow. This farm plants 115 acres for silage and generated 94 percent of its 2001 gross receipts from milk sales.

WAD900 A 900-cow, large-sized northern Washington (Whatcom County) dairy farm that averages 24,811 pounds of milk per cow per year. This farm plants 605 acres for silage annually. During 2001, 94 percent of this farm's gross receipts came from milk.

IDD750 A 750-cow, moderate-sized Idaho (Twin Falls County) dairy farm that produces an average of 22,665 pounds of milk per cow. This farm plants no crops. Milk sales accounted for 87 percent of IDD750's gross receipts for 2001.

**IDD2100** A 2,100-cow, large-sized Idaho (Twin Falls County) dairy farm that produces 23,181 pounds of milk per cow. This farm plants 560 acres for silage annually. Milk represents 90 percent of this farm's receipts.

**TXCD400** A 400-cow, moderate-sized central Texas (Erath County) dairy farm that averages 18,539 pounds of milk per cow. TXCD400 plants 330 acres of hay each year. Milk sales represented 90 percent of this farm's 2001 gross receipts.

TXCD825 An 825-cow, large-sized central Texas (Erath County) dairy farm that produces 21,119 pounds of milk per cow. TXCD825 plants 430 acres for silage and 20 acres for haylage annually. During 2001, milk sales accounted for 92 percent of receipts.

**TXED310** A 310-cow, moderate-sized northeast Texas (Hopkins County) dairy farm that averages 17,925 pounds of milk per cow. This farm has 60 acres of improved pasture and raises 260 acres of hay and forage. 2001 milk sales represented 95 percent of annual receipts.

**TXED750** A 750-cow, large-sized northeast Texas (Lamar County) dairy farm that produces an average of 18,044 pounds of milk per cow. This farm plants 400 acres of hay and 500 acres for silage each year. This farm generated 92 percent of 2001 receipts from milk sales.

Appendix Table A7. Characteristics of Panel Farms Producing Milk.

	CAD1710	NMD2000	WAD185	WAD900	IDD750	IDD2100	TXCD400	TXCD825	TXED310	TXED750
County	Tulare	Dona Ana	Whatcom	Whatcom	Twin Falls	Twin Falls	Erath	Erath	Hopkins	Lamar
Total Cropland	800	300	120	605	120	620	165	460	420	900
Acres Owned	800	300	60	300	120	620	165	460	210	900
Acres Leased	0	0	60	305	0	0	0	0	210	0
Pastureland										
Acres Leased	0	0	0	0	0	0	0	0	0	80
Assets (\$1000)										
Total	11,897	6,956	1,346	4,986	3,417	12,862	1,576	5,755	1,170	3,602
Real Estate	6,506	3,185	496	2,570	1,392	4,419	814	1,617	424	1,460
Machinery	348	237	101	594	316	527	160	373	115	538
Other & Livestock	5,043	3,533	749	1,823	1,709	7,917	601	3,765	631	1,604
Debt/Asset Ratios										
Total	0.20	0.23	0.18	0.24	0.20	0.15	0.65	0.15	0.33	0.24
Intermediate	0.11	0.18	0.12	0.20	0.16	0.10	1.05	0.09	0.37	0.22
Long Run	0.27	0.28	0.28	0.28	0.24	0.24	0.28	0.28	0.28	0.27
2001 Gross Receipts (\$1,	000)*									
Total	4,986.0	6,033.6	665.2	3,082.4	2,171.8	6,006.0	1,080.7	3,651.5	794.6	1,984.0
Milk	4,578.3	5,570.4	623.8	2,881.6	1,878.1	5,378.4	969.1	3,361.5	752.2	1,831.9
	91.80%	92.30%	93.80%	93.50%	86.50%	89.50%	89.70%	92.10%	94.70%	92.30%
Dairy Cattle	407.7	463.2	41.4	200.8	293.7	627.6	75.8	290.0	42.4	152.1
	8.20%	7.70%	6.20%	6.50%	13.50%	10.50%	7.00%	7.90%	5.30%	7.70%
Hay	0.0	0.0	0.0	0.0	0.0	0.0	35.8	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.30%	0.00%	0.00%	0.00%
2001 Planted Acres**										
Total	525.0	0.0	115.0	605.0	0.0	560.0	330.0	450.0	320.0	900.0
Hay	525.0	0.0	115.0	605.0	0.0	0.0	330.0	450.0	260.0	900.0
	100.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	100.00%	81.30%	100.00%
Silage	0.0	0.0	0.0	0.0	0.0	560.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Improved Pasture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.80%	0.00%

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops. 
\*\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)

WID70 A 70-cow, moderate-sized eastern Wisconsin (Winnebago County) dairy farm that averages 23,200 pounds of milk per cow. The farm plants 150 acres of hay, 45 acres of corn, and 40 acres of soybeans. Milk constituted 89 percent of this farm's 2001 receipts.

WID600 A 600-cow, large-sized eastern Wisconsin (Winnebago County) dairy farm that produces an average of 22,229 pounds of milk per cow. The farm plants 623 acres of hay and 378 acres for silage each year. Milk sales accounted for 93 percent of the farm's 2001 receipts.

MIED200 A 200-cow, moderate-sized Michigan (Sanilac County) dairy farm that produces 23,350 pounds of milk per cow. This farm plants 220 acres of corn, 50 acres of wheat, and 320 acres for haylage. During 2001, milk sales comprised 92 percent of this farm's gross receipts.

MICD140 A 140-cow, moderate-sized Michigan (Isabella County) dairy farm that averages 21,584 pounds of milk production per cow. This farm plants 175 acres of corn, 70 acres each of hay and wheat, and 175 acres for silage and haylage. Milk sales represented 85 percent of MICD140's total receipts during 2001.

NYWD800 An 800-cow, moderate-sized western New York (Wyoming County) dairy farm that produces 23,040 pounds of milk per cow. This farm plants 575 acres for silage and 625 acres for haylage annually. About 94 percent of this farm's 2001 gross receipts came from milk.

NYWD1200 A 1,200-cow, large-sized western New York (Wyoming County) dairy farm that produces 23,000 pounds of milk per cow. This farm plants 1,525 acres for silage and haylage each year. During 2001, milk sales represented 94 percent of farm receipts.

NYCD110 A 110-cow, moderate-sized central New York (Cayuga County) dairy farm that produces 23,350 pounds of milk per cow. The farm plants 80 acres of hay, 64 acres of corn, and 131 acres for silage annually. Ninety-one percent of 2001's gross receipts came from milk.

NYCD400 A 400-cow, large-sized central New York (Cayuga County) dairy farm that averages 22,819 pounds of milk per cow. This farm plants 580 acres of hay and haylage and 310 acres for silage. Milk sales made up 92 percent of 2001 total receipts.

VTD134 A 134-cow, moderate-sized Vermont (Washington County) dairy farm that produces 19,285 pounds of milk per cow. VTD134 plants 220 acres of hay, 94 acres for silage, and 81 acres for haylage each year. Milk accounted for 88 percent of 2001 receipts for this farm.

VTD350 A 350-cow, large-sized Vermont (Washington County) dairy farm that averages 23,490 pounds of milk per cow. This farm plants 40 acres of hay, silage, and haylage. Milk sales represented 94 percent of VTD350's gross receipts for 2001.

Appendix Table A8. Characteristics of Panel Farms Producing Milk.

County   Winnebago   Winnebago   Sanilac   Isabelia   Wyoming   Cayuga   Cayuga   Cayuga   Washington   Washington   Washington   Washington   Cayuga   Ca		WID70	WID600	MIED200	MICD140	NYWD800	NYWD1200	NYCD110	NYCD400	VTD134	VTD350
Acres Cowned 45 600 227 210 300 600 460 450 600 120 120 125	County	Winnebago	Winnebago	Sanilac	Isabella	Wyoming	Wyoming	Cayuga	Cayuga	Washington	Washington
Acres Cowned 45 600 227 210 300 600 460 450 600 120 120 125	Total Cropland	245	1.000	590	510	1.200	1.800	296	850	220	700
Pasturelland   Acres Oaned   0											
Acres Lossed         0         0         50         50         25         225         300         20         400         120         50           Assets (\$1000)         0         0         0         0         0         0         50           Assets (\$1000)         7         725         2,826         1,1574         1,304         5,241         7,866         327         3,439         711         2,303           Assets (\$1000)         90         225         2,826         2,218         620         2,778         385         1,289         300         1,241           Machinery         90         225         223         223         228         2,788         2,778         368         1,289         300         1,241           Debt/Asset Ratios         1         2         2         0.22         0.28         0.27         0.28         0.27         0.28         0.27         0.28         1,277         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.28         0.28         0.28         0.28	Acres Leased	45			210			46	200	120	
Acres Lasaed 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0											
Marcial Stroto   Total   72   2,826   1,136   916   660   2,186   2,774   385   1,289   300   1,241   341											
Total 725	Acres Leased	0	0	0	0	0	0	0	0	0	50
Real Estate											
Machinery         93         295         283         281         582         268         76         359         134         349           Other & Livestock         197         1,355         475         384         2,473         4,412         466         1,792         276         713           Debt/Asset Ratios         Total         0,24         0,22         0,26         0,36         0,15         0,12         0,19         0,17         0,27         0,28           Long Ron         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28         0,27         0,28 <td></td>											
Debt											
Debt/Asset Ratios   Total   0.24   0.22   0.26   0.32   0.20   0.18   0.19   0.17   0.27   0.24   1.69   0.27   0.28   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.27   0.28   0.28   0.27   0.28   0.27   0.28											
Total Intermediate   0.24   0.22   0.26   0.32   0.20   0.18   0.19   0.17   0.27   0.24   0.20   0.08   0.27   0.28   0.20   0.28   0.27   0.28   0.20   0.28   0.27   0.28	Other & Livestock	197	1,333	4/5	304	2,473	4,412	400	1,792	2/6	713
Intermediate		0.24	0.22	0.26	0.32	0.20	0.19	0.10	0.17	0.27	0.24
Long Run         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.27         0.28         0.29         0.20											
Total											
Total         220.8         1,737.8         675.7         457.9         2,955.5         4,476.7         400.2         1,510.0         391.4         1,229.5           Milk         195.9         1,609.2         618.5         389.8         2,767.2         4,227.6         365.5         1,382.2         345.6         1,149.6           Dairy Cattle         24.3         128.7         50.8         57.8         188.3         249.1         34.7         93.3         44.3         80.0           Silage         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0           Soybeans         0.6         0.0 <td>=</td> <td></td>	=										
Milk         195.9         1.609.2         618.5         389.8         2.767.2         4.227.6         365.5         1.382.2         345.6         1.149.6           Dairy Cattle         24.3         128.7         50.8         57.8         188.3         249.1         34.7         93.3         44.3         80.0           Silage         0.0         <			1.737.8	675.7	457.9	2.955.5	4.476.7	400.2	1.510.0	391.4	1,229,5
Dairy Cattle											
Dairy Cattle  24.3 11.00% 7.40% 7.50% 12.60% 6.40% 5.60% 8.70% 6.20% 111.30% 6.50%  Silage  0.0 0.00%	Milk										
Silage         11.00%         7.40%         7.50%         12.60%         6.40%         5.60%         8.70%         6.20%         11.30%         6.50%           Silage         0.0         0.00%         0.00         0.0         0.0         0.00         0.0         34.5         0.0         0.0           Soybeans         0.6         0.0		00.7076	92.0076	91.50%	03.1076	33.0076	94.40 /6	31.3076	31.3076	00.30 /6	33.30 /6
Silage         0.0         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%         2.30%         0.00%         0.00%           Soybeans         0.66         0.0         0.00         0.00%         0.00	Dairy Cattle										
Soybeans         0.00%         0.00%         0.00%         0.00%         0.00%         0.00%         2.30%         0.00%         0.00%           Soybeans         0.6         0.0         0.		11.00%	7.40%	7.50%	12.60%	6.40%	5.60%	8.70%	6.20%	11.30%	6.50%
Soybeans         0.6 0.30%         0.0 0.00%         0.0 0.00%         0.0 0.00%         0.0 0.00%         0.0 0.00%         0.00         0.00         0.00         0.00         0.00         0.00%	Silage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	0.0	0.0
Wheat         0.30%         0.00% <th< td=""><td></td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>0.00%</td><td>2.30%</td><td>0.00%</td><td>0.00%</td></th<>		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.30%	0.00%	0.00%
Wheat         0.0 0.00%         0.0 0.00%         6.3 0.00%         10.3 0.00%         0.0 0.00%         0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Soybeans	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OLOW         0.00%         0.90%         2.30%         0.00%		0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts         0.0 0.00%         0.0 0.0 0.00%         0.0 0.0 0.00%         0.0 0.00%         0.0 0.00%         0.0 0.00%         0.0 0.00%         0.0 0.0 0.0 0.00%         0.0 0.0 0.0 0.00%         0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Wheat	0.0	0.0	6.3	10.3	0.0	0.0	0.0	0.0	0.0	0.0
Com		0.00%	0.00%	0.90%	2.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001 Planted Acres** Total  235.0  1,001.0  590.0  490.0  1,200.0  1,525.0  275.0  890.0  220.2  700.0  Hay  150.0  63.80%  62.20%  0.00%  14.30%  52.10%  0.00%  29.10%  65.20%  100.00%  200.0  200.0  20	Other Receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
Total         235.0         1,001.0         590.0         490.0         1,200.0         1,525.0         275.0         890.0         220.2         700.0           Hay         150.0         623.0         0.0         70.0         625.0         0.0         80.0         580.0         220.2         700.0           Silage         0.0         378.0         320.0         175.0         575.0         1,525.0         131.0         310.0         0.0         0.0           Corn         45.0         0.0         220.0         175.0         0.0         0.0         47.60%         34.80%         0.00%         0.0           Soybeans         40.0         0.0         220.0         175.0         0.0         0.0         64.0         0.0         0.0         0.0           Wheat         0.0		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%
Hay 150.0 623.0 0.0 70.0 625.0 0.0 80.0 580.0 580.0 220.2 700.0 % 100.00% 5100.0 % 100.00% 100.00% 5100.0 % 100.00% 100.00% 510.0 % 100.00% 10											
Silage         63.80%         62.20%         0.00%         14.30%         52.10%         0.00%         29.10%         65.20%         100.00%         100.00%           Silage         0.0         378.0         320.0         175.0         575.0         1.525.0         131.0         310.0         0.0         0.0           Corn         45.0         0.0         220.0         175.0         0.0         0.0         64.0         0.0         0.0         0.0           Soybeans         40.0         0.0	Total	235.0	1,001.0	590.0	490.0	1,200.0	1,525.0	275.0	890.0	220.2	700.0
Silage         0.0         378.0         320.0         175.0         575.0         1,525.0         131.0         310.0         0.0         0.0           Corn         45.0         0.0         220.0         175.0         0.0         0.00%         23.30%         0.00         0.0           Soybeans         40.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0           Wheat         0.0         0.0         50.0         0.0	Hay	150.0	623.0	0.0	70.0	625.0	0.0	80.0	580.0	220.2	700.0
Corn         45.0 19.10%         0.00%         220.0 20.0         175.0 0.0         0.00%         47.60%         47.60%         47.60%         34.80%         0.00%         0.00%           Corn         45.0 0.00         0.0 220.0         175.0 0.0         0.0 0.0         64.0 0.0         0.0 0.0         0.0           19.10%         0.00%         37.30%         35.70%         0.00%         0.00%         23.30%         0.00%         0.00%         0.00%           Soybeans         40.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.00%         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	•	63.80%	62.20%	0.00%	14.30%	52.10%	0.00%	29.10%	65.20%	100.00%	100.00%
Corn         45.0 19.10%         0.00%         220.0 20.0         175.0 0.0         0.00%         47.60%         47.60%         47.60%         34.80%         0.00%         0.00%           Corn         45.0 0.00         0.0 220.0         175.0 0.0         0.0 0.0         64.0 0.0         0.0 0.0         0.0           19.10%         0.00%         37.30%         35.70%         0.00%         0.00%         23.30%         0.00%         0.00%         0.00%           Soybeans         40.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.0 0.0         0.00%         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	Silage	0.0	378.0	320.0	175.0	575.0	1.525.0	131.0	310.0	0.0	0.0
19.10% 0.00% 37.30% 35.70% 0.00% 0.00% 23.30% 0.00% 0.		0.00%		54.20%						0.00%	
19.10% 0.00% 37.30% 35.70% 0.00% 0.00% 23.30% 0.00% 0.	Corn	45.0	0.0	220.0	175.0	0.0	0.0	64.0	0.0	0.0	0.0
17.00% 0.00%	Com										
17.00% 0.00%	Sovheans	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Coypeans										
	\A/h 4		0.0	50.0	70.0		0.0	0.0			0.0
	vvneat	0.00%	0.00%	50.0 8.50%	70.0 14.30%	0.0	0.00%	0.00%	0.0%	0.00%	0.00%

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops. 
\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total roppiand available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARM PRODUCING MILK (CONTINUED)

MOD85 An 85-cow, moderate-sized southwest Missouri (Christian County) dairy farm that averages 18,057 pounds of milk per cow. The farm plants 220 acres of hay and 40 acres for silage.

Eighty-five percent of 2001 total receipts were derived from milk sales.

MOD330 A 330-cow, large-sized southwest Missouri (Christian County) dairy farm that produces an

average of 19,976 pounds of milk per cow. This farm plants 765 acres of hay, haylage, and

silage. Milk accounted for 91 percent of MOD330's gross receipts for 2001.

**GAND200** A 200-cow, moderate-sized central Georgia (Putnam County) dairy farm that produces

18,894 pounds of milk per cow. This farm purchases all commodities necessary for blending its own total mixed ration and plants no crops. Milk sales comprised 94 percent of 2001 total

receipts.

GASD700 A 700-cow, large-sized southern Georgia (Houston County) dairy farm that averages 18,894

pounds of milk per cow. GASD700 plants 407 acres of hay and 233 acres for silage annually.

During 2001, milk sales accounted for 95 percent of farm receipts.

**FLND500** A 500-cow, moderate-sized North Florida (Lafayette County) dairy farm that produces 16,597

pounds of milk per cow. This farm grows 125 acres of hay each year. All other feed requirements are met through a purchased pre-mixed ration. Milk sales accounted for 93

percent of the farm's 2001 receipts.

**FLSD1800** A 1,800-cow, large-sized south central Florida (Okeechobee County) dairy farm that

produces an average of 15,605 pounds of milk per cow. FLSD1800 plants 800 acres of hay and silage annually. In addition to grass hay, grass silage, and pasture, cows are fed a premixed ration purchased externally. Milk sales represented 95 percent of 2001 total receipts.

Appendix Table A9. Characteristics of Panel Farms Producing Milk.

	MOD85	MOD330	GAND200	GASD700	FLND500	FLSD1800
County	Christian	Christian	Putnam	Houston	Lafayette	Okeechobee
Total Cropland	260	685	200	507	590	1,800
Acres Owned	180	450	200	400	440	1,800
Acres Leased	80	235	0	107	150	0
Pastureland						
Acres Owned	55	20	0	150	60	0
Acres Leased	55	20	0	0	0	0
Assets (\$1000)						
Total	851	2,268	1,244	5,128	2,532	5,110
Real Estate	566	1,037	722	2,303	863	3,112
Machinery	118	273	97	374	268	295
Other & Livestock	167	958	425	2,451	1,402	1,703
Debt/Asset Ratios						
Total	0.47	0.22	0.56	0.18	0.18	0.41
Intermediate	0.87	0.17	0.96	0.11	0.14	0.61
Long Run	0.27	0.28	0.27	0.27	0.27	0.27
2001 Gross Receipts (\$1	1,000)*					
Total	227.3	928.1	632.7	2,497.6	1,685.5	5,599.0
Milk	193.8	842.3	594.9	2,367.0	1,571.6	5,319.4
	85.30%	90.80%	94.00%	94.80%	93.20%	95.00%
Dairy Cattle	33.5	85.7	37.8	130.6	113.9	279.6
	14.70%	9.20%	6.00%	5.20%	6.80%	5.00%
Silage	0.0	0.0	0.0	0.0	0.0	0.0
· ·	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Other Receipts	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2001 Planted Acres**						
Total	260.0	765.0	0.0	640.0	125.0	800.0
Hay	220.0	765.0	0.0	407.0	125.0	800.0
,	84.60%	100.00%	0.00%	63.60%	100.00%	100.00%
Silage	40.0	0.0	0.0	233.0	0.0	0.0
9-	15.40%	0.00%	0.00%	36.40%	0.00%	0.00%
Corn	0.0	0.0	0.0	0.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops. 
\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING BEEF CATTLE

**MTB500** 

A 500-cow ranch located on the eastern plains of Montana (Custer County), MTB500 runs cows on a combination of owned land and land leased from federal, state, and private sources. Federal land satisfies one quarter of its total grazing needs. The ranch owns 14,000 acres of pasture. 720 acres of hay are produced annually on the owned land. Cattle sales represent 100 percent of sales on this ranch each year.

**WYB300** 

This is a 300-cow ranch located in north central Wyoming (Washakie County). The ranch leases 42 percent of the required grazing acreage from the U.S. Forest Service and owns 1,000 acres of range. Annually, the ranch cuts 200 acres of hay on owned ground. Cattle sales account for 100 percent of gross receipts on this ranch.

**NVB680** 

NVB680 is a 680-cow ranch located in northeastern Nevada (Elko County). The operation consists of 1,900 acres of owned hay meadow and 8,725 acres of owned range, supplemented by acreage leased from the U.S. Forest Service that provides four percent of the total grazing needs. Each year, the farm harvests 1,900 acres of hay. Annually, cattle sales represent all of the ranch's receipts.

**COB300** 

This is a 300-cow ranch located in northwestern Colorado (Routt County). Federal land provides seven percent of the ranch's grazing needs. The ranch owns 1,800 acres of rangeland, and the cattle graze federal land during the summer. COB300 harvests 450 acres of hay each year (of which 300 acres are owned and 150 acres are leased). The ranch retains ownership of 75 percent of its steers through the backgrounding stage. Cattle generated 96 percent of the ranch's total receipts during 2001.

**NMB300** 

NMB300 is a 300-cow ranch located in northeastern New Mexico (Union County) that consists of 10,072 owned acres of pastureland. This ranch harvests no hay. All forage and concentrate feed requirements are purchased from outside sources. Ninety-six percent of 2001 total receipts were derived from cattle sales.

**MOB150** 

A 150-cow beef cattle operation is the focal point of this diversified livestock and crop farm located in southwest Missouri (Dade County). This farm operates on 840 acres of owned and leased land. Annually, MOB150 plants 40 acres of corn, 40 acres of sorghum, 80 acres of wheat, 160 acres of soybeans (80 of which are double-cropped following wheat), and 400 acres of hay. During 2001, cattle sales comprised 58 percent of gross receipts and crop sales composed 35 percent.

MOCB350

MOCB350 is a 350-cow beef cattle farm located in central Missouri (Phelps County). This farm consists of 1,974 acres of owned ground and 1,063 acres of leased ground. Annually, 300 acres of hay are harvested on owned land. 2001 cattle sales represented 89 percent of MOCB350's cash receipts.

FLB1155

This is a 1,155-cow ranch located in central Florida (Osceola County). FLB1155 runs cows on 5,400 acres of owned improved pasture, from which 3,560 acres of hay are harvested annually. During 2001, cattle sales represented 90 percent of total receipts.

**OTHERS** 

Nine other representative farms have beef cattle operations along with their crop production (MONG2050, TXBG2000, TXBG2500, TNG900, KSCW4000, KSNW4300, COW3000, TXRP2500, and TXBC1400). These farming operations have from 12 to 200 cows. Cattle contributed from two to 20 percent of gross receipts on these farms in 2001.

Appendix Table A10. Characteristics of Panel Farms Producing Beef Cattle.

	MTB500	WYB300	NVB680	COB300	NMB300	MOB150	MOCB350	FLB1155
County	Custer	Washakie	Elko	Routt	Union	Dade	Phelps	Osceola
Total Cropland	0	200	1,900	450	0	440	0	5,400
Acres Owned	0	200	1,900	300	0	320	0	5,400
Acres Leased	0	0	0	150	0	120	0	0
Pastureland								
Acres Owned	14,000	1,000	8,725	1,800	10,072	320	1,974	0
Acres Leased	0	0	0	0	2	80	1,063	0
Federal AUMs Leased	1,350	1,800	5,400	250	0	0	0	0
State/Private AUMs	1,000	0	0	630	0	0	0	0
Assets (\$1000)								
Total	2,346	3,186	1,899	5,928	2,311	898	2,020	9,176
Real Estate	1,533	2,727	1,299	5,503	1,893	517	1,644	8,254
Machinery	92	152	92	137	116	228	119	116
Other & Livestock	721	306	508	288	301	153	257	806
Debt/Asset Ratios								
Total	0.10	0.12	0.14	0.12	0.15	0.18	0.13	0.10
Intermediate	0.11	0.32	0.27	0.47	0.39	0.30	0.30	0.24
Long Run	0.09	0.09	0.08	0.09	0.10	0.09	0.09	0.08
_								
Number of Livestock	500	202	coc	200	200	450	252	4.455
Beef Cows	500	300	680	300	300	150	350	1,155
2001 Gross Receipts (\$1,000)	)*							
Total	279.0	163.5	291.8	135.8	177.2	132.2	200.5	458.3
0.44	070 -	400 -	204.5	400.5	470 7	75 -	470 :	446.5
Cattle	279.0	163.5	291.8	129.8	170.7	75.9	178.4	410.3
	100.00%	100.00%	100.00%	95.60%	96.30%	57.40%	89.00%	89.50%
Corn	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0
122	0.00%	0.00%	0.00%	0.00%	0.00%	5.40%	0.00%	0.00%
	0.0070	0.0070	0.00,0	0.00,0	0.0070	3. 10 /0	0.0070	0.0070
Sorghum	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0
•	0.00%	0.00%	0.00%	0.00%	0.00%	6.60%	0.00%	0.00%
Soybeans	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	15.30%	0.00%	0.00%
\M/hoot	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0
Wheat	0.0	0.0	0.0		0.0	10.6	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%
Hay	0.0	0.0	0.0	0.0	0.0	9.7	0.0	0.0
/	0.00%	0.00%	0.00%	0.00%	0.00%	7.30%	0.00%	0.00%
	0.0070	0.0070	0.0070	0.0070	0.0070		0.0070	0.0070
Other Receipts	0.0	0.0	0.0	6.0	6.5	0.0	22.1	48.0
•	0.00%	0.00%	0.00%	4.40%	3.70%	0.00%	0.00%	10.50%
0004 Pt								
2001 Planted Acres**	700 -	200 -	4.000.5	450.5	0.5	700 -	4.570 -	0.500.5
Total	720.0	200.0	1,900.0	450.0	0.0	720.0	1,573.0	3,560.0
Corn	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0
Com	0.00%	0.00%	0.00%	0.00%	0.00%	5.60%	0.00%	0.00%
	0.0070	5.0070	3.0070	5.0070	3.0070	3.0070	5.0070	3.00 /8
Sorghum	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0
•	0.00%	0.00%	0.00%	0.00%	0.00%	5.60%	0.00%	0.00%
Soybeans	0.0	0.0	0.0	0.0	0.0	160.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	22.20%	0.00%	0.00%
14/1								
Wheat	0.0	0.0	0.0	0.0	0.0	80.0	0.0	0.0
	0.00%	0.00%	0.00%	0.00%	0.00%	11.10%	0.00%	0.00%
Hay	720.0	200.0	1,900.0	450.0	0.0	400.0	298.0	3,560.0
Tay	100.00%	100.00%	100.00%	100.00%	0.00%	55.60%	18.90%	100.00%
	100.0076	100.0076	100.0078	100.0078	0.0078	00.0076	10.5076	100.0076
Improved Pasture	0.0	0.0	0.0	0.0	0.0	0.0	1,275.0	0.0
*	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	81.10%	0.00%
*Pacainte for 2001 are inclus				interprise to the				

<sup>\*</sup>Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops.

\*\*Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

### 2000 CHARACTERISTICS OF PANEL FARMS PRODUCING HOGS

**IAH400** 

A weaning-to-finish operation located in northwestern Iowa (Cherokee County). The farm purchases 8,000 weaned pigs from other producers and develops them through the finishing stage. IAH400 plants 333 each of acres of corn and soybeans annually. The hog operation produced 90 percent of gross receipts during 2001.

**ILH200** 

A 200-sow hog farm located in western Illinois (Knox County). The farm plants 700 acres each of corn and soybeans each year. This farm weans an average of 17 pigs per sow per year and feeds about 3.5 pounds of feed per each pound of pork sold in a year. The hog operation generated 60 percent of ILH200's cash receipts for 2001 with the remainder of the receipts coming from crop sales.

**ILH750** 

A 750-sow hog farm located in western Illinois (Knox County). The farm plants 1,072 acres of corn and 878 acres of soybeans each year. The farm weans an average of 22 pigs per sow per year and feeds about 3.1 pounds of feed for each pound of pork sold. The hog enterprise generated 84 percent of 2001 gross receipts.

INH200

A 200-sow hog farm located in north central Indiana (Carroll County). This moderate-sized farm plants 600 acres of corn, 145 acres of soybeans, and 25 acres of wheat. INH200 feeds 3.3 pounds of feed per pound of pork sold and weans 17 pigs per sow per year. Seventy-five percent of 2001 total receipts were derived from the sowherd.

INH1200

A 1,200-sow hog farm located in north central Indiana (Carroll County). This large-sized diversified farm plants 2,066 acres of corn, 1,034 acres of soybeans, and 100 acres of wheat annually. This farm weans 20 pigs per sow per year. INH1200 feeds 3.3 pounds of feed per pound of pork sold. The hog operation accounted for 84 percent of total receipts during 2001.

**NCH350** 

A 350-sow hog farm located on the upper coastal plain of North Carolina (Wayne County). This farm maintains 100 acres of hay production to dispose of the farrow-to-finish operation's waste but does not plant any crops for feed. All feed required is purchased. The farm will wean 17 pigs per sow each year and will feed 3.2 pounds of feed per pound of pork sold. Hog sales represent 100 percent of total receipts.

NCH13268

A 13,268-sow hog farm located on the upper coastal plain of North Carolina (Wayne County). The operation contracts with individual farmers who provide on-side management, labor, and facilities. NCH13268 provides hogs, purchased feed, and specialized labor for its group of contract farrowing, nursery, and finishing farms. On average, this farm will wean 20 pigs per sow per year. In terms of feed efficiency, this operation feeds 2.9 pounds of feed per pound of pork sold. One hundred percent of this farm's receipts are generated from hog sales.

Appendix Table A11. Characteristics of Panel Farms Producing Hogs.

	IAH400	ILH200	ILH750	INH200	INH1200	NCH350	NCH13268	
County	Cherokee	Knox	Knox	Carroll	Carroll	Wayne	Wayne	
Total Cropland	667	1,400	1,950	770	3,200	100	0	
Acres Owned	60	140	975	460	1,038	100	0	
Acres Leased	607	1,260	975	310	2,162	0	0	
Pastureland							_	
Acres Owned	0	0	0	0	0	0	0	
Acres Leased	0	0	0	0	0	0	0	
Assets (\$1000)								
Total	1,107	1,595	6,627	1,916	6,693	1,403	24,285	
Real Estate Machinery	241 285	704 413	3,917 778	1,487 300	3,566 1,248	736 110	1 21	
Other & Livestock	581	478	1,931	129	1,878	557	24,263	
	361	4/0	1,931	129	1,070	337	24,203	
Debt/Asset Ratios								
Total	0.25	0.29	0.27	0.37	0.30	0.27	0.11	
Intermediate	0.23 0.33	0.25 0.33	0.17 0.33	0.50 0.33	0.27 0.33	0.19 0.34	0.11 0.32	
Long Run	0.33	0.33	0.33	0.33	0.33	0.34	0.32	
Number of Livestock								
Beef Cows	0	0	0	0	0	0	0	
Sows	1,000	200	750	200	1,200	350	13,268	
2001 Gross Receipts (\$1,0	00)*							
Total	1,005.3	594.4	2,097.1	493.7	3,396.0	827.5	30,585.9	
Cattle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Hogs	905.1	356.4	1,754.7	368.3	2,847.9	827.5	30,585.9	
11093	90.00%	60.00%	83.70%	74.60%	83.90%	100.00%	100.00%	
Corn	21.3	98.2	75.8	90.5	239.5	0.0	0.0	
	2.10%	16.50%	3.60%	18.30%	7.10%	0.00%	0.00%	
Soybeans	76.4	137.0	266.6	30.0	283.5	0.0	0.0	
	7.60%	23.00%	12.70%	6.10%	8.30%	0.00%	0.00%	
Wheat	0.0	0.2	0.0	4.9	25.2	0.0	0.0	
***************************************	0.00%	0.00%	0.00%	1.00%	0.70%	0.00%	0.00%	
Other Receipts	2.5	2.5	0.0	0.0	0.0	0.0	0.0	
Outer Receipts	2.5 0.20%	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%	
	0.2070	0.1070	0.0070	0.0070	0.0070	0.0070	0.0070	
2001 Planted Acres**								
Total	667.0	1,400.0	1,950.0	770.0	3,200.0	0.0	0.0	
Corn	333.5	700.0	1,072.5	600.0	2,066.0	0.0	0.0	
	50.00%	50.00%	55.00%	77.90%	64.60%	0.00%	0.00%	
Couhanna	222 5	700.0	977 E	145.0	1 024 0	0.0	0.0	
Soybeans	333.5 50.00%	700.0 50.00%	877.5 45.00%	145.0 18.80%	1,034.0 32.30%	0.0 0.00%	0.0 0.00%	
	50.0078	30.0070	40.0070	10.0070	02.00 /d	0.0076	0.0076	
Wheat	0.0	0.0	0.0	25.0	100.0	0.0	0.0	
	0.00%	0.00%	0.00%	3.20%	3.10%	0.00%	0.00%	
Hay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
,	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

<sup>&</sup>quot;Receipts for 2001 are included to indicate the relative importance of each enterprise to the farm. Percents indicate the percentage of the total receipts accounted for by the livestock categories and the crops. ""Acreages for 2001 are included to indicate the relative importance of each enterprise to the farm. Total planted acreage may exceed total cropland available due to double cropping. Percents indicate the percentage of total planted acreage accounted for by the crop.

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### **APPENDIX B:**

## LIST OF PANEL FARM COOPERATORS

### FEED GRAIN FARMS

### Iowa

### **Facilitators**

Mr. Jim Patton - Webster County Extension Agent

### Panel Participants

Mr. Phil Naeve Mr. Loren Wuebker
Mr. Robert Lynch Mr. Dennis Ammen
Mr. Don Sandell Mr. John Ricke
Mr. Bob Anderson Mr. Virgil Gordon
Mr. Larry Lane Mr. Merv Berg

Mr. Perry Black Mr. and Mrs. Jim Carver

### Nebraska

### **Facilitators**

Mr. Gary Hall-Phelps County Extension Agent, Cooperative Extension Service Dr. Roger Selley - Extension Farm Management Specialist, University of Nebraska

Mr. Joe Trujillo-University of Missouri-Colombia

### Panel Participants

Mr. Kerry BlytheMr. Tony DavisMr. Frank HadleyMr. Phil HighMr. Brian JohnsonMr. Johnny C. NelsonMr. Gary RobinsonMr. Tom Schwarz

### Missouri - Central

### **Facilitator**

Mr. Parman Green - Farm Management Specialist, University of Missouri - Columbia

Mr. Peter Zimmel - University of Missouri-Columbia

### Panel Participants

Mr. Ron Gibson Mr. Ron Linneman Mr. Glen Kaiser Mr. James Wheeler Mr. Gerald Kitchen Mr. Jack Harriman Mr. Mike Hisle

### **Texas - Northern High Plains**

### **Facilitators**

Mr. Robert Harris - Moore County Agricultural Extension Agent

Dr. Steve Amosson - Extension Economist - Management, Texas A&M University

### Panel Participants

Mr. Ellis MooreMr. Kelly WilliamsMr. Tom MooreMr. Kerri CartwrightMr. Brent ClarkMr. Rick MayMr. Kelly HaysMr. Clyde Tims

Mr. Jerry Trussell

### FEED GRAIN FARMS (CONTINUED)

### Missouri -Northern

**Facilitator** 

Mr. Mike Killingsworth - Farm Management Consultant, Maryville, Missouri

Mr. Peter Zimmel - University of Missouri-Columbia

Panel Participants

Mr. Jack Baldwin Mr. Kevin Rosenbohm

Mr. Roger Vest Mr. Gary Ecker

### **South Carolina**

Facilitator

Mr. Toby Boring - Extension Agricultural Economist, Clemson University

Panel Participants

Mr. Harry DuRantMr. Leslie McIntoshMr. John DucworthMr. Steve LowderMr. Tom JacksonMr. Billy DavisMrs. Vikki BrogdonMr. Chris Cogdill

### **Tennessee**

**Facilitator** 

Dr. Kelly Tiller, Assistant Professor, University of Tennessee

Panel Participants

Mr. Edwin Alles Mr. Jack Ogg
Mr. Donald Parker Mr. Doug Schoolfield
Mr. Greg Story Mr. Daniel Wengerd
Mr. Paul Wengerd Mr. James Yarbro

### **Texas - Blackland Prairie**

**Facilitators** 

Mr. Bill Buxkemper - County Extension Agent, Agriculture, Hill County Mr. Donald Kelm - County Extension Agent, Agriculture, Falls County

### Panel Participants

Mr. Kenneth Machac Mr. Ben Dieterich, Jr. Mr. Lanny Neil Mr. Keith Drews Mr. Barney Pastejoysky Mr. R.L. Kuretsch Mr. John Sawyer Mr. Gary Strabanet Mr. Aaron Walters Mr. Tom Zander

### WHEAT FARMS

### Washington

### **Facilitators**

Mr. Randy Baldree - Whitman County Agricultural Extension Agent

Mr. John Burns - Washington State Extension Crops Specialist

Dr. Herb Hinman - Extension Economist, Washington State University

### Panel Participants

Mr. Brian LargentMr. Jon WhitmanMr. Bruce NelsonMr. Randy SuessMr. Asa ClarkMr. Del TeadeMr. Gary LargentMr. Steve Teade

### **North Dakota**

### **Facilitators**

Mr. Shawn Vachal - Barnes County Extension Agent

Mr. Dwight Aakre - Extension Associate - Farm Management, North Dakota State University

### Panel Participants

Mr. Mike Clemens
Mr. Arvid Winkler
Mr. Arvid Winkler
Mr. Anthony Thilmony
Mr. Wade Bruns
Mr. Leland Guscette
Mr. Jack Formo
Mr. Greg Shanenko
Mr. Jim Broten
Mr. Charles Triebold

### **Kansas - South Central**

### **Facilitators**

Mr. Gerald LeValley - Sumner County Agricultural Extension Agent

Mr. Steve Westfahl - Sedgwick County Extension Agent

### Panel Participants

Mr. Robert White Mr. Tim Turek
Mr. Nick Steffen Mr. Rae Reusser
Mr. Donald Applegate Mr. Jim Stuhlsatz

### Colorado

### **Facilitators**

Mr. Dennis Kaan - Regional Extension Specialist, Colorado State University

Mr. Don Nitchie - Director, Farm Mgmt/Marketing, Colorado State University Cooperative Extension

### Panel Participants

Mr. Terry Kuntz
Mr. John Hickert
Mr. Marlin Snyder
Mr. Bill Rodwell
Mr. John Wright
Mr. Gerry Ohr
Mr. Cliff Fletcher
Mr. David Foy
Mr. Ken Remington
Mr. Leland Willeke
Mr. Monte Willeke

### WHEAT FARMS (CONTINUED)

### Kansas - Northwestern

### **Facilitators**

Mr. Fred DeLano-Farm Management Program, Kansas State University

Mr. Scott Docken - Extension Agricultural Economist, Farm Management Association, KSU

Mr. Mark Wood - Extension Agricultural Economist, Farm Management Association, KSU

Mr. Dan O'Brien - Extension Agricultural Economist, Kansas State University

### Panel Participants

Mr. Harold Mizell
Mr. Gerald Huessman
Mr. Brian Laufer
Mr. Steve Schertz
Mr. Lee Jueneman
Mr. Dennis Franklin
Mr. Lance Leebrick
Mr. Rich Calliham
Mr. Lyman Goetsch
Mr. Vernon Akers

### **COTTON FARMS**

### California

**Facilitator** 

Mr. Bruce A. Roberts - Kings County Director and Farm Advisor, University of California Cooperative Extension

Panel Participants

Mr. Craig Pedersen Mr. Bo Champlin Mr. Carlton Duty Mr. Dave Smith

### **Texas - Southern High Plains**

**Facilitators** 

Mr. John Farris - Dawson County Agricultural Extension Agent

Dr. Jackie Smith - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Milton Schneider
Mr. Dave Nix
Mr. Lonny Ferguson
Mr. Glen Phipps
Mr. Todd Gregory
Mr. Donald Vogler
Mr. Kent Nix
Mr. Brad Boyd
Mr. Mark Furlow
Mr. Jerry Chapman

### **Texas - Rolling Plains**

**Facilitators** 

Mr. Todd Vineyard - Ellis County Agricultural Extension Agent

Mr. Stan Bevers - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Ronnie Richmond Mr. Ronnie Riddle Mr. Dennis Olson Mr. Ferdie Walker

### **Texas - Blackland Prairie**

Facilitator

Mr. Ronnie Leps - Williamson County Agricultural Extension Agent

Panel Participants

Mr. Donald Stolte Mr. Bob Bartosh

Mr. Herbert Raesz Mr. Lonny Rinderknecht

Mr. Doug Schernik

### **Texas - Coastal Bend**

**Facilitators** 

Mr. Jeffrey Stapper - San Patricio-Aransas County Extension Agent

Dr. Larry Falconer - Extension Economist - Management, Texas A&M University

Panel Participants

Mr. Brad Bickham Mr. Darby Salge

Mr. Clarence Chopelas

### **COTTON FARMS (CONTINUED)**

### **Tennessee**

Facilitator

Dr. Kelly Tiller, Assistant Professor, University of Tennessee Jim Castellaw, Farm Management Specialist, University of Tennessee Chuck Danehower, Farm Management Specialist, University of Tennessee Jamie Jenkins, County Extension Agent, Fayette County, Tennessee Tim Roberts, County Extension Agent, Crockett County, Tennessee

### Panel Participants

Mr. Harris Armour, III Mr. Tom Karcher
Mr. Eugene McFerren Mr. Dewayne Hendrix
Mr. Travis Lonon Allen King

### Arkansas - Southeast

Panel Participants

Mr. Gregg Day Mr. Jim Whitaker
Mr. Jeff Keeter Mr. Phillip Baugh
Mr. Joe Mencer Mr. Sam Whitaker

### Alabama

Facilitator

Mr. Steve Ford, Blythe Farms

Panel Participants

Mr. James Blythe Mr. Ron Terry
Mr. William Lee Mr. Paul Clark
Mr. Larkin Martin

### **North Carolina**

Facilitator

Mr. R.H. "Bob" Pleasants, County Extension Agent, Wayne County, North Carolina

Panel Participants

Mr. Julian Nelms Mr. Danny Pierce
Mr. Craig West Mr. Bryant Worley
Mr. Landis Brantham, Jr.

### Louisiana

Facilitator

Dr. L. Eugene Johnson, Specialist in Marketing, Louisiana Cooperative Extension Service, Natural Resources and Economic Development

### Panel Participants

Mr. J. Macon LaFoe, Sr.Mr. Buddy DavisMr. Jerry StuttsMr. Buddy PageMr. Jess BarrMr. Randy Miller

Mr. John Barnet

### **RICE FARMS**

### Arkansas

**Facilitator** 

Bill Free - Riceland Foods

Panel Participants

Mr. Jerry Burkett Mr. David Jessup Mr. Dusty Hoskyn Mr. Monty Bohanan

Mr. Derek Bohanan

### **Texas**

Panel Participants

Mr. W. A. "Billy" Hefner, III Mr. Andy Anderson
Mr. Kenneth "Peter" Stelzel Mr. John Waligura
Mr. Steve Balas Mr. Jason Hlavinka
Mr. Brian Wiese Mr. Kenneth Danklefs

### California

Facilitator

Mr. Jack Williams - Farm Advisor, Sutter and Yuba Counties, Univ. of California Cooperative Extension

Panel Participants

Mr. Bill Baggett Mr. Frank Rosa
Mr. Jack DeWit Mr. Wayne Vineyard
Mr. Ned Lemenager Mr. Paul Lowery
Mr. Walt Trevethan Mr. Scott Tucker
Mr. Steve Butler Mr. Bob VanDyke

### Missouri

**Facilitators** 

Mr. Bruce Beck - Farmer's Agronomy Specialist, University of Missouri - Columbia Mr. David Guethle - Area Agronomy Specialist, University of Missouri - Columbia

Panel Participants

Mr. Sonny MartinMr. Fred TannerMr. Bruce YarbroMr. J. D. SiffordMr. C. P. JohnsonMr. Mike MickMr. Davis MintonMr. Rick SpargoMr. Floyd PageMr. Cloyce Sowell

Mr. Dale Conner

### Louisiana - Southwest

**Facilitators** 

Dr. L. Eugene (Gene) Johnson - Specialist in Marketing, Louisiana Cooperative Extension Service, Natural Resources and Economic Development

Panel Participants

Mr. Alden Horten Mr. Paul "Jackie" Loewer

Mr. Tommy Faulk Mr. Brian Wild

### RICE FARMS (CONTINUED)

### Louisiana - Northeast

**Facilitators** 

Dr. L. Eugene (Gene) Johnson - Specialist in Marketing, Louisiana Cooperative Extension Service, Natural Resources and Economic Development

Panel Participants

Morgan SmithFred FranklinDamian BollichEd PatrickMarvin ColvinBuford PerrySteve HendersonJohn OwenMark BrownLindy Lingo

Mississippi

Panel Participants

Abbott R. Myers Hugh Arant Scott A. Arnold, III David Arant

Nolan Canon

### **DAIRY FARMS**

### California

**Facilitator** 

Mr. Larry Serpa - Land O' Lakes

Panel Participants

Mr. Dave Rebeiro Mr. Bill Van Beek Mr. Jeff Wilbur

### **New Mexico**

Facilitator

Dr. Robert Schwart - Professor and Extension Economist, Texas A&M University

Panel Participants

Mr. Joe Gonzalez Mr. Marc Reischman Mr. Bill Davis Mr. Mike Visser

Mr. Bob Wade

### Washington

**Facilitator** 

Mr. Robert Dyk - Watcom County Agricultural Extension Agent

Panel Participants

Mr. Ron BronsemaMr. Keith BoonMr. Rod DeJongMr. Dick BengenMr. Greg McKayMr. Peter Vlas

Mr. Ed Pomeroy

### Idaho

**Facilitator** 

Mr. Dean Falk - Extension Dairy Specialist, University of Idaho

Dr. Wilson Gray - Farm Management Specialist - University of Idaho

Panel Participants

Mr. & Mrs. Martin Lee
Mr. Harry Hogland
Mr. Michael Quesnell
Mr. Greg Ledbetter
Mr. Bill Stouder
Mr. Rick Thompson
Mr. John Beukers
Mr. Adrian Boer
Mr. Reagon Hatch
Mr. Alan Gerratt
Mr. Hank Hafliger
Mr. Randy Tolman

### Texas - Central

Facilitator

Mr. Joe Pope - Erath County Agricultural Extension Agent

Panel Participants

Mr. Lane Jones Mr. Lonnie Hammonds
Mr. Leonard Moncrief Mr. Jack Parks
Mr. Jake Van Vliet Mr. Owen Sieperda

### Texas - Eastern

Facilitator

Mr. Ron Tosh - Dairy Farmers of America, Field Supervisor

Panel Participants

Mr. Jimmy Barnhart Mr. Gary Overstreet
Mr. Burk Bullock Mr. Richard Fannin
Mr. Allan Caddell Mr. Douwe Plantinga

### **DAIRY FARMS (CONTINUED)**

### Missouri

Facilitator

Mr. Stacey Hamilton - Greene County Dairy Specialist

### Panel Participants

Mr. Allen Sulgrove Mr. & Mrs. Doug Owen Mr. & Mrs. Freddie Martin Mr. Wayne Whitehead Mr. Joe Peebles Mr. Larry Winfree Mr. John McArthur

### Michigan

### Facilitator

Mr. Dan Bollinger - County Extension Agent - Clinton County Mr. Dennis Stein-District Farm Business Management Agent Dr. Craig Thomas - County Extension Agent - Sanilac County

### Panel Participants

Mr. Ken Halfmann Mr. Albert Steenblik
Mr. Dwight Bartle Mr. Mike Fagan
Mr. Jason Shinn Mr. Duane Stuever

### Florida

### **Facilitators**

Mr. Chris Vann - Lafayette County Agricultural Extension Agent

Mr. Art Darling - Sunshine State Milk Producers

### Panel Participants

Mr. Morris Jackson Mr. Everett Kerby
Mr. Bobby Koon Mr. Terry Reagan
Mr. Louis Shiver Mr. Roger Butler
Mr. Bob Butler Mr. Ray Melear
Mr. Glynn Rutledge Mr. Bob Rydzewski

### Wisconsin

### **Facilitator**

Mr. Jeff Key - Winnebago County Agricultural Extension Agent

### Panel Participants

Mr. Fred Kasten Mr. Pete Van Wychen Mr. Joseph Bonlender Mr. Pete Knigge Mr. John Ruedinger Mr. Dean Hughes Mr. Dave Bradley Mr. Gary Frank Mr. Michael Hinz Ms. Linda Hodorff Mr. Vernon Newhouse Mr. Larry Pollack Mr. Ben Hughes

### **DAIRY FARMS (CONTINUED)**

### Georgia

Facilitator

Mr. Bill Thomas - Professor and Extension Economist, University of Georgia

Mr. Bobby Smith - Morgan County Extension Agent

Panel Participants

Mr. Zippy DuVall Mr. Carlton McMichael

Mr. Mike Rainey Mr. Joe West
Mr. Everett Williams Mr. Lane Ely
Mr. Terry Camp Mr. Bill Boyce
Mr. Bernard Sims Mr. Terry Embry
Mr. John Bernard Mr. Lamar Anthony

Mr. Henry Cabiness

### New York - Western

Facilitator

Mr. Steve Richards - Cornell Cooperative Extension

Panel Participants

Mr. Walter Faryns Mr. Kent Miller Mr. Collin Broughton Mr. Bill Fitch Mr. George Mueller Mr. John Mueller

Mr. John Noble

### **New York - Central**

Facilitator

Dr. Wayne Knoblauch - Professor, Cornell University

Panel Participants

Mr. Gary Mutchler Mr. Robert Howland Mr. Bill Kilcer Mr. Robert Space Mr. Chuck Benson Mr. Mike Learn Mr. Edie McMahon Mr. Kenton Patchen

Mr. Martin Young

### Vermont

Facilitator

Dr. Rick Wackernagel - Professor, University of Vermont

Panel Participants

Mr. Steve Hurd Mr. Kim Harvey
Mr. Everett Maynard Mr. Stanley Scribner
Mr. Ted Foster Mr. Roger Rainville
Mr. Onan Whitcomb Ms. Sally Goodrich
Mr. Mark Rogers Mr. Steven Jones
Mr. David Conant Mr. Mitch Montagne

Mr. Dennis Mueller

### **BEEF PRODUCERS**

### **Missouri - Southwest**

**Facilitators** 

Joe Trujillo-University of Missouri-Colombia

Panel Participants

Mr. James Nivens
Mr. Chuck Daniel
Mr. Randall Erisman
Mr. Mike Theurer
Mr. Steve Allison
Mr. Brian Gillen

### Missouri - Central

**Facilitators** 

Mr. Jerry Terrill, Phelps County Extension Agent Mr. Peter Zimmel, University of Missouri-Columbia Mr. Brent Carpenter, University of Missouri-Columbia

Panel Participants

Mr. G. Douglas Black
Mr. George A. Barnitz
Mr. Ken Lenox
Mr. Tom Gollhofer

### Montana

**Facilitators** 

Mr. Kent Williams - Custer County Agricultural Extension Agent

Panel Participants

Mr. Dee Murray Mr. Art Drange
Mr. Clarence Brown Mr. Jeff Okerman

Mr. Donald Ochmer

### Colorado

Facilitator

Mr. C.J. Mucklow - Routt County Agricultural Extension Agent

Panel Participants

Mr. Doug Carlson
Mr. Jay Fetcher
Mr. Geoff Blaresle
Mr. Robert Bruchez
Mr. Robert Bruchez

### Wyoming

**Facilitators** 

Mr. Jim Gill, County Extension Agent, Washakie County

Panel Participants

Mr. Gary Rice Mr. Tim Flitner
Mr. Tom Brewster Mr. Jim Foreman

### **BEEF PRODUCERS (CONTINUED)**

### **New Mexico**

### **Facilitators**

Mr. David Graham - Union County Extension Specialist

Mr. Jason Sawyer - Clayton Livestock Research Center, New Mexico State University

### Panel Participants

Mr. Damon Brown Mr. Derek Walker
Mr. John Vincent Mr. Eugene Like
Mr. John Gilbert Mr. Albert Burton

### Florida

### **Facilitators**

Mr. John Earman, Consultant

Dr. John Holt, Professor - University of Florida

### Panel Participants

Mr. Bert Tucker Ms. Doris Lisle
Mr. Alan Kelley Dr. Fred Tucker
Mr. Wes Williamson Dr. Judy Bozeman
Mr. Mike Adams

### Nevada

### **Facilitators**

Mr. Willie Riggs - Eureka County Extension Agent

Mr. Ron Torell - Eureka County Extension Agent

Mr. Tim Darden, Research Associate - University of Nevada - Reno

### Panel Participants

Mr. Tom BarnesMr. Peter ChurchMr. Ed SarmanMr. Niel McQuearyMr. Wilde BroughMr. Jay Wright

Mr. Allan Glaser

### **HOG FARMS**

### Illinois

Facilitator

Mr. Don Teel - Retired Knox County Agricultural Extension Agent

Panel Participants

Mr. David HawkinsonMr. Steve MainMr. Dale CarlsonMr. Don EricksonMr. David BowmanMr. Lance HumphreysMr. John GustafsonDr. Donald G. Reeder

Mr. Sterling Saline

### Indiana

**Facilitator** 

Mr. Steve Nichols - Carroll County Agricultural Extension Agent

Panel Participants

Mr. Rick Brown Mr. Levi Huffman Mr. Brad Burton Mr. Jim Yost

### **North Carolina**

**Facilitators** 

Ms. Eileen Coite - Wayne County Agricultural Extension Agent

Dr. Kelly Zering - Associate Professor and Extension Specialist, North Carolina State University

Panel Participants

Mr. Ben OutlawMr. Frankie WarrenMr. David Harrell OvermanMr. Jeff HansenMr. Charlie McClennyMr. John DawsonMr. Ronald ParksMr. R.H. Mohesky

Mr. David Sanderson

### Iowa

**Facilitators** 

Mr. David Stender - Cherokee County Extension Agent

Panel Participants

Mr. Bruce AmundsonMr. Bill WolfMr. Tim BiermanMr. Jay HoflandMr. Duane CaveMr. Kent Ohlson

Mr. Joe Rotta