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State-Level Costs of Production, 1986

Gregory Davenport

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ABSTRACT

The cost of producing major U.S. field crops fell an average 10 percent in 1986. The decline was led by fuel costs, followed by fertilizer costs. However, prices received by farmers declined by a higher percentage, thus deteriorating returns. The costs and returns in this report are consistent with regional and national weighted averages published annually in the Economic Indicators of the Farm Sector: Costs of Production. The estimates are preliminary and subject to revision.

Keywords: Costs of production, costs and returns.

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These State budgets are presented for research and review only. Comments are encouraged and should be directed to the author at USDA-ERS, 1301 New York Avenue NW., Room 937, Washington, DC 20005-4788. Phone (202) 786-1801.

State-Level Costs of Production, 1986

Gregory Davenport

INTRODUCTION

The U.S. Department of Agriculture's Economic Research Service (ERS) has been estimating costs of production (COP) for major U.S. crops since 1974. In estimating these costs, ERS uses survey data to create State budgets by crop and cropping practice. The State budgets in the appendix tables are updated and revised from a computerized budget generator. The budgets are aggregated each summer by means of a weighted average to the regional and national levels and are published in ERS' annual Economic Indicators of the Farm Sector: Costs of Production.

This report supplements the annual economic indicators report. The estimates are preliminary and subject to revision. This report briefly describes the concepts and methods behind the estimates and the process of interpreting the costs and returns budgets. More detailed explanations and data sources are in the annual ERS Economic Indicators of the Farm Sector reports.

STRUCTURE OF THE ACCOUNTS

Each enterprise budget contains cost and return measures separated into three major categories: cash receipts, cash expenses, and economic costs. ERS and the National Agricultural Statistics Service (NASS) collect much of the data used to estimate the costs through surveys of farmers. Quantities of variable inputs, multiplied by their prices, determine the costs shown in the enterprise budgets.

Cash Receipts and Cash Expenses

Cash receipts measure the gross value of production, allowing analysts to estimate the residual returns to management and owned resources used in producing crops. Receipt information used to calculate net returns allows one to review the economic performance of a commodity in a particular year or over time.

Cash expenses account for the variable and fixed inputs and are the out-of-pocket costs incurred during production. The cashflow position of producers is determined by subtracting cash expenses from the value of production (cash receipts).

ERS tabulates cash returns (receipts less expenses) before and after a charge for replacing the capital invested in buildings and machinery. In any given year, an operator may defer machinery and equipment purchases, depending on the income or tax position of the farm. Over the long run, however, operators must set aside funds to replace equipment. The remaining cash returns reflect funds available for family living, debt retirement, or other discretionary uses and should provide for depreciation of machinery and equipment.

Economic (Full Ownership) Costs

Total economic costs and returns can be used to compare various commodities without regard for equity levels or tenure of producers. For example, the cash expenses of two farm operators who produce corn may differ because of differing levels of debt, even if they use identical practices and technology on similar land.

Economic costs partly consist of variable expenses (less actual interest charges) plus general farm overhead, taxes and insurance, and the charge for capital replacement. If the total of these items is subtracted from cash receipts, the remainder is a return to the farmer's owned inputs used to cover the costs of land, machinery, labor, and capital invested in operating inputs during production. The cost allocated to land, machinery, and labor is based only on the imputed value of each item used for crop production.

Individual operators have many methods of allocating residual returns to cover the costs of owned or fixed resources. Some operators assign a proportionately large return to cover landownership costs and then leave a small return to unpaid labor. Others may do the opposite. To allocate residual returns to each asset, the COP budgets use the annual rate of return the producer could expect capital to earn in the current year without accounting for inflation or deflation.

The earnings value of an owner-supplied input during production is difficult to determine. One cannot easily assess the additional revenue earned when a producer invests more money in operating inputs rather than incurring additional short-term debt. Therefore, the accounts in this report are calculated by assuming that the rational producer expects money invested in variable production inputs to earn at least as much as if it were placed in a savings account or a similar financial instrument. Thus, that relatively risk-free rate of return (which is the opportunity cost of the funds) is used to estimate the imputed annual return to invested operating capital. ERS uses the average 6-month U.S. Treasury bill rate.

ERS uses a similar procedure to value the time the operator and other individuals work on the farm. At a minimum, their unpaid labor is worth the equivalent of the hired-labor wage rate. Any additional return reflecting the operator's entrepreneurial skill appears in the residual return to management and risk.

The annual expected return the average producer might receive from capital invested in machinery and other nonland production assets is estimated directly from data published in ERS' annual Economic Indicators of The Farm Sector: National Financial Summary. A single real rate of return estimates the annual earnings of owner-supplied or owned assets for all commodities in all regions. This rate was revised this year to reflect new estimates of the imputed returns to operator's labor as discussed in the appendix of ERS' annual Economic Indicators of the Farm Sector: Production and Efficiency Statistics 1985. Another change is in the use of a 10-year average rather than 20 years. It is felt that 10 years better reflects the ownership of the non-land capital, particularly machinery. The 10-year average calculated rates for 1984-86 are:

Year	Old Percentage	New Percentage
1984	4.20	2.26
1985	4.34	2.14
1986	Not available	2.16

Data are not available to estimate rates specific to various commodities and regions. Returns to land for crops include rental value as a proxy for land returns rather than the real rate of return to production assets.

The return to management and risk is the residual amount after deducting all the above costs from total receipts. The return to management and risk can be evaluated only in light of the given allocation of residual returns and is directly comparable only when the same procedure is used for those commodities. The longrun return to risk is expected to average near zero; the residual return to risk in any particular year could be positive or negative depending on weather and supply and demand factors. The return to management should be positive, but the level remains unknown and is speculative. Therefore, the residual return to management and risk combined is expected to average above zero over time.

PROCEDURE

ERS prepares and presents COP data in an enterprise budget, which summarizes all operator and landlord costs and returns associated with producing a commodity. ERS prepares crop enterprise budgets on a per-planted-acre basis. The State enterprise budgets cover each commodity in each major producing region and represent average production input use and technology. These budgets (excluding rice) are based on surveys taken through the spring 1984 in which NASS drew a random sample from all producers who responded to acreage and production surveys. NASS sampled farms from the list of respondents with a probability (proportionate to size) that each unit of production (an acre or animal) in the region had an equal chance of being included in the survey. Therefore, the survey data tend to represent acreages of surveyed crops on larger commercial farms because of their many acres. For example, a 1,000-acre farm with 400 acres of a COP crop has twice the probability of being sampled as a 1,000-acre farm with 200 acres of the same crop.

For rice, and all future surveys, ERS uses the Farm Costs and Returns Survey (FCRS). The FCRS is a full probability survey started in 1984. The changes implemented by the FCRS were mainly in the sample design. The most noticeable differences in the COP budgets will be the shifting of categories of some cost items. A more indepth look at exactly what changes were made can be found in ERS' annual Economic Indicators of the Farm Sector: Costs of Production, 1986. Rather than solicit per-acre costs directly from farmers, ERS uses more generalized methods because individual farmers often use different accounting procedures. Surveys determine the quantity of each input and describe field operations, the size and type of equipment, fertilizing rates, seeding rates, custom operations, and labor use.

Engineering relationships and a computerized budget generator determine fuel use, repairs, total labor for crop production, and machinery replacement costs. The economic engineering equations, developed by the American Society of Agricultural Engineers, calculate machinery repair and fuel costs as well as a replacement allowance, interest, taxes, and insurance based on the original price of the machine and annual hours of use. Formulas also estimate the required amount of labor needed to operate machines. COP surveys provide the amount of hand labor. Table 1 shows the survey years on which the cost estimates are based.

Table 1--Surveys of major commodities, selected years

Commodity	Production year 1/	:	Commodity	Production year 1/
Corn	1982 and 1983	:	Flax	1983
Sorghum	1982 and 1983	:	Cotton	1982
Barley	1982 and 1983	:	Soybeans	1982 and 1983
Oats	1983	:	Sunflowers	1983
Wheat	1982 and 1983	:	Peanuts	1982
Rice	1984	:		

1/The 1982 survey was conducted in the Southern States and the Pacific Northwest. The 1983 survey was conducted in the Northern States. The 1984 survey was conducted in the major rice producing States.

USING COST-OF-PRODUCTION DATA

Although the costs and returns in USDA's budgets are on a per-acre basis, per-bushel or per-pound estimates can supplement farm management or planning and agricultural policy and program decisionmaking. Per-unit crop costs and returns can be derived by dividing the per-acre costs and returns by the yields given here or by trend yields determined elsewhere.

Four cost indicators and three return indicators can be derived from each budget. These indicators can be used for many purposes so correct selection of the proper cost or return depends entirely on the user's objectives.

Cost Indicators

Total cash expense reflects the shortrun out-of-pocket variable and fixed costs incurred, and minimum breakeven price needed, to raise and harvest a crop with a given yield on an average acre of cropland.

Total cash expense with replacement reflects all cash expenses and the additional dollars needed to replace the machinery and equipment used in crop production. Capital stock must be replaced in a timely manner to maintain productive capacity over time.

Economic costs excluding land reflect all cash expenses (less cash interest), capital replacement, and allocated returns to unpaid labor, operating capital, and nonland capital. ERS imputes the allocated returns for some items because they cannot be measured directly. Economic costs indicate the average longer run costs, which must be covered to keep an acre of land in production before land rent is paid, whether to the owner-operator or to the landholder.

Economic costs including land reflect total economic costs, including an estimated rent to the landowner. On a per-unit basis, these costs show the breakeven longrun average price necessary to continue producing a crop. This is an indicator of total costs.

Return Indicators

Net cash returns (total cash receipts less total cash expenses) are strictly cash returns and are the cash in hand to allocate to capital replacement and owned factors of production.

Net cash returns after replacement (receipts less cash expenses and replacement) reflect cash available for paying for the farmer's owned inputs after all cash costs are paid.

Residual returns to management and risk (total receipts less total economic costs) are the longrun economic indicators used to compare performance of commodities and to assess relative returns among commodities.

1986 PRODUCTION COSTS AND RETURNS

The 1986 costs of producing major U.S. field crops continued 1985's decline. Also, the price received by farmers for their commodities declined. For some crops, the fall in prices received by farmers exceeded the fall in costs, thus further squeezing profit margins.

Farmers planted 328.3 million acres to the major field crops in 1986, a decline of 4 percent from 1985. This represents the second smallest amount of land in production this decade. A feed grain program was in effect that enticed farmers to hold out land usually used in production. Feed grains accounted for most of the fall in acreage. Corn acreage alone fell from 83.5 million acres in 1985 to 76.7 million acres in 1986.

Most input costs fell, with fuel and interest payments leading the way at 19.5 and 11.0 percent. General inflation, as measured by the Consumer Price Index (CPI), was a low 1.9 percent. Wages, coupled with autos and trucks, were the only inputs whose costs rose by a higher amount. The only other input costs to rise were taxes and other machinery.

The 1986 costs changed sharply from the year before with fuel costs leading the way. The significance of lower fuel costs is enhanced by recognition that fuel costs can range from 4 to 12 percent of total cash expenses depending on the crop. Fertilizer costs continued down on a national average by 8.1 percent in 1986. Soybeans, peanuts, and cotton were affected less as fertilizer costs accounted for 5 to 8 percent of total cash expenses, compared with 6 to 34 percent for grains. Table 2 provides a view of what selected input prices did in 1986.

Table 2--Price changes for selected input items, 1986

Item	Change Percent
Farm origin:	
Feed	-9.1
Feeder livestock	-.7
Nonfarm origin:	
Wage rates	3.9
Interest payments	-10.5
Taxes	1.1
Buildings	-.3
Autos and trucks	2.4
Tractors	-2.2
Other machinery	.6
Farm supplies	-1.6
Fuels	-19.5
Farm chemicals	-.9
Seed	-3.3
Fertilizer	-8.1

Automobiles, trucks, and pulled farm implements showed smaller price increases than in the previous year. But the trend of farmers using farm machinery longer continues. Total expenses for machinery purchases, therefore, would tend to decrease as farmers buy less equipment.

Total cash expenses fell for every major crop. Crops such as cotton, hard red spring wheat, hard red winter wheat, oats, and barley showed double digit

percent expense declines in many cases. Commodity prices also fell and in some cases by a higher proportion, thus causing net cash returns to deteriorate. There was one exception. Peanut prices went up while the cost associated with their production went down. Due to production practices, climate, and soil, expenses vary across States, as does the price a farmer receives.

Net land returns for oats and wheat fell off drastically. The fall in price for these two crops was only part of the story. As a rule, falling prices are the result of rising yields, but this did not occur in 1986 for oats and wheat. These two crops had lower yields accompanied by falling prices, thus in effect shrinking net returns to land.

Table 3 lists the per-unit total economic cost ranges for the major commodities. The costs were estimated as the total economic cost of producing the commodity divided by the actual planted-acre yield. These costs are for 1986 only and do not necessarily represent an average year. For example, small grains like oats were frequently used for a cover crop, being planted but not harvested.

The appendix tables present the State COP budgets for the major crops. Budgets are arranged alphabetically by State with feed grains followed by food grains, oilseed crops, and fibers.

Table 3--Per-unit economic cost ranges for major commodities, 1986

Crop	Low-cost State	U.S. average	High-cost State
<u>Dollars per bushel</u>			
Corn	1.68 (SD)	2.04	4.52 (SC)
Grain sorghum	1.69 (NE-DRY) <u>1/</u>	2.22	4.07 (CA)
Barley	1.95 (ND-AC) <u>1/</u>	2.58	4.95 (MT-AC)
Oats	1.81 (ND)	3.32	8.67 (IL)
Hard red winter wheat	2.55 (ID-AF) <u>1/</u>	3.88	9.04 (NM-IRR) <u>1/</u>
Soft red winter wheat	3.12 (AR)	4.36	7.01 (AL)
White wheat	2.81 (WA-AC)	3.16	4.26 (ID-AF)
Hard red spring wheat	3.42 (ND)	3.67	5.86 (MT-AC)
Durum wheat	2.53 (SD-AF)	3.50	3.62 (ND-AF)
Soybeans	3.84 (KS)	4.87	11.34 (GA)
Flaxseed	5.33 (ND)	5.58	6.74 (MN)
<u>Dollars per hundredweight</u>			
Rice	6.74 (CA)	7.21	8.24 (SW-LA)
Sunflower	7.40 (SD)	8.45	9.79 (MN)
<u>Dollars per pound</u>			
Peanuts	.19 (VA)	.21	.28 (TX-DRY) <u>1/</u>
Cotton	.56 (AR)	.74	1.36 (NM-DRY) <u>1/</u>

1/ AC = After crop, in rotation; AF = After fallow; DRY = Dryland;
IRR=Irrigated

Appendix table 1--Alabama corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	90.39
Total	90.39
Cash expenses:	
Seed	14.26
Fertilizer	53.88
Lime and gypsum	6.99
Chemicals	12.56
Custom operations	7.19
Fuel, lube, and electricity	4.86
Repairs	8.42
Hired labor	1.64
Drying	1.48
Miscellaneous	.27
Technical services	.44
Total, variable cash expenses	111.99
General farm overhead	5.69
Taxes and insurance	4.77
Interest	15.21
Total, fixed cash expenses	25.67
Total, cash expenses	137.66
Receipts less cash expenses	-47.27
Capital replacement	18.32
Receipts less cash expenses and replacement	-65.59
Economic (full ownership) costs:	
Variable cash expenses	111.99
General farm overhead	5.69
Taxes and insurance	4.77
Capital replacement	18.32
Allocated returns to owned inputs:	
Return to operating capital	2.94
Return to other nonland capital	3.64
Net land rent	19.65
Unpaid labor	13.26
Total, economic costs	180.25
Residual returns to management and risk	-89.86
Harvest-period price (dollars/bu.)	1.85
Yield (bu./planted acre)	48.86

All costs and returns are preliminary as of 08/01/87.

Appendix table 2--Alabama soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	44.57
Secondary crop	.52
Total	45.09
Cash expenses:	
Seed	9.22
Fertilizer	32.15
Lime and gypsum	4.66
Chemicals	3.35
Custom operations	6.59
Fuel, lube, and electricity	3.85
Repairs	6.03
Hired labor	.70
Miscellaneous	.16
Technical services	.12
Total, variable cash expenses	66.84
General farm overhead	3.13
Taxes and insurance	3.05
Interest	8.37
Total, fixed cash expenses	14.54
Total, cash expenses	81.38
Receipts less cash expenses	-36.29
Capital replacement	13.27
Receipts less cash expenses and replacement	-49.56
Economic (full ownership) costs:	
Variable cash expenses	66.84
General farm overhead	3.13
Taxes and insurance	3.05
Capital replacement	13.27
Allocated returns to owned inputs:	
Return to operating capital	1.98
Return to other nonland capital	2.27
Net land rent	19.32
Unpaid labor	8.09
Total, economic costs	117.94
Residual returns to management and risk	-72.85
Harvest-period price (dollars/bu.)	2.65
Yield (bu./planted acre)	16.82

All costs and returns are preliminary as of 08/01/87.

Appendix table 3--Alabama soybeans production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	104.21
Total	104.21
=====	
Cash expenses:	
Seed	9.07
Fertilizer	16.15
Lime and gypsum	5.13
Chemicals	21.25
Custom operations	6.55
Fuel, lube, and electricity	4.99
Repairs	7.67
Hired labor	1.67
Miscellaneous	.09
Technical services	.63
Total, variable cash expenses	73.21
General farm overhead	4.82
Taxes and insurance	3.74
Interest	12.90
Total, fixed cash expenses	21.46
Total, cash expenses	94.66
Receipts less cash expenses	9.55
Capital replacement	16.39
Receipts less cash expenses and replacement	-6.84
=====	
Economic (full ownership) costs:	
Variable cash expenses	73.21
General farm overhead	4.82
Taxes and insurance	3.74
Capital replacement	16.39
Allocated returns to owned inputs:	
Return to operating capital	1.74
Return to other nonland capital	2.84
Net land rent	23.78
Unpaid labor	11.21
Total, economic costs	137.72
Residual returns to management and risk	-33.51
=====	
Harvest-period price (dollars/bu.)	4.89
Yield (bu./planted acre)	21.31
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 4--Alabama peanuts
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts:	
Primary crop	560.18
Secondary crop	20.24
Total	580.42
=====	
Cash expenses:	
Seed	66.11
Fertilizer	21.49
Lime and gypsum	17.30
Chemicals	99.91
Custom operations	8.89
Fuel, lube, and electricity	9.80
Repairs	15.63
Hired labor	6.15
Drying	35.77
Technical services	.62
Total, variable cash expenses	281.67
General farm overhead	25.64
Taxes and insurance	9.09
Interest	68.62
Total, fixed cash expenses	103.35
Total, cash expenses	385.01
Receipts less cash expenses	195.41
Capital replacement	46.98
Receipts less cash expenses and replacement	148.43
=====	
Economic (full ownership) costs:	
Variable cash expenses	281.67
General farm overhead	25.64
Taxes and insurance	9.09
Capital replacement	46.98
Allocated returns to owned inputs:	
Return to operating capital	6.57
Return to other nonland capital	8.66
Net land rent	60.76
Unpaid labor	20.57
Total, economic costs	459.94
Residual returns to management and risk	120.48
=====	
Harvest-period price (dollars/lb.)	.25
Yield (lbs./planted acre)	2249.73
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 5--Alabama cotton
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	217.74
Secondary crop	24.58
Total	242.32
Cash expenses:	
Seed	7.29
Fertilizer	35.67
Lime and gypsum	13.51
Chemicals	103.90
Custom operations	8.29
Fuel, lube, and electricity	8.77
Repairs	19.86
Hired labor	7.42
Ginning	38.23
Miscellaneous	2.42
Technical services	2.55
Total, variable cash expenses	247.92
General farm overhead	17.03
Taxes and insurance	10.38
Interest	45.57
Total, fixed cash expenses	72.98
Total, cash expenses	320.90
Receipts less cash expenses	-78.58
Capital replacement	59.82
Receipts less cash expenses and replacement	-138.40
Economic (full ownership) costs:	
Variable cash expenses	247.92
General farm overhead	17.03
Taxes and insurance	10.38
Capital replacement	59.82
Allocated returns to owned inputs:	
Return to operating capital	4.23
Return to other nonland capital	9.79
Net land rent	45.86
Unpaid labor	14.41
Total, economic costs	409.43
Residual returns to management and risk	-167.11
Harvest-period price (dollars/lb.)	.43
Yield (lbs./planted acre)	502.86

All costs and returns are preliminary as of 08/01/87.

Appendix table 6--Arizona barley (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	217.51
Secondary crop	4.37
Total	221.88
Cash expenses:	
Seed	23.65
Fertilizer	34.03
Chemicals	1.43
Custom operations	29.41
Fuel, lube, and electricity	89.88
Repairs	21.84
Hired labor	3.92
Purchased irrigation water	15.14
Miscellaneous	2.66
Technical services	1.05
Total, variable cash expenses	223.02
General farm overhead	17.79
Taxes and insurance	16.50
Interest	29.59
Total, fixed cash expenses	63.88
Total, cash expenses	286.89
Receipts less cash expenses	-65.01
Capital replacement	45.10
Receipts less cash expenses and replacement	-110.11
Economic (full ownership) costs:	
Variable cash expenses	223.02
General farm overhead	17.79
Taxes and insurance	16.50
Capital replacement	45.10
Allocated returns to owned inputs:	
Return to operating capital	2.65
Return to other nonland capital	8.09
Net land rent	5.30
Unpaid labor	26.24
Total, economic costs	344.68
Residual returns to management and risk	-122.80
Harvest-period price (dollars/bu.)	2.40
Yield (bu./planted acre)	90.63

All costs and returns are preliminary as of 08/01/87.

Appendix table 7--Arizona hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	285.45
Secondary crop	1.25
Total	286.70
=====	
Cash expenses:	
Seed	18.29
Fertilizer	42.78
Chemicals	2.95
Custom operations	26.46
Fuel, lube, and electricity	97.17
Repairs	19.74
Hired labor	2.51
Purchased irrigation water	11.01
Miscellaneous	8.47
Technical services	
Total, variable cash expenses	230.11
General farm overhead	18.20
Taxes and insurance	15.78
Interest	30.28
Total, fixed cash expenses	64.26
Total, cash expenses	294.37
Receipts less cash expenses	-7.67
Capital replacement	38.34
Receipts less cash expenses and replacement	-46.01
=====	
Economic (full ownership) costs:	
Variable cash expenses	230.11
General farm overhead	18.20
Taxes and insurance	15.78
Capital replacement	38.34
Allocated returns to owned inputs:	
Return to operating capital	4.65
Return to other nonland capital	6.85
Net land rent	68.40
Unpaid labor	28.84
Total, economic costs	411.17
Residual returns to management and risk	-124.47
=====	
Harvest-period price (dollars/bu.)	3.10
Yield (bu./planted acre)	92.08
=====	
All costs and returns are preliminary as of 08/01/87.	

Appendix table 8--Arizona cotton (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	727.22
Secondary crop	112.29
Total	839.51
=====	
Cash expenses:	
Seed	8.32
Fertilizer	44.74
Chemicals	99.61
Custom operations	48.84
Fuel, lube, and electricity	107.86
Repairs	37.08
Hired labor	24.82
Purchased irrigation water	26.56
Ginning	117.37
Miscellaneous	3.44
Technical services	
Total, variable cash expenses	522.66
General farm overhead	45.87
Taxes and insurance	24.38
Interest	76.32
Total, fixed cash expenses	146.57
Total, cash expenses	669.23
Receipts less cash expenses	170.28
Capital replacement	96.72
Receipts less cash expenses and replacement	73.56
=====	
Economic (full ownership) costs:	
Variable cash expenses	522.66
General farm overhead	45.87
Taxes and insurance	24.38
Capital replacement	96.72
Allocated returns to owned inputs:	
Return to operating capital	8.85
Return to other nonland capital	16.93
Net land rent	108.43
Unpaid labor	48.18
Total, economic costs	872.02
Residual returns to management and risk	-32.51
=====	
Harvest-period price (dollars/lb.)	.56
Yield (lbs./planted acre)	1,305.60
=====	
All costs and returns are preliminary as of 08/01/87.	

Appendix table 9--Arkansas sorghum production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	55.42
Total	55.42
Cash expenses:	
Seed	4.03
Fertilizer	26.26
Lime and gypsum	1.61
Chemicals	5.75
Custom operations	8.60
Fuel, lube, and electricity	3.97
Repairs	7.65
Hired labor	2.02
Drying	.09
Miscellaneous	.10
Technical services	.06
Total, variable cash expenses	60.14
General farm overhead	4.13
Taxes and insurance	3.47
Interest	6.86
Total, fixed cash expenses	14.46
Total, cash expenses	74.60
Receipts less cash expenses	-19.18
Capital replacement	19.60
Receipts less cash expenses and replacement	-38.78
Economic (full ownership) costs:	
Variable cash expenses	60.14
General farm overhead	4.13
Taxes and insurance	3.47
Capital replacement	19.60
Allocated returns to owned inputs:	
Return to operating capital	.73
Return to other nonland capital	3.41
Net land rent	13.83
Unpaid labor	12.38
Total, economic costs	117.69
Residual returns to management and risk	-62.27
Harvest-period price (dollars/bu.)	1.81
Yield (bu./planted acre)	30.62

All costs and returns are preliminary as of 08/01/87.

Appendix table 10--Arkansas soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	93.67
Total	93.67
Cash expenses:	
Seed	9.96
Fertilizer	23.50
Chemicals	2.93
Custom operations	7.66
Fuel, lube, and electricity	3.85
Repairs	5.98
Hired labor	.75
Miscellaneous	1.63
Technical services	.09
Total, variable cash expenses	56.35
General farm overhead	5.78
Taxes and insurance	4.63
Interest	9.41
Total, fixed cash expenses	19.83
Total, cash expenses	76.18
Receipts less cash expenses	17.49
Capital replacement	18.29
Receipts less cash expenses and replacement	-80
Economic (full ownership) costs:	
Variable cash expenses	56.35
General farm overhead	5.78
Taxes and insurance	4.63
Capital replacement	18.29
Allocated returns to owned inputs:	
Return to operating capital	1.71
Return to other nonland capital	2.96
Net land rent	19.16
Unpaid labor	8.62
Total, economic costs	117.51
Residual returns to management and risk	-23.84
Harvest-period price (dollars/bu.)	2.49
Yield (bu./planted acre)	37.62

All costs and returns are preliminary as of 08/01/87.

Appendix table 11--Arkansas (Grand Prairie) rice
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	244.76
Total	244.76
Cash expenses:	
Seed	24.10
Fertilizer	26.83
Chemicals	.35
Custom operations	45.36
Fuel, lube, and electricity	24.70
Repairs	41.91
Hired labor	13.93
Drying	17.10
Technical services	4.91
Total, variable cash expenses	199.19
General farm overhead	18.00
Taxes and insurance	14.87
Interest	29.29
Total, fixed cash expenses	62.16
Total, cash expenses	261.35
Receipts less cash expenses	-16.59
Capital replacement	67.61
Receipts less cash expenses and replacement	-84.20
Economic (full ownership) costs:	
Variable cash expenses	199.19
General farm overhead	18.00
Taxes and insurance	14.87
Capital replacement	67.61
Allocated returns to owned inputs:	
Return to operating capital	4.11
Return to other nonland capital	12.95
Net land rent	46.10
Unpaid labor	23.72
Total, economic costs	386.55
Residual returns to management and risk	-141.79
Harvest-period price (dollars/cwt.)	4.27
Yield (cwt./planted acre)	57.32

All costs and returns are preliminary as of 08/01/87.

Appendix table 12--Arkansas (Northeast) rice
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	217.51
Total	217.51
Cash expenses:	
Seed	21.04
Fertilizer	23.31
Chemicals	1.48
Custom operations	34.99
Fuel, lube, and electricity	32.95
Repairs	30.97
Hired labor	17.24
Drying	25.35
Technical services	5.41
Total, variable cash expenses	192.73
General farm overhead	16.82
Taxes and insurance	12.32
Interest	27.37
Total, fixed cash expenses	56.50
Total, cash expenses	249.24
Receipts less cash expenses	-31.73
Capital replacement	54.57
Receipts less cash expenses and replacement	-86.30
Economic (full ownership) costs:	
Variable cash expenses	192.73
General farm overhead	16.82
Taxes and insurance	12.32
Capital replacement	54.57
Allocated returns to owned inputs:	
Return to operating capital	3.35
Return to other nonland capital	10.19
Net land rent	35.10
Unpaid labor	29.35
Total, economic costs	354.43
Residual returns to management and risk	-136.92
Harvest-period price (dollars/cwt.)	4.27
Yield (cwt./planted acre)	50.94

All costs and returns are preliminary as of 08/01/87.

Appendix table 13--Arkansas soybeans
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	101.49
Total	101.49
Cash expenses:	
Seed	6.11
Fertilizer	3.92
Lime and gypsum	.40
Chemicals	13.61
Custom operations	7.90
Fuel, lube, and electricity	4.90
Repairs	7.20
Hired labor	1.72
Total, variable cash expenses	45.76
General farm overhead	6.67
Taxes and insurance	5.76
Interest	10.85
Total, fixed cash expenses	23.27
Total, cash expenses	69.04
Receipts less cash expenses	32.45
Capital replacement	20.81
Receipts less cash expenses and replacement	11.64
Economic (full ownership) costs:	
Variable cash expenses	45.76
General farm overhead	6.67
Taxes and insurance	5.76
Capital replacement	20.81
Allocated returns to owned inputs:	
Return to operating capital	1.29
Return to other nonland capital	3.49
Net land rent	21.12
Unpaid labor	11.54
Total, economic costs	116.44
Residual returns to management and risk	-14.95
Harvest-period price (dollars/bu.)	4.98
Yield (bu./planted acre)	20.38

All costs and returns are preliminary as of 08/01/87.

Appendix table 14--Arkansas cotton production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	263.73
Secondary crop	29.05
Total	292.78
Cash expenses:	
Seed	7.37
Fertilizer	22.66
Lime and gypsum	1.21
Chemicals	71.84
Custom operations	8.62
Fuel, lube, and electricity	8.69
Repairs	20.79
Hired labor	10.50
Ginning	50.77
Technical services	2.19
Total, variable cash expenses	204.64
General farm overhead	20.57
Taxes and insurance	10.30
Interest	33.47
Total, fixed cash expenses	64.34
Total, cash expenses	268.98
Receipts less cash expenses	23.80
Capital replacement	46.91
Receipts less cash expenses and replacement	-23.11
Economic (full ownership) costs:	
Variable cash expenses	204.64
General farm overhead	20.57
Taxes and insurance	10.30
Capital replacement	46.91
Allocated returns to owned inputs:	
Return to operating capital	2.84
Return to other nonland capital	8.02
Net land rent	46.82
Unpaid labor	20.38
Total, economic costs	360.48
Residual returns to management and risk	-67.70
Harvest-period price (dollars/lb.)	.440
Yield (lbs./planted acre)	592.65

All costs and returns are preliminary as of 08/01/87.

Appendix table 15--California corn (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	332.68
Total	332.68
Cash expenses:	
Seed	19.78
Fertilizer	55.22
Chemicals	28.33
Custom operations	21.37
Fuel, lube, and electricity	31.83
Repairs	22.70
Hired labor	4.89
Purchased irrigation water	13.43
Drying	3.92
Miscellaneous	5.03
Technical services	.30
Total, variable cash expenses	206.80
General farm overhead	45.58
Taxes and insurance	19.51
Interest	66.70
Total, fixed cash expenses	131.79
Total, cash expenses	338.59
Receipts less cash expenses	-5.91
Capital replacement	50.52
Receipts less cash expenses and replacement	-56.43
Economic (full ownership) costs:	
Variable cash expenses	206.80
General farm overhead	45.58
Taxes and insurance	19.51
Capital replacement	50.52
Allocated returns to owned inputs:	
Return to operating capital	4.34
Return to other nonland capital	9.08
Net land rent	80.17
Unpaid labor	39.58
Total, economic costs	455.58
Residual returns to management and risk	-122.90
Harvest-period price (dollars/bu.)	2.25
Yield (bu./planted acre)	147.86

All costs and returns are preliminary as of 08/01/87.

Appendix table 16--California sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	156.92
Total	156.92
Cash expenses:	
Seed	10.32
Fertilizer	30.07
Chemicals	11.97
Custom operations	19.76
Fuel, lube, and electricity	31.72
Repairs	15.47
Hired labor	5.90
Purchased irrigation water	6.66
Drying	.07
Miscellaneous	.75
Technical services	.68
Total, variable cash expenses	133.37
General farm overhead	20.12
Taxes and insurance	17.71
Interest	29.43
Total, fixed cash expenses	67.25
Total, cash expenses	200.62
Receipts less cash expenses	-43.70
Capital replacement	38.23
Receipts less cash expenses and replacement	-81.93
Economic (full ownership) costs:	
Variable cash expenses	133.37
General farm overhead	20.12
Taxes and insurance	17.71
Capital replacement	38.23
Allocated returns to owned inputs:	
Return to operating capital	2.91
Return to other nonland capital	6.93
Net land rent	44.51
Unpaid labor	36.26
Total, economic costs	300.03
Residual returns to management and risk	-143.11
Harvest-period price (dollars/bu.)	2.13
Yield (bu./planted acre)	73.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 17—California barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	68.30
Total	68.30
Cash expenses:	
Seed	6.28
Fertilizer	8.55
Chemicals	4.33
Custom operations	5.99
Fuel, lube, and electricity	3.30
Repairs	8.03
Hired labor	1.16
Miscellaneous	.38
Total, variable cash expenses	38.02
General farm overhead	8.65
Taxes and insurance	9.42
Interest	12.66
Total, fixed cash expenses	30.72
Total, cash expenses	68.74
Receipts less cash expenses	-.44
Capital replacement	18.28
Receipts less cash expenses and replacement	-18.72
Economic (full ownership) costs:	
Variable cash expenses	38.02
General farm overhead	8.65
Taxes and insurance	9.42
Capital replacement	18.28
Allocated returns to owned inputs:	
Return to operating capital	1.10
Return to other nonland capital	3.34
Net land rent	9.80
Unpaid labor	7.76
Total, economic costs	96.37
Residual returns to management and risk	-28.07
Harvest-period price (dollars/bu.)	1.93
Yield (bu./planted acre)	35.39

All costs and returns are preliminary as of 08/01/87.

Appendix table 18—California barley (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	68.75
Total	68.75
Cash expenses:	
Seed	7.07
Fertilizer	13.29
Chemicals	9.98
Custom operations	6.55
Fuel, lube, and electricity	3.82
Repairs	8.06
Hired labor	1.31
Miscellaneous	3.75
Total, variable cash expenses	53.83
General farm overhead	11.67
Taxes and insurance	15.01
Interest	17.08
Total, fixed cash expenses	43.75
Total, cash expenses	97.58
Receipts less cash expenses	-28.83
Capital replacement	18.44
Receipts less cash expenses and replacement	-47.27
Economic (full ownership) costs:	
Variable cash expenses	53.83
General farm overhead	11.67
Taxes and insurance	15.01
Capital replacement	18.44
Allocated returns to owned inputs:	
Return to operating capital	1.33
Return to other nonland capital	3.36
Net land rent	4.17
Unpaid labor	8.75
Total, economic costs	116.56
Residual returns to management and risk	-47.81
Harvest-period price (dollars/bu.)	1.93
Yield (bu./planted acre)	35.62

All costs and returns are preliminary as of 08/01/87.

Appendix table 19--California barley (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	144.11
Secondary crop	4.21
Total	148.32
=====	
Cash expenses:	
Seed	8.24
Fertilizer	35.20
Chemicals	6.69
Custom operations	25.56
Fuel, lube, and electricity	16.58
Repairs	9.81
Hired labor	2.93
Purchased irrigation water	16.19
Miscellaneous	8.88
Technical services	.63
Total, variable cash expenses	130.71
General farm overhead	20.12
Taxes and insurance	15.34
Interest	29.43
Total, fixed cash expenses	64.88
Total, cash expenses	195.59
Receipts less cash expenses	-47.27
Capital replacement	23.18
Receipts less cash expenses and replacement	-70.45
=====	
Economic (full ownership) costs:	
Variable cash expenses	130.71
General farm overhead	20.12
Taxes and insurance	15.34
Capital replacement	23.18
Allocated returns to owned inputs:	
Return to operating capital	2.42
Return to other nonland capital	4.02
Net land rent	32.81
Unpaid labor	19.64
Total, economic costs	248.23
Residual returns to management and risk	-99.91
=====	
Harvest-period price (dollars/bu.)	1.93
Yield (bu./planted acre)	74.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 20--California hard red winter wheat
(after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	133.93
Total	133.93
=====	
Cash expenses:	
Seed	12.56
Fertilizer	31.02
Chemicals	14.81
Custom operations	9.02
Fuel, lube, and electricity	4.24
Repairs	9.79
Hired labor	.86
Miscellaneous	3.25
Technical services	.15
Total, variable cash expenses	85.70
General farm overhead	27.98
Taxes and insurance	9.83
Interest	40.93
Total, fixed cash expenses	78.73
Total, cash expenses	164.43
Receipts less cash expenses	-30.50
Capital replacement	23.32
Receipts less cash expenses and replacement	-53.82
=====	
Economic (full ownership) costs:	
Variable cash expenses	85.70
General farm overhead	27.98
Taxes and insurance	9.83
Capital replacement	23.32
Allocated returns to owned inputs:	
Return to operating capital	2.50
Return to other nonland capital	4.22
Net land rent	38.05
Unpaid labor	9.89
Total, economic costs	201.48
Residual returns to management and risk	-67.55
=====	
Harvest-period price (dollars/bu.)	2.66
Yield (bu./planted acre)	50.35

All costs and returns are preliminary as of 08/01/87.

Appendix table 21--California hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	110.50
Secondary crop	1.91
Total	112.41
=====	
Cash expenses:	
Seed	10.00
Fertilizer	14.81
Chemicals	7.53
Custom operations	12.73
Fuel, lube, and electricity	4.64
Repairs	12.22
Hired labor	.99
Miscellaneous	2.29
Total, variable cash expenses	65.21
General farm overhead	18.60
Taxes and insurance	15.79
Interest	27.21
Total, fixed cash expenses	61.59
Total, cash expenses	126.81
Receipts less cash expenses	-14.40
Capital replacement	23.05
Receipts less cash expenses and replacement	-37.45
=====	
Economic (full ownership) costs:	
Variable cash expenses	65.21
General farm overhead	18.60
Taxes and insurance	15.79
Capital replacement	23.05
Allocated returns to owned inputs:	
Return to operating capital	2.04
Return to other nonland capital	4.26
Net land rent	21.46
Unpaid labor	11.43
Total, economic costs	161.84
Residual returns to management and risk	-49.43
=====	
Harvest-period price (dollars/bu.)	2.66
Yield (bu./planted acre)	41.54
=====	
All costs and returns are preliminary as of 08/01/87.	

Appendix table 22--California hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	204.37
Secondary crop	6.67
Total	211.04
=====	
Cash expenses:	
Seed	12.18
Fertilizer	45.78
Chemicals	10.01
Custom operations	42.55
Fuel, lube, and electricity	44.89
Repairs	15.32
Hired labor	2.43
Purchased irrigation water	16.39
Miscellaneous	4.77
Technical services	1.36
Total, variable cash expenses	195.68
General farm overhead	28.84
Taxes and insurance	16.85
Interest	42.20
Total, fixed cash expenses	87.89
Total, cash expenses	283.57
Receipts less cash expenses	-72.53
Capital replacement	33.57
Receipts less cash expenses and replacement	-106.10
=====	
Economic (full ownership) costs:	
Variable cash expenses	195.68
General farm overhead	28.84
Taxes and insurance	16.85
Capital replacement	33.57
Allocated returns to owned inputs:	
Return to operating capital	4.55
Return to other nonland capital	6.03
Net land rent	58.38
Unpaid labor	28.00
Total, economic costs	371.89
Residual returns to management and risk	-160.85
=====	
Harvest-period price (dollars/bu.)	2.66
Yield (bu./planted acre)	76.83
=====	
All costs and returns are preliminary as of 08/01/87.	

Appendix table 23--California (Sacramento Valley)
rice production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	281.08
Total	281.08
Cash expenses:	
Seed	26.56
Fertilizer	33.78
Chemicals	6.00
Custom operations	59.79
Fuel, lube, and electricity	18.52
Repairs	35.59
Hired labor	20.10
Purchased irrigation water	25.51
Drying	50.16
Technical services	8.28
Total, variable cash expenses	284.28
General farm overhead	53.06
Taxes and insurance	23.50
Interest	77.64
Total, fixed cash expenses	154.21
Total, cash expenses	438.49
Receipts less cash expenses	-157.41
Capital replacement	63.45
Receipts less cash expenses and replacement	-220.86
Economic (full ownership) costs:	
Variable cash expenses	284.28
General farm overhead	53.06
Taxes and insurance	23.50
Capital replacement	63.45
Allocated returns to owned inputs:	
Return to operating capital	5.60
Return to other nonland capital	12.00
Net land rent	48.78
Unpaid labor	34.21
Total, economic costs	524.89
Residual returns to management and risk	-243.81
Harvest-period price (dollars/cwt.)	3.68
Yield (cwt./planted acre)	76.38

All costs and returns are preliminary as of 08/01/87.

Appendix table 24--California cotton (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	620.47
Secondary crop	81.47
Total	701.94
Cash expenses:	
Seed	10.35
Fertilizer	45.47
Lime and gypsum	2.38
Chemicals	60.72
Custom operations	56.73
Fuel, lube, and electricity	41.68
Repairs	23.02
Hired labor	23.92
Purchased irrigation water	37.57
Ginning	110.64
Miscellaneous	4.14
Technical services	3.30
Total, variable cash expenses	419.92
General farm overhead	79.99
Taxes and insurance	22.44
Interest	117.04
Total, fixed cash expenses	219.47
Total, cash expenses	639.39
Receipts less cash expenses	62.55
Capital replacement	55.93
Receipts less cash expenses and replacement	6.62
Economic (full ownership) costs:	
Variable cash expenses	419.92
General farm overhead	79.99
Taxes and insurance	22.44
Capital replacement	55.93
Allocated returns to owned inputs:	
Return to operating capital	7.53
Return to other nonland capital	9.57
Net land rent	122.12
Unpaid labor	46.43
Total, economic costs	763.93
Residual returns to management and risk	-61.99
Harvest-period price (dollars/lb.)	.59
Yield (lbs./planted acre)	1,058.82

All costs and returns are preliminary as of 08/01/87.

Appendix table 25--Colorado corn (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	219.36
Total	219.36
=====	
Cash expenses:	
Seed	23.60
Fertilizer	31.64
Chemicals	20.91
Custom operations	12.74
Fuel, lube, and electricity	39.92
Repairs	21.85
Hired labor	3.95
Purchased irrigation water	9.08
Drying	1.15
Miscellaneous	.50
Technical services	.36
Total, variable cash expenses	165.71
General farm overhead	30.43
Taxes and insurance	14.10
Interest	50.62
Total, fixed cash expenses	95.15
Total, cash expenses	260.86
Receipts less cash expenses	-41.50
Capital replacement	49.49
Receipts less cash expenses and replacement	-90.99
=====	
Economic (full ownership) costs:	
Variable cash expenses	165.71
General farm overhead	30.43
Taxes and insurance	14.10
Capital replacement	49.49
Allocated returns to owned inputs:	
Return to operating capital	4.06
Return to other nonland capital	9.35
Net land rent	11.66
Unpaid labor	31.98
Total, economic costs	316.77
Residual returns to management and risk	-97.41
=====	
Harvest-period price (dollars/bu.)	1.60
Yield (bu./planted acre)	137.10
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 26--Colorado sorghum (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	33.98
Total	33.98
=====	
Cash expenses:	
Seed	2.50
Fertilizer	7.12
Chemicals	2.06
Custom operations	.77
Fuel, lube, and electricity	2.18
Repairs	5.17
Hired labor	1.07
Miscellaneous	.06
Total, variable cash expenses	20.94
General farm overhead	4.19
Taxes and insurance	4.27
Interest	6.97
Total, fixed cash expenses	15.44
Total, cash expenses	36.37
Receipts less cash expenses	-2.39
Capital replacement	18.69
Receipts less cash expenses and replacement	-21.08
=====	
Economic (full ownership) costs:	
Variable cash expenses	20.94
General farm overhead	4.19
Taxes and insurance	4.27
Capital replacement	18.69
Allocated returns to owned inputs:	
Return to operating capital	.53
Return to other nonland capital	3.11
Net land rent	8.42
Unpaid labor	6.60
Total, economic costs	66.75
Residual returns to management and risk	-32.77
=====	
Harvest-period price (dollars/bu.)	1.37
Yield (bu./planted acre)	24.80
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 27--Colorado sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	93.24
Total	93.24
=====	
Cash expenses:	
Seed	6.94
Fertilizer	13.68
Chemicals	7.91
Custom operations	6.64
Fuel, lube, and electricity	15.22
Repairs	11.83
Hired labor	2.54
Purchased irrigation water	7.53
Miscellaneous	.17
Technical services	.99
Total, variable cash expenses	73.46
General farm overhead	12.13
Taxes and insurance	9.60
Interest	20.19
Total, fixed cash expenses	41.92
Total, cash expenses	115.38
Receipts less cash expenses	-22.14
Capital replacement	29.66
Receipts less cash expenses and replacement	-51.80
=====	
Economic (full ownership) costs:	
Variable cash expenses	73.46
General farm overhead	12.13
Taxes and insurance	9.60
Capital replacement	29.66
Allocated returns to owned inputs:	
Return to operating capital	1.61
Return to other nonland capital	5.42
Net land rent	15.56
Unpaid labor	15.62
Total, economic costs	163.06
Residual returns to management and risk	-69.82
=====	
Harvest-period price (dollars/bu.)	1.37
Yield (bu./planted acre)	68.06
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 28--Colorado barley (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	51.69
Total	51.69
=====	
Cash expenses:	
Seed	3.23
Fertilizer	3.10
Chemicals	1.20
Custom operations	4.60
Fuel, lube, and electricity	2.86
Repairs	6.78
Hired labor	1.25
Total, variable cash expenses	23.02
General farm overhead	7.44
Taxes and insurance	6.58
Interest	12.37
Total, fixed cash expenses	26.38
Total, cash expenses	49.40
Receipts less cash expenses	2.29
Capital replacement	20.51
Receipts less cash expenses and replacement	-18.22
=====	
Economic (full ownership) costs:	
Variable cash expenses	23.02
General farm overhead	7.44
Taxes and insurance	6.58
Capital replacement	20.51
Allocated returns to owned inputs:	
Return to operating capital	.57
Return to other nonland capital	3.50
Net land rent	14.66
Unpaid labor	8.35
Total, economic costs	84.63
Residual returns to management and risk	-32.94
=====	
Harvest-period price (dollars/bu.)	1.76
Yield (bu./planted acre)	29.37
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 29--Colorado barley (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	132.32
Secondary crop	5.88
Total	138.20
=====	
Cash expenses:	
Seed	6.26
Fertilizer	21.93
Chemicals	10.58
Custom operations	22.83
Fuel, lube, and electricity	30.60
Repairs	18.15
Hired labor	2.61
Purchased irrigation water	4.12
Miscellaneous	.74
Technical services	.11
Total, variable cash expenses	117.93
General farm overhead	20.18
Taxes and insurance	11.15
Interest	33.58
Total, fixed cash expenses	64.91
Total, cash expenses	182.85
Receipts less cash expenses	-44.65
Capital replacement	37.75
Receipts less cash expenses and replacement	-82.40
=====	
Economic (full ownership) costs:	
Variable cash expenses	117.93
General farm overhead	20.18
Taxes and insurance	11.15
Capital replacement	37.75
Allocated returns to owned inputs:	
Return to operating capital	1.44
Return to other nonland capital	7.08
Net land rent	15.43
Unpaid labor	17.48
Total, economic costs	228.44
Residual returns to management and risk	-90.24
=====	
Harvest-period price (dollars/bu.)	1.76
Yield (bu./planted acre)	75.18

All costs and returns are preliminary as of 08/01/87.

Appendix table 30--Colorado hard red winter wheat
(after crop) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	49.38
Secondary crop	.64
Total	50.02
=====	
Cash expenses:	
Seed	3.85
Fertilizer	2.18
Chemicals	.48
Custom operations	.87
Fuel, lube, and electricity	2.59
Repairs	5.94
Hired labor	.58
Total, variable cash expenses	16.49
General farm overhead	5.31
Taxes and insurance	5.44
Interest	8.83
Total, fixed cash expenses	19.58
Total, cash expenses	36.08
Receipts less cash expenses	13.94
Capital replacement	16.19
Receipts less cash expenses and replacement	-2.25
=====	
Economic (full ownership) costs:	
Variable cash expenses	16.49
General farm overhead	5.31
Taxes and insurance	5.44
Capital replacement	16.19
Allocated returns to owned inputs:	
Return to operating capital	.63
Return to other nonland capital	3.32
Net land rent	14.23
Unpaid labor	6.72
Total, economic costs	68.33
Residual returns to management and risk	-18.31
=====	
Harvest-period price (dollars/bu.)	2.06
Yield (bu./planted acre)	23.97

All costs and returns are preliminary as of 08/01/87.

Appendix table 31--Colorado hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	56.03
Secondary crop	1.39
Total	57.42
Cash expenses:	
Seed	3.14
Fertilizer	3.98
Chemicals	.85
Custom operations	9.00
Fuel, lube, and electricity	2.69
Repairs	6.28
Hired labor	.73
Miscellaneous	.25
Total, variable cash expenses	26.92
General farm overhead	9.23
Taxes and insurance	5.93
Interest	15.35
Total, fixed cash expenses	30.50
Total, cash expenses	57.42
Receipts less cash expenses	0
Capital replacement	17.28
Receipts less cash expenses and replacement	-17.28
Economic (full ownership) costs:	
Variable cash expenses	26.92
General farm overhead	9.23
Taxes and insurance	5.93
Capital replacement	17.28
Allocated returns to owned inputs:	
Return to operating capital	.92
Return to other nonland capital	2.93
Net land rent	15.24
Unpaid labor	8.40
Total, economic costs	86.84
Residual returns to management and risk	-29.42
Harvest-period price (dollars/bu.)	2.06
Yield (bu./planted acre)	27.20

All costs and returns are preliminary as of 08/01/87.

Appendix table 32--Colorado hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	86.89
Secondary crop	19.72
Total	106.61
Cash expenses:	
Seed	5.34
Fertilizer	15.42
Chemicals	.72
Custom operations	8.59
Fuel, lube, and electricity	24.50
Repairs	13.75
Hired labor	1.57
Purchased irrigation water	3.23
Miscellaneous	.80
Technical services	.12
Total, variable cash expenses	74.04
General farm overhead	14.14
Taxes and insurance	9.49
Interest	23.52
Total, fixed cash expenses	47.15
Total, cash expenses	121.19
Receipts less cash expenses	-14.58
Capital replacement	31.92
Receipts less cash expenses and replacement	-46.50
Economic (full ownership) costs:	
Variable cash expenses	74.04
General farm overhead	14.14
Taxes and insurance	9.49
Capital replacement	31.92
Allocated returns to owned inputs:	
Return to operating capital	2.34
Return to other nonland capital	5.56
Net land rent	7.96
Unpaid labor	18.06
Total, economic costs	163.51
Residual returns to management and risk	-56.90
Harvest-period price (dollars/bu.)	2.06
Yield (bu./planted acre)	53.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 33--Florida peanuts production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	612.00
Secondary crop	5.86
Total	617.86
Cash expenses:	
Seed	65.41
Fertilizer	21.67
Lime and gypsum	19.15
Chemicals	91.03
Custom operations	9.60
Fuel, lube, and electricity	13.40
Repairs	16.22
Hired labor	11.48
Drying	37.03
Miscellaneous	1.16
Technical services	1.49
Total, variable cash expenses	287.64
General farm overhead	24.45
Taxes and insurance	12.79
Interest	65.45
Total, fixed cash expenses	102.69
Total, cash expenses	390.33
Receipts less cash expenses	227.53
Capital replacement	44.15
Receipts less cash expenses and replacement	183.38
Economic (full ownership) costs:	
Variable cash expenses	287.64
General farm overhead	24.45
Taxes and insurance	12.79
Capital replacement	44.15
Allocated returns to owned inputs:	
Return to operating capital	6.76
Return to other nonland capital	7.97
Net land rent	60.25
Unpaid labor	38.43
Total, economic costs	482.44
Residual returns to management and risk	135.42
Harvest-period price (dollars/lb.)	.250
Yield (lbs./planted acre)	2,467.74

All costs and returns are preliminary as of 08/01/87.

Appendix table 34--Georgia corn production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	96.00
Total	96.00
Cash expenses:	
Seed	12.49
Fertilizer	51.43
Lime and gypsum	4.66
Chemicals	15.35
Custom operations	10.14
Fuel, lube, and electricity	7.61
Repairs	10.83
Hired labor	1.91
Drying	1.06
Miscellaneous	.08
Technical services	.19
Total, variable cash expenses	115.76
General farm overhead	7.83
Taxes and insurance	7.97
Interest	20.96
Total, fixed cash expenses	36.76
Total, cash expenses	152.52
Receipts less cash expenses	-56.52
Capital replacement	21.75
Receipts less cash expenses and replacement	-78.27
Economic (full ownership) costs:	
Variable cash expenses	115.76
General farm overhead	7.83
Taxes and insurance	7.97
Capital replacement	21.75
Allocated returns to owned inputs:	
Return to operating capital	3.03
Return to other nonland capital	3.87
Net land rent	17.74
Unpaid labor	15.49
Total, economic costs	193.43
Residual returns to management and risk	-97.43
Harvest-period price (dollars/bu.)	1.95
Yield (bu./planted acre)	49.23

All costs and returns are preliminary as of 08/01/87.

Appendix table 35--Georgia soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	56.30
Secondary crop	.52
Total	56.82
Cash expenses:	
Seed	9.22
Fertilizer	32.68
Lime and gypsum	4.66
Chemicals	3.35
Custom operations	9.03
Fuel, lube, and electricity	4.71
Repairs	7.24
Hired labor	.97
Miscellaneous	.16
Technical services	.12
Total, variable cash expenses	72.15
General farm overhead	3.25
Taxes and insurance	5.34
Interest	8.70
Total, fixed cash expenses	17.29
Total, cash expenses	89.44
Receipts less cash expenses	-32.62
Capital replacement	16.08
Receipts less cash expenses and replacement	-48.70
Economic (full ownership) costs:	
Variable cash expenses	72.15
General farm overhead	3.25
Taxes and insurance	5.34
Capital replacement	16.08
Allocated returns to owned inputs:	
Return to operating capital	2.12
Return to other nonland capital	2.73
Net land rent	12.29
Unpaid labor	11.21
Total, economic costs	125.17
Residual returns to management and risk	-68.35
Harvest-period price (dollars/bu.)	2.34
Yield (bu./planted acre)	24.06

All costs and returns are preliminary as of 08/01/87.

Appendix table 36--Georgia soybeans production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	58.14
Total	58.14
Cash expenses:	
Seed	7.58
Fertilizer	18.53
Lime and gypsum	4.43
Chemicals	27.92
Custom operations	6.09
Fuel, lube, and electricity	5.25
Repairs	7.36
Hired labor	1.87
Miscellaneous	.02
Technical services	.34
Total, variable cash expenses	79.39
General farm overhead	4.87
Taxes and insurance	6.10
Interest	13.03
Total, fixed cash expenses	24.00
Total, cash expenses	103.39
Receipts less cash expenses	-45.25
Capital replacement	15.94
Receipts less cash expenses and replacement	-61.19
Economic (full ownership) costs:	
Variable cash expenses	79.39
General farm overhead	4.87
Taxes and insurance	6.10
Capital replacement	15.94
Allocated returns to owned inputs:	
Return to operating capital	2.24
Return to other nonland capital	2.75
Net land rent	14.95
Unpaid labor	12.51
Total, economic costs	138.75
Residual returns to management and risk	-80.61
Harvest-period price (dollars/bu.)	4.75
Yield (bu./planted acre)	12.24

All costs and returns are preliminary as of 08/01/87.

Appendix table 37--Georgia peanuts production costs
per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	634.73
Secondary crop	12.95
Total	647.68
Cash expenses:	
Seed	71.28
Fertilizer	19.46
Lime and gypsum	17.64
Chemicals	111.70
Custom operations	5.29
Fuel, lube, and electricity	11.78
Repairs	16.31
Hired labor	7.33
Drying	29.14
Miscellaneous	.27
Technical services	1.31
Total, variable cash expenses	291.51
General farm overhead	27.17
Taxes and insurance	12.64
Interest	72.71
Total, fixed cash expenses	112.52
Total, cash expenses	404.02
Receipts less cash expenses	243.66
Capital replacement	48.67
Receipts less cash expenses and replacement	194.99
Economic (full ownership) costs:	
Variable cash expenses	291.51
General farm overhead	27.17
Taxes and insurance	12.64
Capital replacement	48.67
Allocated returns to owned inputs:	
Return to operating capital	6.88
Return to other nonland capital	8.88
Net land rent	79.45
Unpaid labor	24.54
Total, economic costs	499.73
Residual returns to management and risk	147.95
Harvest-period price (dollars/lb.)	.26
Yield (lbs./planted acre)	2,413.43

All costs and returns are preliminary as of 08/01/87.

Appendix table 38--Georgia cotton production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	219.31
Secondary crop	31.73
Total	251.04
Cash expenses:	
Seed	6.64
Fertilizer	34.60
Lime and gypsum	3.96
Chemicals	124.71
Custom operations	10.97
Fuel, lube, and electricity	12.75
Repairs	19.91
Hired labor	8.87
Ginning	38.53
Miscellaneous	.06
Technical services	3.11
Total, variable cash expenses	264.12
General farm overhead	14.08
Taxes and insurance	13.03
Interest	37.70
Total, fixed cash expenses	64.81
Total, cash expenses	328.93
Receipts less cash expenses	-77.89
Capital replacement	53.78
Receipts less cash expenses and replacement	-131.67
Economic (full ownership) costs:	
Variable cash expenses	264.12
General farm overhead	14.08
Taxes and insurance	13.03
Capital replacement	53.78
Allocated returns to owned inputs:	
Return to operating capital	4.43
Return to other nonland capital	9.45
Net land rent	24.05
Unpaid labor	17.23
Total, economic costs	400.16
Residual returns to management and risk	-149.12
Harvest-period price (dollars/lb.)	.51
Yield (lbs./planted acre)	426.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 39--Idaho barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	95.99
Secondary crop	1.60
Total	97.59
Cash expenses:	
Seed	5.73
Fertilizer	12.76
Chemicals	7.16
Custom operations	.82
Fuel, lube, and electricity	2.96
Repairs	8.84
Hired labor	.96
Miscellaneous	.25
Total, variable cash expenses	39.48
General farm overhead	9.65
Taxes and insurance	7.64
Interest	16.05
Total, fixed cash expenses	33.34
Total, cash expenses	72.82
Receipts less cash expenses	24.77
Capital replacement	21.59
Receipts less cash expenses and replacement	3.18
Economic (full ownership) costs:	
Variable cash expenses	39.48
General farm overhead	9.65
Taxes and insurance	7.64
Capital replacement	21.59
Allocated returns to owned inputs:	
Return to operating capital	.55
Return to other nonland capital	3.96
Net land rent	27.92
Unpaid labor	6.45
Total, economic costs	117.24
Residual returns to management and risk	-19.65
Harvest-period price (dollars/bu.)	2.10
Yield (bu./planted acre)	45.71

All costs and returns are preliminary as of 08/01/87.

Appendix table 40--Idaho barley (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	84.59
Secondary crop	1.38
Total	85.97
Cash expenses:	
Seed	5.14
Fertilizer	10.41
Chemicals	3.20
Custom operations	4.79
Fuel, lube, and electricity	3.70
Repairs	8.35
Hired labor	1.27
Miscellaneous	.35
Technical services	.12
Total, variable cash expenses	37.33
General farm overhead	8.29
Taxes and insurance	8.47
Interest	13.79
Total, fixed cash expenses	30.55
Total, cash expenses	67.89
Receipts less cash expenses	18.08
Capital replacement	19.84
Receipts less cash expenses and replacement	-1.76
Economic (full ownership) costs:	
Variable cash expenses	37.33
General farm overhead	8.29
Taxes and insurance	8.47
Capital replacement	19.84
Allocated returns to owned inputs:	
Return to operating capital	.69
Return to other nonland capital	3.58
Net land rent	26.38
Unpaid labor	8.53
Total, economic costs	113.12
Residual returns to management and risk	-27.15
Harvest-period price (dollars/bu.)	2.10
Yield (bu./planted acre)	40.28

All costs and returns are preliminary as of 08/01/87.

Appendix table 41--Idaho barley (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	168.02
Secondary crop	9.39
Total	177.41
=====	
Cash expenses:	
Seed	8.05
Fertilizer	21.86
Chemicals	5.85
Custom operations	6.83
Fuel, lube, and electricity	19.28
Repairs	18.09
Hired labor	2.70
Purchased irrigation water	8.82
Miscellaneous	1.40
Technical services	.14
Total, variable cash expenses	93.03
General farm overhead	17.72
Taxes and insurance	13.44
Interest	29.48
Total, fixed cash expenses	60.64
Total, cash expenses	153.67
Receipts less cash expenses	23.74
Capital replacement	39.10
Receipts less cash expenses and replacement	-15.36
=====	
Economic (full ownership) costs:	
Variable cash expenses	93.03
General farm overhead	17.72
Taxes and insurance	13.44
Capital replacement	39.10
Allocated returns to owned inputs:	
Return to operating capital	1.35
Return to other nonland capital	7.14
Net land rent	37.48
Unpaid labor	18.09
Total, economic costs	227.34
Residual returns to management and risk	-49.93
=====	
Harvest-period price (dollars/bu.)	2.10
Yield (bu./planted acre)	80.01

All costs and returns are preliminary as of 08/01/87.

Appendix table 42--Idaho hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	94.57
Total	94.57
=====	
Cash expenses:	
Seed	5.59
Fertilizer	4.78
Chemicals	1.64
Custom operations	1.63
Fuel, lube, and electricity	3.54
Repairs	9.33
Hired labor	.75
Total, variable cash expenses	27.26
General farm overhead	9.78
Taxes and insurance	8.18
Interest	16.28
Total, fixed cash expenses	34.24
Total, cash expenses	61.51
Receipts less cash expenses	33.06
Capital replacement	18.62
Receipts less cash expenses and replacement	14.44
=====	
Economic (full ownership) costs:	
Variable cash expenses	27.26
General farm overhead	9.78
Taxes and insurance	8.18
Capital replacement	18.62
Allocated returns to owned inputs:	
Return to operating capital	1.16
Return to other nonland capital	3.45
Net land rent	28.83
Unpaid labor	8.68
Total, economic costs	105.96
Residual returns to management and risk	-11.39
=====	
Harvest-period price (dollars/bu.)	2.28
Yield (bu./planted acre)	41.48

All costs and returns are preliminary as of 08/01/87.

Appendix table 43--Idaho hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	211.90
Secondary crop	4.70
Total	216.60
=====	
Cash expenses:	
Seed	10.68
Fertilizer	42.34
Chemicals	6.69
Custom operations	6.43
Fuel, lube, and electricity	21.62
Repairs	15.00
Hired labor	1.95
Purchased irrigation water	11.58
Miscellaneous	.83
Technical services	.09
Total, variable cash expenses	117.21
General farm overhead	21.80
Taxes and insurance	12.18
Interest	36.26
Total, fixed cash expenses	70.24
Total, cash expenses	187.45
Receipts less cash expenses	29.15
Capital replacement	33.04
Receipts less cash expenses and replacement	-3.89
=====	
Economic (full ownership) costs:	
Variable cash expenses	117.21
General farm overhead	21.80
Taxes and insurance	12.18
Capital replacement	33.04
Allocated returns to owned inputs:	
Return to operating capital	4.96
Return to other nonland capital	6.25
Net land rent	33.28
Unpaid labor	22.43
Total, economic costs	251.15
Residual returns to management and risk	-34.55
=====	
Harvest-period price (dollars/bu.)	2.28
Yield (bu./planted acre)	92.94
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 44--Idaho white wheat (after crop)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	100.68
Secondary crop	2.46
Total	103.14
=====	
Cash expenses:	
Seed	6.57
Fertilizer	23.31
Chemicals	15.31
Custom operations	2.37
Fuel, lube, and electricity	3.28
Repairs	8.72
Hired labor	.62
Miscellaneous	.49
Total, variable cash expenses	60.67
General farm overhead	15.45
Taxes and insurance	8.48
Interest	25.70
Total, fixed cash expenses	49.63
Total, cash expenses	110.31
Receipts less cash expenses	-7.17
Capital replacement	20.84
Receipts less cash expenses and replacement	-28.01
=====	
Economic (full ownership) costs:	
Variable cash expenses	60.67
General farm overhead	15.45
Taxes and insurance	8.48
Capital replacement	20.84
Allocated returns to owned inputs:	
Return to operating capital	1.89
Return to other nonland capital	3.97
Net land rent	23.72
Unpaid labor	7.11
Total, economic costs	142.13
Residual returns to management and risk	-38.99
=====	
Harvest-period price (dollars/bu.)	2.33
Yield (bu./planted acre)	43.21
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 45--Idaho white wheat (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	92.34
Total	92.34
Cash expenses:	
Seed	6.26
Fertilizer	22.40
Chemicals	11.43
Custom operations	4.10
Fuel, lube, and electricity	4.84
Repairs	11.71
Hired labor	.95
Technical services	.30
Total, variable cash expenses	61.99
General farm overhead	17.51
Taxes and insurance	14.14
Interest	29.13
Total, fixed cash expenses	60.78
Total, cash expenses	122.77
Receipts less cash expenses	-30.43
Capital replacement	27.24
Receipts less cash expenses and replacement	-57.67
Economic (full ownership) costs:	
Variable cash expenses	61.99
General farm overhead	17.51
Taxes and insurance	14.14
Capital replacement	27.24
Allocated returns to owned inputs:	
Return to operating capital	2.05
Return to other nonland capital	5.27
Net land rent	29.86
Unpaid labor	10.94
Total, economic costs	169.00
Residual returns to management and risk	-76.66
Harvest-period price (dollars/bu.)	2.33
Yield (bu./planted acre)	39.63

All costs and returns are preliminary as of 08/01/87.

Appendix table 46--Idaho white wheat (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	175.87
Secondary crop	3.36
Total	179.23
Cash expenses:	
Seed	9.73
Fertilizer	36.55
Chemicals	12.58
Custom operations	6.93
Fuel, lube, and electricity	29.21
Repairs	14.06
Hired labor	2.29
Purchased irrigation water	4.83
Miscellaneous	.52
Technical services	.25
Total, variable cash expenses	116.95
General farm overhead	21.86
Taxes and insurance	13.75
Interest	36.36
Total, fixed cash expenses	71.97
Total, cash expenses	188.92
Receipts less cash expenses	-9.69
Capital replacement	37.41
Receipts less cash expenses and replacement	-47.10
Economic (full ownership) costs:	
Variable cash expenses	116.95
General farm overhead	21.86
Taxes and insurance	13.75
Capital replacement	37.41
Allocated returns to owned inputs:	
Return to operating capital	1.94
Return to other nonland capital	6.69
Net land rent	31.26
Unpaid labor	26.35
Total, economic costs	256.21
Residual returns to management and risk	-76.98
Harvest-period price (dollars/bu.)	2.33
Yield (bu./planted acre)	75.48

All costs and returns are preliminary as of 08/01/87.

Appendix table 47--Idaho hard red spring wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	174.27
Secondary crop	1.79
Total	176.06
Cash expenses:	
Seed	9.51
Fertilizer	36.00
Chemicals	13.06
Custom operations	7.66
Fuel, lube, and electricity	37.75
Repairs	15.29
Hired labor	2.31
Purchased irrigation water	8.68
Miscellaneous	.25
Technical services	.19
Total, variable cash expenses	130.69
General farm overhead	20.54
Taxes and insurance	12.52
Interest	34.17
Total, fixed cash expenses	67.23
Total, cash expenses	197.92
Receipts less cash expenses	-21.86
Capital replacement	40.30
Receipts less cash expenses and replacement	-62.16
Economic (full ownership) costs:	
Variable cash expenses	130.69
General farm overhead	20.54
Taxes and insurance	12.52
Capital replacement	40.30
Allocated returns to owned inputs:	
Return to operating capital	2.02
Return to other nonland capital	7.16
Net land rent	23.79
Unpaid labor	26.53
Total, economic costs	263.56
Residual returns to management and risk	-87.50
Harvest-period price (dollars/bu.)	2.30
Yield (bu./planted acre)	75.77

All costs and returns are preliminary as of 08/01/87.

Appendix table 48--Illinois corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	186.93
Total	186.93
Cash expenses:	
Seed	17.49
Fertilizer	58.91
Lime and gypsum	2.16
Chemicals	19.73
Custom operations	9.24
Fuel, lube, and electricity	5.71
Repairs	9.94
Hired labor	1.45
Drying	6.30
Miscellaneous	.10
Technical services	3.80
Total, variable cash expenses	134.83
General farm overhead	12.60
Taxes and insurance	24.12
Interest	37.15
Total, fixed cash expenses	73.87
Total, cash expenses	208.71
Receipts less cash expenses	-21.78
Capital replacement	35.07
Receipts less cash expenses and replacement	-56.85
Economic (full ownership) costs:	
Variable cash expenses	134.83
General farm overhead	12.60
Taxes and insurance	24.12
Capital replacement	35.07
Allocated returns to owned inputs:	
Return to operating capital	3.34
Return to other nonland capital	6.51
Net land rent	26.85
Unpaid labor	11.75
Total, economic costs	255.07
Residual returns to management and risk	-68.14
Harvest-period price (dollars/bu.)	1.39
Yield (bu./planted acre)	134.48

All costs and returns are preliminary as of 08/01/87.

Appendix table 49--Illinois oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	9.37
Secondary crop	32.94
Total	42.31
Cash expenses:	
Seed	7.69
Fertilizer	9.71
Lime and gypsum	1.90
Chemicals	.26
Custom operations	.95
Fuel, lube, and electricity	2.85
Repairs	3.04
Hired labor	.75
Miscellaneous	.12
Total, variable cash expenses	27.28
General farm overhead	5.46
Taxes and insurance	20.37
Interest	16.10
Total, fixed cash expenses	41.93
Total, cash expenses	69.21
Receipts less cash expenses	-26.90
Capital replacement	10.03
Receipts less cash expenses and replacement	-36.93
Economic (full ownership) costs:	
Variable cash expenses	27.28
General farm overhead	5.46
Taxes and insurance	20.37
Capital replacement	10.03
Allocated returns to owned inputs:	
Return to operating capital	.48
Return to other nonland capital	2.28
Net land rent	11.95
Unpaid labor	7.63
Total, economic costs	85.48
Residual returns to management and risk	-43.17
Harvest-period price (dollars/bu.)	.95
Yield (bu./planted acre)	9.86

All costs and returns are preliminary as of 08/01/87.

Appendix table 50--Illinois soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	64.38
Secondary crop	7.39
Total	71.77
Cash expenses:	
Seed	11.12
Fertilizer	39.41
Lime and gypsum	5.97
Chemicals	.54
Custom operations	4.63
Fuel, lube, and electricity	3.58
Repairs	4.46
Hired labor	.81
Miscellaneous	.76
Total, variable cash expenses	71.28
General farm overhead	7.39
Taxes and insurance	14.35
Interest	21.77
Total, fixed cash expenses	43.51
Total, cash expenses	114.79
Receipts less cash expenses	-43.02
Capital replacement	18.78
Receipts less cash expenses and replacement	-61.80
Economic (full ownership) costs:	
Variable cash expenses	71.28
General farm overhead	7.39
Taxes and insurance	14.35
Capital replacement	18.78
Allocated returns to owned inputs:	
Return to operating capital	2.57
Return to other nonland capital	3.45
Unpaid labor	9.32
Total, economic costs	127.14
Residual returns to management and risk	-55.37
Harvest-period price (dollars/bu.)	2.32
Yield (bu./planted acre)	27.75

All costs and returns are preliminary as of 08/01/87.

Appendix table 51--Illinois soybeans production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	184.58
Total	184.58
=====	
Cash expenses:	
Seed	8.84
Fertilizer	6.33
Lime and gypsum	1.27
Chemicals	19.56
Custom operations	3.93
Fuel, lube, and electricity	4.43
Repairs	6.09
Hired labor	1.44
Miscellaneous	.95
Technical services	.08
Total, variable cash expenses	52.91
General farm overhead	11.54
Taxes and insurance	20.75
Interest	34.03
Total, fixed cash expenses	66.32
Total, cash expenses	119.24
Receipts less cash expenses	65.34
Capital replacement	25.70
Receipts less cash expenses and replacement	39.64
=====	
Economic (full ownership) costs:	
Variable cash expenses	52.91
General farm overhead	11.54
Taxes and insurance	20.75
Capital replacement	25.70
Allocated returns to owned inputs:	
Return to operating capital	1.20
Return to other nonland capital	4.51
Net land rent	53.31
Unpaid labor	9.62
Total, economic costs	179.55
Residual returns to management and risk	5.03
=====	
Harvest-period price (dollars/bu.)	4.64
Yield (bu./planted acre)	39.78
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 52--Indiana corn production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	169.90
Total	169.90
=====	
Cash expenses:	
Seed	16.87
Fertilizer	53.78
Lime and gypsum	.89
Chemicals	19.96
Custom operations	4.72
Fuel, lube, and electricity	5.39
Repairs	9.66
Hired labor	1.56
Drying	5.54
Miscellaneous	.04
Technical services	.35
Total, variable cash expenses	118.76
General farm overhead	11.77
Taxes and insurance	17.17
Interest	34.68
Total, fixed cash expenses	63.62
Total, cash expenses	182.38
Receipts less cash expenses	-12.48
Capital replacement	33.62
Receipts less cash expenses and replacement	-46.10
=====	
Economic (full ownership) costs:	
Variable cash expenses	118.76
General farm overhead	11.77
Taxes and insurance	17.17
Capital replacement	33.62
Allocated returns to owned inputs:	
Return to operating capital	2.98
Return to other nonland capital	6.20
Net land rent	38.90
Unpaid labor	12.63
Total, economic costs	242.03
Residual returns to management and risk	-72.13
=====	
Harvest-period price (dollars/bu.)	1.40
Yield (bu./planted acre)	121.36
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 53--Indiana oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	15.98
Secondary crop	10.31
Total	26.29
Cash expenses:	
Seed	7.24
Fertilizer	19.81
Lime and gypsum	.63
Chemicals	.71
Custom operations	1.46
Fuel, lube, and electricity	2.78
Repairs	3.77
Hired labor	1.00
Miscellaneous	.44
Technical services	.07
Total, variable cash expenses	37.91
General farm overhead	5.19
Taxes and insurance	13.15
Interest	15.29
Total, fixed cash expenses	33.62
Total, cash expenses	71.53
Receipts less cash expenses	-45.24
Capital replacement	12.24
Receipts less cash expenses and replacement	-57.48
Economic (full ownership) costs:	
Variable cash expenses	37.91
General farm overhead	5.19
Taxes and insurance	13.15
Capital replacement	12.24
Allocated returns to owned inputs:	
Return to operating capital	.60
Return to other nonland capital	2.50
Net land rent	7.01
Unpaid labor	10.06
Total, economic costs	88.66
Residual returns to management and risk	-62.37
Harvest-period price (dollars/bu.)	1.00
Yield (bu./planted acre)	15.98

All costs and returns are preliminary as of 08/01/87.

Appendix table 54--Indiana soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	77.92
Secondary crop	11.12
Total	89.04
Cash expenses:	
Seed	11.19
Fertilizer	33.63
Chemicals	.30
Custom operations	7.69
Fuel, lube, and electricity	3.95
Repairs	5.14
Hired labor	.95
Miscellaneous	1.57
Technical services	.21
Total, variable cash expenses	64.63
General farm overhead	7.89
Taxes and insurance	14.16
Interest	23.25
Total, fixed cash expenses	45.30
Total, cash expenses	109.93
Receipts less cash expenses	-20.89
Capital replacement	19.84
Receipts less cash expenses and replacement	-40.73
Economic (full ownership) costs:	
Variable cash expenses	64.63
General farm overhead	7.89
Taxes and insurance	14.16
Capital replacement	19.84
Allocated returns to owned inputs:	
Return to operating capital	2.15
Return to other nonland capital	3.81
Net land rent	16.22
Unpaid labor	10.89
Total, economic costs	139.59
Residual returns to management and risk	-50.55
Harvest-period price (dollars/bu.)	2.33
Yield (bu./planted acre)	33.44

All costs and returns are preliminary as of 08/01/87.

Appendix table 55--Indiana soybeans production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	172.78
Total	172.78
=====	
Cash expenses:	
Seed	8.15
Fertilizer	8.13
Lime and gypsum	1.02
Chemicals	17.70
Custom operations	2.50
Fuel, lube, and electricity	4.31
Repairs	6.16
Hired labor	1.36
Technical services	.43
Total, variable cash expenses	49.76
General farm overhead	11.90
Taxes and insurance	15.40
Interest	35.08
Total, fixed cash expenses	62.38
Total, cash expenses	112.14
Receipts less cash expenses	60.64
Capital replacement	25.53
Receipts less cash expenses and replacement	35.11
=====	
Economic (full ownership) costs:	
Variable cash expenses	49.76
General farm overhead	11.90
Taxes and insurance	15.40
Capital replacement	25.53
Allocated returns to owned inputs:	
Return to operating capital	1.18
Return to other nonland capital	4.50
Net land rent	56.29
Unpaid labor	9.11
Total, economic costs	173.67
Residual returns to management and risk	-.89
=====	
Harvest-period price (dollars/bu.)	4.60
Yield (bu./planted acre)	37.56

All costs and returns are preliminary as of 08/01/87.

Appendix table 56--Iowa corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	166.71
Total	166.71
=====	
Cash expenses:	
Seed	17.64
Fertilizer	44.96
Lime and gypsum	1.02
Chemicals	21.04
Custom operations	5.31
Fuel, lube, and electricity	7.00
Repairs	10.58
Hired labor	1.58
Drying	6.43
Miscellaneous	.15
Total, variable cash expenses	115.71
General farm overhead	13.50
Taxes and insurance	16.99
Interest	39.79
Total, fixed cash expenses	70.28
Total, cash expenses	185.99
Receipts less cash expenses	-19.28
Capital replacement	34.83
Receipts less cash expenses and replacement	-54.11
=====	
Economic (full ownership) costs:	
Variable cash expenses	115.71
General farm overhead	13.50
Taxes and insurance	16.99
Capital replacement	34.83
Allocated returns to owned inputs:	
Return to operating capital	2.79
Return to other nonland capital	6.71
Net land rent	43.75
Unpaid labor	12.76
Total, economic costs	247.04
Residual returns to management and risk	-80.33
=====	
Harvest-period price (dollars/bu.)	1.24
Yield (bu./planted acre)	134.44

All costs and returns are preliminary as of 08/01/87.

Appendix table 57--Iowa oats production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	14.36
Secondary crop	24.00
Total	38.36
=====	
Cash expenses:	
Seed	6.87
Fertilizer	7.85
Lime and gypsum	1.02
Chemicals	.16
Custom operations	2.34
Fuel, lube, and electricity	3.95
Repairs	4.37
Hired labor	.99
Miscellaneous	.60
Technical services	.07
Total, variable cash expenses	28.22
General farm overhead	4.38
Taxes and insurance	14.99
Interest	12.90
Total, fixed cash expenses	32.27
Total, cash expenses	60.49
Receipts less cash expenses	-22.13
Capital replacement	13.24
Receipts less cash expenses and replacement	-35.37
=====	
Economic (full ownership) costs:	
Variable cash expenses	28.22
General farm overhead	4.38
Taxes and insurance	14.99
Capital replacement	13.24
Allocated returns to owned inputs:	
Return to operating capital	.45
Return to other nonland capital	2.85
Net land rent	17.75
Unpaid labor	10.05
Total, economic costs	91.92
Residual returns to management and risk	-53.56
=====	
Harvest-period price (dollars/bu.)	.95
Yield (bu./planted acre)	15.12
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 58--Iowa soybeans production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	182.37
Total	182.37
=====	
Cash expenses:	
Seed	10.03
Fertilizer	2.01
Lime and gypsum	.76
Chemicals	17.98
Custom operations	4.24
Fuel, lube, and electricity	5.31
Repairs	6.17
Hired labor	1.57
Miscellaneous	.12
Total, variable cash expenses	48.19
General farm overhead	13.20
Taxes and insurance	16.49
Interest	38.90
Total, fixed cash expenses	68.59
Total, cash expenses	116.78
Receipts less cash expenses	65.59
Capital replacement	28.35
Receipts less cash expenses and replacement	37.24
=====	
Economic (full ownership) costs:	
Variable cash expenses	48.19
General farm overhead	13.20
Taxes and insurance	16.49
Capital replacement	28.35
Allocated returns to owned inputs:	
Return to operating capital	1.13
Return to other nonland capital	4.69
Net land rent	59.50
Unpaid labor	10.48
Total, economic costs	182.03
Residual returns to management and risk	.34
=====	
Harvest-period price (dollars/bu.)	4.42
Yield (bu./planted acre)	41.26
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 59--Kansas corn (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	145.86
Total	145.86
Cash expenses:	
Seed	14.04
Fertilizer	32.05
Lime and gypsum	1.00
Chemicals	19.99
Custom operations	4.88
Fuel, lube, and electricity	4.21
Repairs	7.86
Hired labor	1.20
Drying	1.12
Technical services	.15
Total, variable cash expenses	86.50
General farm overhead	6.56
Taxes and insurance	8.85
Interest	15.44
Total, fixed cash expenses	30.85
Total, cash expenses	117.35
Receipts less cash expenses	28.51
Capital replacement	22.10
Receipts less cash expenses and replacement	6.41
Economic (full ownership) costs:	
Variable cash expenses	86.50
General farm overhead	6.56
Taxes and insurance	8.85
Capital replacement	22.10
Allocated returns to owned inputs:	
Return to operating capital	2.23
Return to other nonland capital	4.52
Net land rent	36.67
Unpaid labor	9.68
Total, economic costs	177.11
Residual returns to management and risk	-31.25
Harvest-period price (dollars/bu.)	1.49
Yield (bu./planted acre)	97.89

All costs and returns are preliminary as of 08/01/87.

Appendix table 60--Kansas corn (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	221.70
Total	221.70
Cash expenses:	
Seed	18.51
Fertilizer	41.53
Chemicals	33.10
Custom operations	9.03
Fuel, lube, and electricity	68.89
Repairs	26.22
Hired labor	2.89
Drying	3.67
Miscellaneous	.04
Technical services	1.99
Total, variable cash expenses	205.87
General farm overhead	22.97
Taxes and insurance	14.81
Interest	54.05
Total, fixed cash expenses	91.83
Total, cash expenses	297.70
Receipts less cash expenses	-76.00
Capital replacement	58.27
Receipts less cash expenses and replacement	-134.27
Economic (full ownership) costs:	
Variable cash expenses	205.87
General farm overhead	22.97
Taxes and insurance	14.81
Capital replacement	58.27
Allocated returns to owned inputs:	
Return to operating capital	4.82
Return to other nonland capital	11.70
Net land rent	27.26
Unpaid labor	23.37
Total, economic costs	369.07
Residual returns to management and risk	-147.37
Harvest-period price (dollars/bu.)	1.49
Yield (bu./planted acre)	148.79

All costs and returns are preliminary as of 08/01/87.

Appendix table 61--Kansas sorghum (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	81.52
Total	81.52
=====	
Cash expenses:	
Seed	2.86
Fertilizer	13.94
Chemicals	10.13
Custom operations	2.36
Fuel, lube, and electricity	4.28
Repairs	8.61
Hired labor	1.47
Drying	.25
Miscellaneous	.10
Technical services	.15
Total, variable cash expenses	44.15
General farm overhead	5.27
Taxes and insurance	9.53
Interest	12.41
Total, fixed cash expenses	27.21
Total, cash expenses	71.36
Receipts less cash expenses	10.16
Capital replacement	25.44
Receipts less cash expenses and replacement	-15.28
=====	
Economic (full ownership) costs:	
Variable cash expenses	44.15
General farm overhead	5.27
Taxes and insurance	9.53
Capital replacement	25.44
Allocated returns to owned inputs:	
Return to operating capital	1.10
Return to other nonland capital	5.09
Net land rent	20.14
Unpaid labor	9.01
Total, economic costs	119.73
Residual returns to management and risk	-38.21
=====	
Harvest-period price (dollars/bu.)	1.29
Yield (bu./planted acre)	63.19

All costs and returns are preliminary as of 08/01/87.

Appendix table 62--Kansas sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	136.46
Total	136.46
=====	
Cash expenses:	
Seed	4.01
Fertilizer	27.13
Chemicals	15.27
Custom operations	4.89
Fuel, lube, and electricity	48.24
Repairs	22.19
Hired labor	2.93
Drying	.33
Miscellaneous	.43
Technical services	1.21
Total, variable cash expenses	126.64
General farm overhead	12.39
Taxes and insurance	13.61
Interest	29.15
Total, fixed cash expenses	55.15
Total, cash expenses	181.79
Receipts less cash expenses	-45.33
Capital replacement	56.19
Receipts less cash expenses and replacement	-101.52
=====	
Economic (full ownership) costs:	
Variable cash expenses	126.64
General farm overhead	12.39
Taxes and insurance	13.61
Capital replacement	56.19
Allocated returns to owned inputs:	
Return to operating capital	2.57
Return to other nonland capital	10.22
Net land rent	1.69
Unpaid labor	18.03
Total, economic costs	241.33
Residual returns to management and risk	-104.87
=====	
Harvest-period price (dollars/bu.)	1.29
Yield (bu./planted acre)	105.78

All costs and returns are preliminary as of 08/01/87.

Appendix table 63--Kansas oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	33.17
Secondary crop	6.49
Total	39.66
Cash expenses:	
Seed	5.46
Fertilizer	10.53
Chemicals	.17
Custom operations	1.24
Fuel, lube, and electricity	2.98
Repairs	5.30
Hired labor	.81
Miscellaneous	.48
Total, variable cash expenses	26.97
General farm overhead	5.13
Taxes and insurance	6.51
Interest	12.06
Total, fixed cash expenses	23.70
Total, cash expenses	50.68
Receipts less cash expenses	-11.02
Capital replacement	12.65
Receipts less cash expenses and replacement	-23.67
Economic (full ownership) costs:	
Variable cash expenses	26.97
General farm overhead	5.13
Taxes and insurance	6.51
Capital replacement	12.65
Allocated returns to owned inputs:	
Return to operating capital	.45
Return to other nonland capital	2.58
Net land rent	8.80
Unpaid labor	8.20
Total, economic costs	71.29
Residual returns to management and risk	-31.63
Harvest-period price (dollars/bu.)	.86
Yield (bu./planted acre)	38.57

All costs and returns are preliminary as of 08/01/87.

Appendix table 64--Kansas hard red winter wheat
(after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	52.67
Secondary crop	2.36
Total	55.03
Cash expenses:	
Seed	5.43
Fertilizer	17.41
Lime and gypsum	1.81
Chemicals	1.55
Custom operations	4.20
Fuel, lube, and electricity	3.62
Repairs	6.85
Hired labor	.71
Miscellaneous	.26
Technical services	.09
Total, variable cash expenses	41.93
General farm overhead	7.76
Taxes and insurance	7.42
Interest	18.27
Total, fixed cash expenses	33.45
Total, cash expenses	75.38
Receipts less cash expenses	-20.35
Capital replacement	19.34
Receipts less cash expenses and replacement	-39.69
Economic (full ownership) costs:	
Variable cash expenses	41.93
General farm overhead	7.76
Taxes and insurance	7.42
Capital replacement	19.34
Allocated returns to owned inputs:	
Return to operating capital	1.51
Return to other nonland capital	3.66
Net land rent	11.42
Unpaid labor	8.17
Total, economic costs	101.21
Residual returns to management and risk	-46.18
Harvest-period price (dollars/bu.)	2.14
Yield (bu./planted acre)	24.61

All costs and returns are preliminary as of 08/01/87.

Appendix table 65--Kansas hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	63.41
Secondary crop	.60
Total	64.01
=====	
Cash expenses:	
Seed	3.58
Fertilizer	5.84
Chemicals	.60
Custom operations	7.49
Fuel, lube, and electricity	4.05
Repairs	6.56
Hired labor	.82
Total, variable cash expenses	28.94
General farm overhead	8.56
Taxes and insurance	9.54
Interest	20.15
Total, fixed cash expenses	38.25
Total, cash expenses	67.19
Receipts less cash expenses	-3.18
Capital replacement	19.72
Receipts less cash expenses and replacement	-22.90
=====	
Economic (full ownership) costs:	
Variable cash expenses	28.94
General farm overhead	8.56
Taxes and insurance	9.54
Capital replacement	19.72
Allocated returns to owned inputs:	
Return to operating capital	.97
Return to other nonland capital	3.38
Net land rent	15.26
Unpaid labor	9.47
Total, economic costs	95.84
Residual returns to management and risk	-31.83
=====	
Harvest-period price (dollars/bu.)	2.14
Yield (bu./planted acre)	29.63

All costs and returns are preliminary as of 08/01/87.

Appendix table 66--Kansas hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	98.44
Secondary crop	2.62
Total	101.06
=====	
Cash expenses:	
Seed	4.66
Fertilizer	16.55
Chemicals	.47
Custom operations	9.51
Fuel, lube, and electricity	35.54
Repairs	14.05
Hired labor	1.11
Miscellaneous	.88
Technical services	.70
Total, variable cash expenses	83.48
General farm overhead	11.10
Taxes and insurance	9.60
Interest	26.13
Total, fixed cash expenses	46.83
Total, cash expenses	130.30
Receipts less cash expenses	-29.24
Capital replacement	31.62
Receipts less cash expenses and replacement	-60.86
=====	
Economic (full ownership) costs:	
Variable cash expenses	83.48
General farm overhead	11.10
Taxes and insurance	9.60
Capital replacement	31.62
Allocated returns to owned inputs:	
Return to operating capital	2.16
Return to other nonland capital	5.58
Net land rent	12.81
Unpaid labor	12.80
Total, economic costs	169.14
Residual returns to management and risk	-68.08
=====	
Harvest-period price (dollars/bu.)	2.14
Yield (bu./planted acre)	46.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 67--Kansas soybeans production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	142.40
Total	142.40
Cash expenses:	
Seed	7.14
Fertilizer	1.95
Lime and gypsum	.20
Chemicals	13.26
Custom operations	2.16
Fuel, lube, and electricity	3.68
Repairs	6.23
Hired labor	1.18
Total, variable cash expenses	35.80
General farm overhead	7.15
Taxes and insurance	7.23
Interest	16.82
Total, fixed cash expenses	31.19
Total, cash expenses	67.00
Receipts less cash expenses	75.40
Capital replacement	17.01
Receipts less cash expenses and replacement	58.39
Economic (full ownership) costs:	
Variable cash expenses	35.80
General farm overhead	7.15
Taxes and insurance	7.23
Capital replacement	17.01
Allocated returns to owned inputs:	
Return to operating capital	.82
Return to other nonland capital	3.55
Net land rent	43.30
Unpaid labor	7.91
Total, economic costs	122.77
Residual returns to management and risk	19.63
Harvest-period price (dollars/bu.)	4.45
Yield (bu./planted acre)	32.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 68--Kentucky corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	175.26
Total	175.26
Cash expenses:	
Seed	15.87
Fertilizer	57.37
Lime and gypsum	4.51
Chemicals	12.15
Custom operations	5.24
Fuel, lube, and electricity	6.79
Repairs	10.26
Hired labor	2.28
Drying	4.83
Technical services	.19
Total, variable cash expenses	119.49
General farm overhead	9.26
Taxes and insurance	7.39
Interest	14.12
Total, fixed cash expenses	30.78
Total, cash expenses	150.26
Receipts less cash expenses	25.00
Capital replacement	26.43
Receipts less cash expenses and replacement	-1.43
Economic (full ownership) costs:	
Variable cash expenses	119.49
General farm overhead	9.26
Taxes and insurance	7.39
Capital replacement	26.43
Allocated returns to owned inputs:	
Return to operating capital	2.58
Return to other nonland capital	4.84
Net land rent	40.12
Unpaid labor	18.42
Total, economic costs	228.53
Residual returns to management and risk	-53.27
Harvest-period price (dollars/bu.)	1.93
Yield (bu./planted acre)	90.81

All costs and returns are preliminary as of 08/01/87.

Appendix table 69--Kentucky soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	50.63
Secondary crop	5.91
Total	56.54
=====	
Cash expenses:	
Seed	10.22
Fertilizer	33.97
Lime and gypsum	2.25
Chemicals	.78
Custom operations	6.31
Fuel, lube, and electricity	3.83
Repairs	5.25
Hired labor	.80
Miscellaneous	.31
Technical services	.31
Total, variable cash expenses	64.02
General farm overhead	5.36
Taxes and insurance	4.66
Interest	8.16
Total, fixed cash expenses	18.18
Total, cash expenses	82.21
Receipts less cash expenses	-25.67
Capital replacement	19.11
Receipts less cash expenses and replacement	-44.78
=====	
Economic (full ownership) costs:	
Variable cash expenses	64.02
General farm overhead	5.36
Taxes and insurance	4.66
Capital replacement	19.11
Allocated returns to owned inputs:	
Return to operating capital	2.17
Return to other nonland capital	3.12
Net land rent	14.72
Unpaid labor	9.15
Total, economic costs	122.32
Residual returns to management and risk	-65.78
=====	
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	20.25
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 70--Kentucky soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	152.57
Total	152.57
=====	
Cash expenses:	
Seed	8.41
Fertilizer	16.12
Lime and gypsum	2.41
Chemicals	26.03
Custom operations	2.08
Fuel, lube, and electricity	4.40
Repairs	6.62
Hired labor	1.90
Miscellaneous	.27
Technical services	.05
Total, variable cash expenses	68.29
General farm overhead	7.20
Taxes and insurance	5.35
Interest	10.96
Total, fixed cash expenses	23.51
Total, cash expenses	91.80
Receipts less cash expenses	60.77
Capital replacement	22.96
Receipts less cash expenses and replacement	37.81
=====	
Economic (full ownership) costs:	
Variable cash expenses	68.29
General farm overhead	7.20
Taxes and insurance	5.35
Capital replacement	22.96
Allocated returns to owned inputs:	
Return to operating capital	1.62
Return to other nonland capital	3.52
Net land rent	41.29
Unpaid labor	12.73
Total, economic costs	162.95
Residual returns to management and risk	-10.38
=====	
Harvest-period price (dollars/bu.)	4.89
Yield (bu./planted acre)	31.20
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 71--Louisiana soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	84.23
Total	84.23
=====	
Cash expenses:	
Seed	11.97
Fertilizer	23.85
Chemicals	2.79
Custom operations	6.06
Fuel, lube, and electricity	2.94
Repairs	5.00
Hired labor	.61
Miscellaneous	1.63
Technical services	.09
Total, variable cash expenses	54.94
General farm overhead	5.72
Taxes and insurance	4.17
Interest	9.31
Total, fixed cash expenses	19.20
Total, cash expenses	74.14
Receipts less cash expenses	10.09
Capital replacement	16.21
Receipts less cash expenses and replacement	-6.12
=====	
Economic (full ownership) costs:	
Variable cash expenses	54.94
General farm overhead	5.72
Taxes and insurance	4.17
Capital replacement	16.21
Allocated returns to owned inputs:	
Return to operating capital	1.69
Return to other nonland capital	2.59
Net land rent	20.34
Unpaid labor	6.98
Total, economic costs	112.65
Residual returns to management and risk	-28.42
=====	
Harvest-period price (dollars/bu.)	2.75
Yield (bu./planted acre)	30.63
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 72--Louisiana (Southwest) rice
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	175.81
Total	175.81
=====	
Cash expenses:	
Seed	26.52
Fertilizer	34.26
Chemicals	7.04
Custom operations	37.11
Fuel, lube, and electricity	9.28
Repairs	22.84
Hired labor	15.23
Purchased irrigation water	48.61
Drying	39.92
Technical services	.92
Total, variable cash expenses	241.73
General farm overhead	15.93
Taxes and insurance	9.09
Interest	25.93
Total, fixed cash expenses	50.95
Total, cash expenses	292.68
Receipts less cash expenses	-116.87
Capital replacement	30.82
Receipts less cash expenses and replacement	-147.69
=====	
Economic (full ownership) costs:	
Variable cash expenses	241.73
General farm overhead	15.93
Taxes and insurance	9.09
Capital replacement	30.82
Allocated returns to owned inputs:	
Return to operating capital	3.59
Return to other nonland capital	6.65
Net land rent	33.01
Unpaid labor	25.93
Total, economic costs	366.75
Residual returns to management and risk	-190.94
=====	
Harvest-period price (dollars/cwt.)	3.95
Yield (cwt./planted acre)	44.51
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 73--Louisiana soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	91.34
Total	91.34
=====	
Cash expenses:	
Seed	14.41
Fertilizer	5.15
Chemicals	31.14
Custom operations	2.69
Fuel, lube, and electricity	4.05
Repairs	6.62
Hired labor	1.33
Miscellaneous	.63
Technical services	.12
Total, variable cash expenses	66.14
General farm overhead	6.92
Taxes and insurance	5.87
Interest	11.25
Total, fixed cash expenses	24.04
Total, cash expenses	90.18
Receipts less cash expenses	1.16
Capital replacement	25.47
Receipts less cash expenses and replacement	-24.31
=====	
Economic (full ownership) costs:	
Variable cash expenses	66.14
General farm overhead	6.92
Taxes and insurance	5.87
Capital replacement	25.47
Allocated returns to owned inputs:	
Return to operating capital	1.61
Return to other nonland capital	3.93
Net land rent	21.05
Unpaid labor	8.93
Total, economic costs	139.91
Residual returns to management and risk	-48.57
=====	
Harvest-period price (dollars/bu.)	4.66
Yield (bu./planted acre)	19.60
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 74--Louisiana cotton production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	246.49
Secondary crop	28.82
Total	275.31
=====	
Cash expenses:	
Seed	8.59
Fertilizer	24.36
Lime and gypsum	.48
Chemicals	86.91
Custom operations	11.73
Fuel, lube, and electricity	8.43
Repairs	20.97
Hired labor	7.27
Ginning	41.32
Miscellaneous	3.68
Technical services	3.27
Total, variable cash expenses	217.01
General farm overhead	20.65
Taxes and insurance	9.89
Interest	33.59
Total, fixed cash expenses	64.12
Total, cash expenses	281.13
Receipts less cash expenses	-5.82
Capital replacement	49.12
Receipts less cash expenses and replacement	-54.94
=====	
Economic (full ownership) costs:	
Variable cash expenses	217.01
General farm overhead	20.65
Taxes and insurance	9.89
Capital replacement	49.12
Allocated returns to owned inputs:	
Return to operating capital	3.41
Return to other nonland capital	8.49
Net land rent	46.26
Unpaid labor	14.12
Total, economic costs	368.94
Residual returns to management and risk	-93.63
=====	
Harvest-period price (dollars/lb.)	.440
Yield (lbs./planted acre)	562.76
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 75--Maryland corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	130.28
Total	130.28
Cash expenses:	
Seed	16.12
Fertilizer	37.61
Lime and gypsum	8.21
Chemicals	19.41
Custom operations	9.56
Fuel, lube, and electricity	6.39
Repairs	10.16
Hired labor	1.97
Drying	3.19
Miscellaneous	.48
Technical services	.06
Total, variable cash expenses	113.17
General farm overhead	22.23
Taxes and insurance	13.63
Interest	34.20
Total, fixed cash expenses	70.06
Total, cash expenses	183.23
Receipts less cash expenses	-52.95
Capital replacement	25.57
Receipts less cash expenses and replacement	-78.52
Economic (full ownership) costs:	
Variable cash expenses	113.17
General farm overhead	22.23
Taxes and insurance	13.63
Capital replacement	25.57
Allocated returns to owned inputs:	
Return to operating capital	2.44
Return to other nonland capital	5.49
Net land rent	44.07
Unpaid labor	15.98
Total, economic costs	242.57
Residual returns to management and risk	-112.29
Harvest-period price (dollars/bu.)	1.80
Yield (bu./planted acre)	72.38

All costs and returns are preliminary as of 08/01/87.

Appendix table 76--Michigan corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	150.41
Total	150.41
Cash expenses:	
Seed	16.15
Fertilizer	48.91
Lime and gypsum	.63
Chemicals	18.13
Custom operations	8.29
Fuel, lube, and electricity	5.40
Repairs	8.19
Hired labor	1.23
Drying	4.14
Miscellaneous	.46
Technical services	.14
Total, variable cash expenses	111.67
General farm overhead	18.37
Taxes and insurance	31.04
Interest	59.20
Total, fixed cash expenses	108.61
Total, cash expenses	220.28
Receipts less cash expenses	-69.87
Capital replacement	31.47
Receipts less cash expenses and replacement	-101.34
Economic (full ownership) costs:	
Variable cash expenses	111.67
General farm overhead	18.37
Taxes and insurance	31.04
Capital replacement	31.47
Allocated returns to owned inputs:	
Return to operating capital	2.78
Return to other nonland capital	6.15
Net land rent	16.38
Unpaid labor	9.95
Total, economic costs	227.81
Residual returns to management and risk	-77.40
Harvest-period price (dollars/bu.)	1.45
Yield (bu./planted acre)	103.73

All costs and returns are preliminary as of 08/01/87.

Appendix table 77--Michigan oats production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	42.79
Secondary crop	7.74
Total	50.53
=====	
Cash expenses:	
Seed	5.51
Fertilizer	21.54
Lime and gypsum	2.03
Chemicals	1.25
Custom operations	4.67
Fuel, lube, and electricity	4.93
Repairs	7.05
Hired labor	1.28
Miscellaneous	.63
Technical services	.21
Total, variable cash expenses	49.10
General farm overhead	5.97
Taxes and insurance	28.82
Interest	18.52
Total, fixed cash expenses	53.31
Total, cash expenses	102.41
Receipts less cash expenses	-51.88
Capital replacement	22.09
Receipts less cash expenses and replacement	-73.97
=====	
Economic (full ownership) costs:	
Variable cash expenses	49.10
General farm overhead	5.74
Taxes and insurance	28.82
Capital replacement	22.09
Allocated returns to owned inputs:	
Return to operating capital	.80
Return to other nonland capital	4.58
Net land rent	1.95
Unpaid labor	12.99
Total, economic costs	126.30
Residual returns to management and risk	-75.77
=====	
Harvest-period price (dollars/bu.)	.83
Yield (bu./planted acre)	51.55

All costs and returns are preliminary as of 08/01/87.

Appendix table 78--Michigan soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	105.00
Secondary crop	13.17
Total	118.17
=====	
Cash expenses:	
Seed	11.74
Fertilizer	33.53
Lime and gypsum	1.78
Chemicals	1.22
Custom operations	5.26
Fuel, lube, and electricity	5.11
Repairs	7.53
Hired labor	.90
Miscellaneous	.44
Technical services	.21
Total, variable cash expenses	67.73
General farm overhead	10.01
Taxes and insurance	30.99
Interest	32.28
Total, fixed cash expenses	73.29
Total, cash expenses	141.01
Receipts less cash expenses	-22.84
Capital replacement	25.05
Receipts less cash expenses and replacement	-47.89
=====	
Economic (full ownership) costs:	
Variable cash expenses	67.73
General farm overhead	10.01
Taxes and insurance	30.99
Capital replacement	25.05
Allocated returns to owned inputs:	
Return to operating capital	2.51
Return to other nonland capital	5.06
Net land rent	8.47
Unpaid labor	10.40
Total, economic costs	160.23
Residual returns to management and risk	-42.06
=====	
Harvest-period price (dollars/bu.)	2.34
Yield (bu./planted acre)	44.87

All costs and returns are preliminary as of 08/01/87.

Appendix table 79--Michigan soybeans
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	138.32
Total	138.32
Cash expenses:	
Seed	8.83
Fertilizer	19.96
Lime and gypsum	.63
Chemicals	19.24
Custom operations	4.02
Fuel, lube, and electricity	4.71
Repairs	6.29
Hired labor	1.29
Total, variable cash expenses	64.97
General farm overhead	15.49
Taxes and insurance	30.54
Interest	49.93
Total, fixed cash expenses	95.96
Total, cash expenses	160.93
Receipts less cash expenses	-22.61
Capital replacement	24.50
Receipts less cash expenses and replacement	-47.11
Economic (full ownership) costs:	
Variable cash expenses	64.97
General farm overhead	15.49
Taxes and insurance	30.54
Capital replacement	24.50
Allocated returns to owned inputs:	
Return to operating capital	1.49
Return to other nonland capital	4.56
Net land rent	21.77
Unpaid labor	8.61
Total, economic costs	171.93
Residual returns to management and risk	-33.61
Harvest-period price (dollars/bu.)	4.55
Yield (bu./planted acre)	30.40

All costs and returns are preliminary as of 08/01/87.

Appendix table 80--Minnesota corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	153.41
Total	153.41
Cash expenses:	
Seed	17.44
Fertilizer	37.32
Lime and gypsum	.63
Chemicals	20.41
Custom operations	5.18
Fuel, lube, and electricity	4.95
Repairs	8.42
Hired labor	1.23
Drying	8.02
Miscellaneous	.14
Technical services	.30
Total, variable cash expenses	104.04
General farm overhead	15.82
Taxes and insurance	13.26
Interest	51.02
Total, fixed cash expenses	80.11
Total, cash expenses	184.15
Receipts less cash expenses	-30.74
Capital replacement	33.58
Receipts less cash expenses and replacement	-64.32
Economic (full ownership) costs:	
Variable cash expenses	104.04
General farm overhead	15.82
Taxes and insurance	13.26
Capital replacement	33.58
Allocated returns to owned inputs:	
Return to operating capital	2.56
Return to other nonland capital	6.40
Net land rent	46.11
Unpaid labor	9.94
Total, economic costs	231.72
Residual returns to management and risk	-78.31
Harvest-period price (dollars/bu.)	1.29
Yield (bu./planted acre)	118.92

All costs and returns are preliminary as of 08/01/87.

Appendix table 81--Minnesota barley production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	50.87
Secondary crop	4.51
Total	55.38
Cash expenses:	
Seed	4.98
Fertilizer	18.78
Chemicals	8.72
Custom operations	1.24
Fuel, lube, and electricity	3.90
Repairs	7.20
Hired labor	1.12
Miscellaneous	.27
Technical services	.25
Total, variable cash expenses	46.46
General farm overhead	7.20
Taxes and insurance	9.09
Interest	23.23
Total, fixed cash expenses	39.53
Total, cash expenses	85.99
Receipts less cash expenses	-30.61
Capital replacement	27.07
Receipts less cash expenses and replacement	-57.68
Economic (full ownership) costs:	
Variable cash expenses	46.46
General farm overhead	7.20
Taxes and insurance	9.09
Capital replacement	27.07
Allocated returns to owned inputs:	
Return to operating capital	.66
Return to other nonland capital	5.19
Net land rent	21.64
Unpaid labor	7.51
Total, economic costs	124.82
Residual returns to management and risk	-69.44
Harvest-period price (dollars/bu.)	1.11
Yield (bu./planted acre)	45.83

All costs and returns are preliminary as of 08/01/87.

Appendix table 82--Minnesota oats production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	22.48
Secondary crop	40.70
Total	63.18
Cash expenses:	
Seed	5.44
Fertilizer	6.75
Chemicals	1.75
Custom operations	1.79
Fuel, lube, and electricity	4.41
Repairs	6.16
Hired labor	1.10
Miscellaneous	.50
Total, variable cash expenses	27.91
General farm overhead	5.45
Taxes and insurance	10.71
Interest	17.59
Total, fixed cash expenses	33.75
Total, cash expenses	61.66
Receipts less cash expenses	1.52
Capital replacement	20.24
Receipts less cash expenses and replacement	-18.72
Economic (full ownership) costs:	
Variable cash expenses	27.91
General farm overhead	5.45
Taxes and insurance	10.71
Capital replacement	20.24
Allocated returns to owned inputs:	
Return to operating capital	.61
Return to other nonland capital	4.24
Net land rent	14.38
Unpaid labor	11.18
Total, economic costs	94.72
Residual returns to management and risk	-31.54
Harvest-period price (dollars/bu.)	.83
Yield (bu./planted acre)	27.09

All costs and returns are preliminary as of 08/01/87.

Appendix table 83--Minnesota hard red spring wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	84.85
Secondary crop	2.46
Total	87.31
Cash expenses:	
Seed	8.10
Fertilizer	21.40
Chemicals	8.44
Custom operations	2.37
Fuel, lube, and electricity	3.74
Repairs	6.31
Hired labor	.62
Miscellaneous	.28
Technical services	.35
Total, variable cash expenses	51.60
General farm overhead	8.23
Taxes and insurance	8.72
Interest	26.52
Total, fixed cash expenses	43.46
Total, cash expenses	95.07
Receipts less cash expenses	-7.76
Capital replacement	24.73
Receipts less cash expenses and replacement	-32.49
Economic (full ownership) costs:	
Variable cash expenses	51.60
General farm overhead	8.23
Taxes and insurance	8.72
Capital replacement	24.73
Allocated returns to owned inputs:	
Return to operating capital	.77
Return to other nonland capital	4.46
Net land rent	28.64
Unpaid labor	7.09
Total, economic costs	134.24
Residual returns to management and risk	-46.93
Harvest-period price (dollars/bu.)	2.38
Yield (bu./planted acre)	35.65

All costs and returns are preliminary as of 08/01/87.

Appendix table 84--Minnesota durum wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	95.48
Secondary crop	2.46
Total	97.94
Cash expenses:	
Seed	8.10
Fertilizer	21.40
Chemicals	8.44
Custom operations	2.23
Fuel, lube, and electricity	3.76
Repairs	6.35
Hired labor	.62
Miscellaneous	.28
Technical services	.35
Total, variable cash expenses	51.53
General farm overhead	7.48
Taxes and insurance	8.51
Interest	24.09
Total, fixed cash expenses	40.08
Total, cash expenses	91.61
Receipts less cash expenses	6.33
Capital replacement	25.02
Receipts less cash expenses and replacement	-18.69
Economic (full ownership) costs:	
Variable cash expenses	51.53
General farm overhead	7.48
Taxes and insurance	8.51
Capital replacement	25.02
Allocated returns to owned inputs:	
Return to operating capital	.77
Return to other nonland capital	4.51
Net land rent	31.68
Unpaid labor	7.12
Total, economic costs	136.61
Residual returns to management and risk	-38.67
Harvest-period price (dollars/bu.)	2.52
Yield (bu./planted acre)	37.89

All costs and returns are preliminary as of 08/01/87.

Appendix table 85--Minnesota soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	152.68
Total	152.68
=====	
Cash expenses:	
Seed	7.98
Fertilizer	3.30
Chemicals	20.26
Custom operations	1.24
Fuel, lube, and electricity	4.14
Repairs	6.38
Hired labor	1.56
Total, variable cash expenses	44.86
General farm overhead	15.53
Taxes and insurance	11.75
Interest	50.06
Total, fixed cash expenses	77.33
Total, cash expenses	122.20
Receipts less cash expenses	30.48
Capital replacement	29.34
Receipts less cash expenses and replacement	1.14
=====	
Economic (full ownership) costs:	
Variable cash expenses	44.86
General farm overhead	15.53
Taxes and insurance	11.75
Capital replacement	29.34
Allocated returns to owned inputs:	
Return to operating capital	1.11
Return to other nonland capital	5.04
Net land rent	50.54
Unpaid labor	10.48
Total, economic costs	168.65
Residual returns to management and risk	-15.97
=====	
Harvest-period price (dollars/bu.)	4.39
Yield (bu./planted acre)	34.78

All costs and returns are preliminary as of 08/01/87.

Appendix table 86--Minnesota sunflower
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	105.49
Total	105.49
=====	
Cash expenses:	
Seed	10.11
Fertilizer	19.19
Chemicals	13.56
Custom operations	2.18
Fuel, lube, and electricity	4.31
Repairs	6.69
Hired labor	.08
Drying	3.49
Technical services	.75
Total, variable cash expenses	60.36
General farm overhead	8.62
Taxes and insurance	8.50
Interest	27.79
Total, fixed cash expenses	44.91
Total, cash expenses	105.27
Receipts less cash expenses	.22
Capital replacement	27.05
Receipts less cash expenses and replacement	-26.83
=====	
Economic (full ownership) costs:	
Variable cash expenses	60.36
General farm overhead	8.62
Taxes and insurance	8.50
Capital replacement	27.05
Allocated returns to owned inputs:	
Return to operating capital	1.28
Return to other nonland capital	4.74
Net land rent	24.26
Unpaid labor	8.04
Total, economic costs	142.85
Residual returns to management and risk	-37.36
=====	
Harvest-period price (dollars/cwt.)	7.23
Yield (cwt./planted acre)	14.59

All costs and returns are preliminary as of 08/01/87.

Appendix table 87--Minnesota flaxseed
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	55.32
Secondary crop	19.41
Total	74.73
=====	
Cash expenses:	
Seed	6.37
Fertilizer	8.44
Chemicals	5.57
Custom operations	3.42
Fuel, lube, and electricity	4.48
Repairs	7.00
Hired labor	.10
Miscellaneous	.44
Technical services	.06
Total, variable cash expenses	35.88
General farm overhead	4.86
Taxes and insurance	9.27
Interest	15.66
Total, fixed cash expenses	29.79
Total, cash expenses	65.67
Receipts less cash expenses	9.06
Capital replacement	27.45
Receipts less cash expenses and replacement	-18.39
=====	
Economic (full ownership) costs:	
Variable cash expenses	35.88
General farm overhead	4.86
Taxes and insurance	9.27
Capital replacement	27.45
Allocated returns to owned inputs:	
Return to operating capital	.64
Return to other nonland capital	5.21
Net land rent	11.44
Unpaid labor	9.96
Total, economic costs	104.71
Residual returns to management and risk	-29.98
=====	
Harvest-period price (dollars/bu.)	3.56
Yield (bu./planted acre)	15.54
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 88--Mississippi soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	69.44
Total	69.44
=====	
Cash expenses:	
Seed	10.77
Fertilizer	24.76
Chemicals	2.79
Custom operations	5.86
Fuel, lube, and electricity	3.37
Repairs	4.86
Hired labor	.60
Miscellaneous	1.63
Technical services	.09
Total, variable cash expenses	54.73
General farm overhead	5.30
Taxes and insurance	3.46
Interest	8.63
Total, fixed cash expenses	17.39
Total, cash expenses	72.12
Receipts less cash expenses	-2.68
Capital replacement	15.55
Receipts less cash expenses and replacement	-18.23
=====	
Economic (full ownership) costs:	
Variable cash expenses	54.73
General farm overhead	5.30
Taxes and insurance	3.46
Capital replacement	15.55
Allocated returns to owned inputs:	
Return to operating capital	1.88
Return to other nonland capital	2.50
Net land rent	15.12
Unpaid labor	6.89
Total, economic costs	105.43
Residual returns to management and risk	-35.99
=====	
Harvest-period price (dollars/bu.)	2.80
Yield (bu./planted acre)	24.80
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 89--Mississippi Delta (Miss., Ark., La.) rice production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	206.40
Total	206.40
=====	
Cash expenses:	
Seed	23.48
Fertilizer	34.24
Chemicals	12.87
Custom operations	52.17
Fuel, lube, and electricity	32.80
Repairs	23.33
Hired labor	12.58
Drying	31.62
Technical services	5.54
Total, variable cash expenses	228.63
General farm overhead	15.75
Taxes and insurance	12.28
Interest	25.63
Total, fixed cash expenses	53.66
Total, cash expenses	282.29
Receipts less cash expenses	-75.89
Capital replacement	46.98
Receipts less cash expenses and replacement	-122.87
=====	
Economic (full ownership) costs:	
Variable cash expenses	228.63
General farm overhead	15.75
Taxes and insurance	12.28
Capital replacement	46.98
Allocated returns to owned inputs:	
Return to operating capital	3.65
Return to other nonland capital	10.25
Net land rent	22.70
Unpaid labor	21.41
Total, economic costs	361.65
Residual returns to management and risk	-155.25
=====	
Harvest-period price (dollars/cwt.)	3.98
Yield (cwt./planted acre)	51.86

All costs and returns are preliminary as of 08/01/87.

Appendix table 90--Mississippi soybeans^e production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	82.93
Total	82.93
=====	
Cash expenses:	
Seed	7.74
Fertilizer	4.74
Lime and gypsum	.81
Chemicals	21.51
Custom operations	3.56
Fuel, lube, and electricity	4.52
Repairs	6.48
Hired labor	1.28
Miscellaneous	2.18
Technical services	1.23
Total, variable cash expenses	54.05
General farm overhead	6.95
Taxes and insurance	4.98
Interest	11.30
Total, fixed cash expenses	23.23
Total, cash expenses	77.28
Receipts less cash expenses	5.65
Capital replacement	21.97
Receipts less cash expenses and replacement	-16.32
=====	
Economic (full ownership) costs:	
Variable cash expenses	54.05
General farm overhead	6.95
Taxes and insurance	4.98
Capital replacement	21.97
Allocated returns to owned inputs:	
Return to operating capital	1.50
Return to other nonland capital	3.51
Net land rent	24.63
Unpaid labor	8.59
Total, economic costs	126.17
Residual returns to management and risk	-43.24
=====	
Harvest-period price (dollars/bu.)	4.89
Yield (bu./planted acre)	16.96

All costs and returns are preliminary as of 08/01/87.

Appendix table 91--Mississippi cotton
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	242.83
Secondary crop	29.03
Total	271.86
=====	
Cash expenses:	
Seed	5.64
Fertilizer	28.49
Lime and gypsum	3.54
Chemicals	108.73
Custom operations	7.95
Fuel, lube, and electricity	10.41
Repairs	21.62
Hired labor	9.79
Ginning	45.33
Miscellaneous	4.05
Technical services	4.03
Total, variable cash expenses	249.58
General farm overhead	26.03
Taxes and insurance	10.41
Interest	42.37
Total, fixed cash expenses	78.81
Total, cash expenses	328.39
Receipts less cash expenses	-56.53
Capital replacement	52.08
Receipts less cash expenses and replacement	-108.61
=====	
Economic (full ownership) costs:	
Variable cash expenses	249.58
General farm overhead	26.03
Taxes and insurance	10.41
Capital replacement	52.08
Allocated returns to owned inputs:	
Return to operating capital	4.00
Return to other nonland capital	8.98
Net land rent	45.08
Unpaid labor	19.00
Total, economic costs	415.16
Residual returns to management and risk	-143.30
=====	
Harvest-period price (dollars/lb.)	.43
Yield (lbs./planted acre)	564.71
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 92--Missouri corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	146.61
Total	146.61
=====	
Cash expenses:	
Seed	14.76
Fertilizer	45.39
Lime and gypsum	1.02
Chemicals	17.43
Custom operations	3.59
Fuel, lube, and electricity	6.63
Repairs	9.77
Hired labor	1.48
Drying	2.70
Technical services	.06
Total, variable cash expenses	102.83
General farm overhead	8.37
Taxes and insurance	9.97
Interest	24.67
Total, fixed cash expenses	43.01
Total, cash expenses	145.84
Receipts less cash expenses	.77
Capital replacement	33.46
Receipts less cash expenses and replacement	-32.69
=====	
Economic (full ownership) costs:	
Variable cash expenses	102.83
General farm overhead	8.37
Taxes and insurance	9.97
Capital replacement	33.46
Allocated returns to owned inputs:	
Return to operating capital	2.60
Return to other nonland capital	6.18
Net land rent	32.57
Unpaid labor	11.95
Total, economic costs	207.93
Residual returns to management and risk	-61.32
=====	
Harvest-period price (dollars/bu.)	1.29
Yield (bu./planted acre)	113.65
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 93--Missouri sorghum production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	85.41
Total	85.41
=====	
Cash expenses:	
Seed	4.69
Fertilizer	33.92
Lime and gypsum	1.40
Chemicals	11.02
Custom operations	1.64
Fuel, lube, and electricity	8.07
Repairs	10.35
Hired labor	2.30
Drying	2.22
Miscellaneous	.14
Technical services	.07
Total, variable cash expenses	75.82
General farm overhead	8.30
Taxes and insurance	18.65
Interest	24.48
Total, fixed cash expenses	51.43
Total, cash expenses	127.25
Receipts less cash expenses	-41.84
Capital replacement	42.97
Receipts less cash expenses and replacement	-84.81
=====	
Economic (full ownership) costs:	
Variable cash expenses	75.82
General farm overhead	8.30
Taxes and insurance	18.65
Capital replacement	42.97
Allocated returns to owned inputs:	
Return to operating capital	1.53
Return to other nonland capital	13.26
Net land rent	17.33
Unpaid labor	14.13
Total, economic costs	192.00
Residual returns to management and risk	-106.59
=====	
Harvest-period price (dollars/bu.)	1.11
Yield (bu./planted acre)	76.95

All costs and returns are preliminary as of 08/01/87.

Appendix table 94--Missouri soft red winter wheat production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	41.55
Secondary crop	3.36
Total	44.91
=====	
Cash expenses:	
Seed	8.61
Fertilizer	33.79
Lime and gypsum	2.16
Chemicals	.42
Custom operations	3.36
Fuel, lube, and electricity	4.00
Repairs	4.59
Hired labor	.74
Miscellaneous	.24
Technical services	.09
Total, variable cash expenses	57.99
General farm overhead	5.64
Taxes and insurance	6.56
Interest	16.62
Total, fixed cash expenses	28.82
Total, cash expenses	86.81
Receipts less cash expenses	-41.90
Capital replacement	16.80
Receipts less cash expenses and replacement	-58.70
=====	
Economic (full ownership) costs:	
Variable cash expenses	57.99
General farm overhead	5.64
Taxes and insurance	6.56
Capital replacement	16.80
Allocated returns to owned inputs:	
Return to operating capital	1.76
Return to other nonland capital	3.13
Net land rent	5.15
Unpaid labor	8.48
Total, economic costs	105.51
Residual returns to management and risk	-60.60
=====	
Harvest-period price (dollars/bu.)	2.32
Yield (bu./planted acre)	17.91

All costs and returns are preliminary as of 08/01/87.

Appendix table 95--Missouri soybeans
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	143.97
Total	143.97
=====	
Cash expenses:	
Seed	7.91
Fertilizer	3.67
Lime and gypsum	.51
Chemicals	16.17
Custom operations	2.50
Fuel, lube, and electricity	5.29
Repairs	6.10
Hired labor	1.50
Technical services	.20
Total, variable cash expenses	43.85
General farm overhead	7.44
Taxes and insurance	8.10
Interest	21.92
Total, fixed cash expenses	37.45
Total, cash expenses	81.31
Receipts less cash expenses	62.66
Capital replacement	25.01
Receipts less cash expenses and replacement	37.65
=====	
Economic (full ownership) costs:	
Variable cash expenses	43.85
General farm overhead	7.44
Taxes and insurance	8.10
Capital replacement	25.01
Allocated returns to owned inputs:	
Return to operating capital	.99
Return to other nonland capital	4.39
Net land rent	52.27
Unpaid labor	10.07
Total, economic costs	152.12
Residual returns to management and risk	-8.15
=====	
Harvest-period price (dollars/bu.)	4.46
Yield (bu./planted acre)	32.28
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 96--Missouri cotton production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	260.31
Secondary crop	27.72
Total	288.03
=====	
Cash expenses:	
Seed	8.05
Fertilizer	25.26
Lime and gypsum	.89
Chemicals	24.59
Custom operations	7.53
Fuel, lube, and electricity	9.46
Repairs	19.64
Hired labor	8.04
Ginning	46.36
Miscellaneous	.36
Technical services	.42
Total, variable cash expenses	150.60
General farm overhead	17.92
Taxes and insurance	12.72
Interest	52.83
Total, fixed cash expenses	83.47
Total, cash expenses	234.07
Receipts less cash expenses	53.96
Capital replacement	44.30
Receipts less cash expenses and replacement	9.66
=====	
Economic (full ownership) costs:	
Variable cash expenses	150.60
General farm overhead	17.92
Taxes and insurance	12.72
Capital replacement	44.30
Allocated returns to owned inputs:	
Return to operating capital	1.96
Return to other nonland capital	7.60
Net land rent	51.95
Unpaid labor	15.61
Total, economic costs	302.66
Residual returns to management and risk	-14.63
=====	
Harvest-period price (dollars/lb.)	.49
Yield (lbs./planted acre)	531.24
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 97--Montana barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	26.21
Secondary crop	5.14
Total	31.35
Cash expenses:	
Seed	3.20
Fertilizer	19.65
Chemicals	6.18
Custom operations	2.76
Fuel, lube, and electricity	1.98
Repairs	5.77
Hired labor	.69
Miscellaneous	.55
Technical services	.15
Total, variable cash expenses	40.93
General farm overhead	6.64
Taxes and insurance	5.51
Interest	11.05
Total, fixed cash expenses	23.19
Total, cash expenses	64.12
Receipts less cash expenses	-32.77
Capital replacement	19.25
Receipts less cash expenses and replacement	-52.02
Economic (full ownership) costs:	
Variable cash expenses	40.93
General farm overhead	6.64
Taxes and insurance	5.51
Capital replacement	19.25
Allocated returns to owned inputs:	
Return to operating capital	.56
Return to other nonland capital	3.28
Net land rent	6.85
Unpaid labor	4.59
Total, economic costs	87.60
Residual returns to management and risk	-56.25
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	17.71

All costs and returns are preliminary as of 08/01/87.

Appendix table 98--Montana barley (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	42.28
Secondary crop	3.51
Total	45.79
Cash expenses:	
Seed	3.13
Fertilizer	6.70
Chemicals	3.87
Custom operations	2.39
Fuel, lube, and electricity	3.24
Repairs	7.37
Hired labor	1.12
Miscellaneous	.25
Total, variable cash expenses	28.07
General farm overhead	7.31
Taxes and insurance	8.01
Interest	12.16
Total, fixed cash expenses	27.48
Total, cash expenses	55.55
Receipts less cash expenses	-9.76
Capital replacement	19.76
Receipts less cash expenses and replacement	-29.52
Economic (full ownership) costs:	
Variable cash expenses	28.07
General farm overhead	7.31
Taxes and insurance	8.01
Capital replacement	19.76
Allocated returns to owned inputs:	
Return to operating capital	.65
Return to other nonland capital	3.45
Net land rent	11.08
Unpaid labor	7.49
Total, economic costs	85.82
Residual returns to management and risk	-40.03
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	28.57

All costs and returns are preliminary as of 08/01/87.

Appendix table 99--Montana barley (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	82.55
Secondary crop	7.84
Total	90.39
Cash expenses:	
Seed	4.42
Fertilizer	23.36
Chemicals	3.77
Custom operations	3.75
Fuel, lube, and electricity	10.79
Repairs	15.61
Hired labor	1.94
Purchased irrigation water	4.80
Miscellaneous	.73
Total, variable cash expenses	69.16
General farm overhead	13.37
Taxes and insurance	11.88
Interest	22.25
Total, fixed cash expenses	47.50
Total, cash expenses	116.67
Receipts less cash expenses	-26.28
Capital replacement	34.01
Receipts less cash expenses and replacement	-60.29
Economic (full ownership) costs:	
Variable cash expenses	69.16
General farm overhead	13.37
Taxes and insurance	11.88
Capital replacement	34.01
Allocated returns to owned inputs:	
Return to operating capital	.90
Return to other nonland capital	6.21
Net land rent	22.92
Unpaid labor	12.96
Total, economic costs	171.42
Residual returns to management and risk	-81.03
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	55.78

All costs and returns are preliminary as of 08/01/87.

Appendix table 100--Montana oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	23.60
Secondary crop	10.14
Total	33.74
Cash expenses:	
Seed	3.94
Fertilizer	6.44
Chemicals	1.59
Custom operations	2.17
Fuel, lube, and electricity	3.21
Repairs	7.90
Hired labor	.75
Miscellaneous	.34
Total, variable cash expenses	26.34
General farm overhead	5.13
Taxes and insurance	6.25
Interest	8.53
Total, fixed cash expenses	19.91
Total, cash expenses	46.25
Receipts less cash expenses	-12.51
Capital replacement	21.75
Receipts less cash expenses and replacement	-34.26
Economic (full ownership) costs:	
Variable cash expenses	26.34
General farm overhead	5.13
Taxes and insurance	6.25
Capital replacement	21.75
Allocated returns to owned inputs:	
Return to operating capital	.37
Return to other nonland capital	4.18
Net land rent	10.16
Unpaid labor	7.60
Total, economic costs	81.78
Residual returns to management and risk	-48.04
Harvest-period price (dollars/bu.)	1.14
Yield (bu./planted acre)	20.70

All costs and returns are preliminary as of 08/01/87.

Appendix table 101--Montana hard red winter wheat
(dryland) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	65.49
Secondary crop	.54
Total	66.03
=====	
Cash expenses:	
Seed	3.84
Fertilizer	11.72
Chemicals	4.33
Custom operations	3.24
Fuel, lube, and electricity	3.91
Repairs	7.79
Hired labor	.76
Miscellaneous	.07
Total, variable cash expenses	35.66
General farm overhead	9.11
Taxes and insurance	8.40
Interest	15.15
Total, fixed cash expenses	32.66
Total, cash expenses	68.32
Receipts less cash expenses	-2.29
Capital replacement	24.60
Receipts less cash expenses and replacement	-26.89
=====	
Economic (full ownership) costs:	
Variable cash expenses	35.66
General farm overhead	9.11
Taxes and insurance	8.40
Capital replacement	24.60
Allocated returns to owned inputs:	
Return to operating capital	1.46
Return to other nonland capital	4.19
Net land rent	14.30
Unpaid labor	8.71
Total, economic costs	106.43
Residual returns to management and risk	-40.40
=====	
Harvest-period price (dollars/bu.)	2.20
Yield (bu./planted acre)	29.77
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 102--Montana hard red spring wheat
(after crop) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	27.85
Secondary crop	.54
Total	28.39
=====	
Cash expenses:	
Seed	3.56
Fertilizer	11.92
Chemicals	3.80
Custom operations	1.00
Fuel, lube, and electricity	1.61
Repairs	4.56
Hired labor	.34
Total, variable cash expenses	26.79
General farm overhead	5.66
Taxes and insurance	4.38
Interest	9.41
Total, fixed cash expenses	19.45
Total, cash expenses	46.24
Receipts less cash expenses	-17.85
Capital replacement	14.68
Receipts less cash expenses and replacement	-32.53
=====	
Economic (full ownership) costs:	
Variable cash expenses	26.79
General farm overhead	5.66
Taxes and insurance	4.38
Capital replacement	14.68
Allocated returns to owned inputs:	
Return to operating capital	.39
Return to other nonland capital	2.46
Net land rent	7.09
Unpaid labor	3.87
Total, economic costs	65.32
Residual returns to management and risk	-36.93
=====	
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	11.14
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 103--Montana hard red spring wheat
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	57.77
Secondary crop	.17
Total	57.94
Cash expenses:	
Seed	3.67
Fertilizer	5.05
Chemicals	2.88
Custom operations	1.84
Fuel, lube, and electricity	3.21
Repairs	6.98
Hired labor	.67
Total, variable cash expenses	24.30
General farm overhead	7.63
Taxes and insurance	7.56
Interest	12.70
Total, fixed cash expenses	27.89
Total, cash expenses	52.19
Receipts less cash expenses	5.75
Capital replacement	22.01
Receipts less cash expenses and replacement	-16.26
Economic (full ownership) costs:	
Variable cash expenses	24.30
General farm overhead	7.63
Taxes and insurance	7.56
Capital replacement	22.01
Allocated returns to owned inputs:	
Return to operating capital	.56
Return to other nonland capital	3.74
Net land rent	15.53
Unpaid labor	7.75
Total, economic costs	89.08
Residual returns to management and risk	-31.14
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	23.11

All costs and returns are preliminary as of 08/01/87.

Appendix table 104--Montana durum wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	60.21
Secondary crop	.27
Total	60.48
Cash expenses:	
Seed	3.67
Fertilizer	5.03
Chemicals	2.88
Custom operations	1.72
Fuel, lube, and electricity	3.11
Repairs	6.81
Hired labor	.66
Total, variable cash expenses	23.88
General farm overhead	5.96
Taxes and insurance	7.03
Interest	9.92
Total, fixed cash expenses	22.92
Total, cash expenses	46.80
Receipts less cash expenses	13.68
Capital replacement	21.44
Receipts less cash expenses and replacement	-7.76
Economic (full ownership) costs:	
Variable cash expenses	23.88
General farm overhead	5.96
Taxes and insurance	7.03
Capital replacement	21.44
Allocated returns to owned inputs:	
Return to operating capital	.56
Return to other nonland capital	3.61
Net land rent	16.58
Unpaid labor	7.55
Total, economic costs	86.61
Residual returns to management and risk	-26.13
Harvest-period price (dollars/bu.)	2.30
Yield (bu./planted acre)	26.18

All costs and returns are preliminary as of 08/01/87.

Appendix table 105--Nebraska corn (dryland)
production costs per planted

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	141.22
Total	141.22
=====	
Cash expenses:	
Seed	14.88
Fertilizer	19.78
Chemicals	13.65
Custom operations	4.81
Fuel, lube, and electricity	4.20
Repairs	8.02
Hired labor	1.40
Drying	3.27
Miscellaneous	.18
Technical services	.13
Total, variable cash expenses	70.32
General farm overhead	11.02
Taxes and insurance	15.71
Interest	25.94
Total, fixed cash expenses	52.67
Total, cash expenses	123.00
Receipts less cash expenses	18.22
Capital replacement	20.87
Receipts less cash expenses and replacement	-2.65
=====	
Economic (full ownership) costs:	
Variable cash expenses	70.32
General farm overhead	11.02
Taxes and insurance	15.71
Capital replacement	20.87
Allocated returns to owned inputs:	
Return to operating capital	1.81
Return to other nonland capital	4.53
Net land rent	39.40
Unpaid labor	11.33
Total, economic costs	175.00
Residual returns to management and risk	-33.78
=====	
Harvest-period price (dollars/bu.)	1.45
Yield (bu./planted acre)	97.39

All costs and returns are preliminary as of 08/01/87.

Appendix table 106--Nebraska corn (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	203.00
Total	203.00
=====	
Cash expenses:	
Seed	19.28
Fertilizer	37.73
Chemicals	20.32
Custom operations	4.93
Fuel, lube, and electricity	28.44
Repairs	22.42
Hired labor	2.59
Purchased irrigation water	1.94
Drying	5.64
Miscellaneous	.55
Technical services	.56
Total, variable cash expenses	144.41
General farm overhead	22.39
Taxes and insurance	24.34
Interest	52.67
Total, fixed cash expenses	99.40
Total, cash expenses	243.81
Receipts less cash expenses	-40.81
Capital replacement	51.73
Receipts less cash expenses and replacement	-92.54
=====	
Economic (full ownership) costs:	
Variable cash expenses	144.41
General farm overhead	22.39
Taxes and insurance	24.34
Capital replacement	51.73
Allocated returns to owned inputs:	
Return to operating capital	3.60
Return to other nonland capital	10.11
Net land rent	15.67
Unpaid labor	20.98
Total, economic costs	293.22
Residual returns to management and risk	-90.22
=====	
Harvest-period price (dollars/bu.)	1.45
Yield (bu./planted acre)	140.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 107--Nebraska sorghum (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	105.26
Total	105.26
Cash expenses:	
Seed	4.46
Fertilizer	15.40
Lime and gypsum	4.61
Chemicals	10.77
Custom operations	2.53
Fuel, lube, and electricity	4.46
Repairs	8.17
Hired labor	1.62
Drying	1.26
Miscellaneous	.07
Total, variable cash expenses	53.35
General farm overhead	9.19
Taxes and insurance	15.19
Interest	21.61
Total, fixed cash expenses	45.99
Total, cash expenses	99.34
Receipts less cash expenses	5.92
Capital replacement	19.89
Receipts less cash expenses and replacement	-13.97
Economic (full ownership) costs:	
Variable cash expenses	53.35
General farm overhead	9.19
Taxes and insurance	15.19
Capital replacement	19.89
Allocated returns to owned inputs:	
Return to operating capital	1.22
Return to other nonland capital	4.34
Net land rent	22.72
Unpaid labor	9.92
Total, economic costs	135.82
Residual returns to management and risk	-30.56
Harvest-period price (dollars/bu.)	1.31
Yield (bu./planted acre)	80.35

All costs and returns are preliminary as of 08/01/87.

Appendix table 108--Nebraska sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	127.25
Total	127.25
Cash expenses:	
Seed	5.33
Fertilizer	22.57
Chemicals	11.17
Custom operations	2.92
Fuel, lube, and electricity	16.95
Repairs	19.76
Hired labor	2.70
Drying	2.61
Miscellaneous	.06
Technical services	.22
Total, variable cash expenses	84.29
General farm overhead	13.43
Taxes and insurance	24.20
Interest	31.59
Total, fixed cash expenses	69.22
Total, cash expenses	153.52
Receipts less cash expenses	-26.27
Capital replacement	42.36
Receipts less cash expenses and replacement	-68.63
Economic (full ownership) costs:	
Variable cash expenses	84.29
General farm overhead	13.43
Taxes and insurance	24.20
Capital replacement	42.36
Allocated returns to owned inputs:	
Return to operating capital	1.83
Return to other nonland capital	8.53
Unpaid labor	16.59
Total, economic costs	191.23
Residual returns to management and risk	-63.98
Harvest-period price (dollars/bu.)	1.31
Yield (bu./planted acre)	97.14

All costs and returns are preliminary as of 08/01/87.

Appendix table 109--Nebraska oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	23.48
Secondary crop	9.88
Total	33.36
Cash expenses:	
Seed	5.55
Fertilizer	9.44
Chemicals	.12
Custom operations	.88
Fuel, lube, and electricity	2.94
Repairs	4.93
Hired labor	.81
Miscellaneous	.26
Technical services	.07
Total, variable cash expenses	24.99
General farm overhead	4.30
Taxes and insurance	13.03
Interest	10.11
Total, fixed cash expenses	27.44
Total, cash expenses	52.44
Receipts less cash expenses	-19.08
Capital replacement	11.69
Receipts less cash expenses and replacement	-30.77
Economic (full ownership) costs:	
Variable cash expenses	24.99
General farm overhead	4.30
Taxes and insurance	13.03
Capital replacement	11.69
Allocated returns to owned inputs:	
Return to operating capital	.43
Return to other nonland capital	2.44
Net land rent	5.76
Unpaid labor	8.16
Total, economic costs	70.81
Residual returns to management and risk	-37.45
Harvest-period price (dollars/bu.)	.84
Yield (bu./planted acre)	27.95

All costs and returns are preliminary as of 08/01/87.

Appendix table 110--Nebraska hard red winter wheat
(after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	64.17
Secondary crop	3.78
Total	67.95
Cash expenses:	
Seed	6.11
Fertilizer	11.90
Lime and gypsum	4.61
Chemicals	1.88
Custom operations	3.11
Fuel, lube, and electricity	4.21
Repairs	6.87
Hired labor	.88
Miscellaneous	.32
Total, variable cash expenses	39.89
General farm overhead	7.56
Taxes and insurance	14.04
Interest	17.79
Total, fixed cash expenses	39.39
Total, cash expenses	79.28
Receipts less cash expenses	-11.33
Capital replacement	18.57
Receipts less cash expenses and replacement	-29.90
Economic (full ownership) costs:	
Variable cash expenses	39.89
General farm overhead	7.56
Taxes and insurance	14.04
Capital replacement	18.57
Allocated returns to owned inputs:	
Return to operating capital	1.69
Return to other nonland capital	3.82
Net land rent	11.29
Unpaid labor	10.14
Total, economic costs	107.00
Residual returns to management and risk	-39.05
Harvest-period price (dollars/bu.)	2.03
Yield (bu./planted acre)	31.61

All costs and returns are preliminary as of 08/01/87.

Appendix table 111--Nebraska hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	65.24
Secondary crop	2.67
Total	67.91
=====	
Cash expenses:	
Seed	4.26
Fertilizer	5.94
Chemicals	.53
Custom operations	9.86
Fuel, lube, and electricity	4.26
Repairs	6.91
Hired labor	.94
Miscellaneous	.26
Total, variable cash expenses	32.95
General farm overhead	8.23
Taxes and insurance	16.12
Interest	19.35
Total, fixed cash expenses	43.69
Total, cash expenses	76.65
Receipts less cash expenses	-8.74
Capital replacement	17.89
Receipts less cash expenses and replacement	-26.63
=====	
Economic (full ownership) costs:	
Variable cash expenses	32.95
General farm overhead	8.23
Taxes and insurance	16.12
Capital replacement	17.89
Allocated returns to owned inputs:	
Return to operating capital	1.25
Return to other nonland capital	3.27
Net land rent	10.30
Unpaid labor	10.78
Total, economic costs	100.79
Residual returns to management and risk	-32.88
=====	
Harvest-period price (dollars/bu.)	2.03
Yield (bu./planted acre)	32.14
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 112--Nebraska hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	79.45
Secondary crop	2.00
Total	81.45
=====	
Cash expenses:	
Seed	5.98
Fertilizer	15.82
Chemicals	1.80
Custom operations	12.60
Fuel, lube, and electricity	21.88
Repairs	15.47
Hired labor	.80
Miscellaneous	.34
Technical services	.52
Total, variable cash expenses	75.21
General farm overhead	10.80
Taxes and insurance	19.05
Interest	25.41
Total, fixed cash expenses	55.26
Total, cash expenses	130.47
Receipts less cash expenses	-49.02
Capital replacement	38.53
Receipts less cash expenses and replacement	-87.55
=====	
Economic (full ownership) costs:	
Variable cash expenses	75.21
General farm overhead	10.80
Taxes and insurance	19.05
Capital replacement	38.53
Allocated returns to owned inputs:	
Return to operating capital	2.30
Return to other nonland capital	6.77
Net land rent	2.93
Unpaid labor	9.21
Total, economic costs	164.80
Residual returns to management and risk	-83.35
=====	
Harvest-period price (dollars/bu.)	2.03
Yield (bu./planted acre)	39.14
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 113--Nebraska soybeans (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	161.26
Total	161.26
Cash expenses:	
Seed	4.75
Fertilizer	2.42
Lime and gypsum	.16
Chemicals	14.32
Custom operations	3.56
Fuel, lube, and electricity	3.77
Repairs	6.15
Hired labor	1.57
Total, variable cash expenses	36.70
General farm overhead	11.56
Taxes and insurance	15.46
Interest	27.21
Total, fixed cash expenses	54.23
Total, cash expenses	90.93
Receipts less cash expenses	70.33
Capital replacement	17.08
Receipts less cash expenses and replacement	53.25
Economic (full ownership) costs:	
Variable cash expenses	36.70
General farm overhead	11.56
Taxes and insurance	15.46
Capital replacement	17.08
Allocated returns to owned inputs:	
Return to operating capital	.87
Return to other nonland capital	3.46
Net land rent	52.94
Unpaid labor	10.48
Total, economic costs	148.55
Residual returns to management and risk	12.71
Harvest-period price (dollars/bu.)	4.40
Yield (bu./planted acre)	36.65

All costs and returns are preliminary as of 08/01/87.

Appendix table 114--Nebraska soybeans (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	186.87
Total	186.87
Cash expenses:	
Seed	8.06
Fertilizer	6.38
Lime and gypsum	.16
Chemicals	15.66
Custom operations	2.96
Fuel, lube, and electricity	22.36
Repairs	16.85
Hired labor	2.15
Miscellaneous	.39
Total, variable cash expenses	74.98
General farm overhead	17.60
Taxes and insurance	23.55
Interest	41.42
Total, fixed cash expenses	82.57
Total, cash expenses	157.55
Receipts less cash expenses	29.32
Capital replacement	41.85
Receipts less cash expenses and replacement	-12.53
Economic (full ownership) costs:	
Variable cash expenses	74.98
General farm overhead	17.60
Taxes and insurance	23.55
Capital replacement	41.85
Allocated returns to owned inputs:	
Return to operating capital	1.56
Return to other nonland capital	7.87
Net land rent	25.27
Unpaid labor	14.43
Total, economic costs	207.11
Residual returns to management and risk	-20.24
Harvest-period price (dollars/bu.)	4.40
Yield (bu./planted acre)	42.47

All costs and returns are preliminary as of 08/01/87.

Appendix table 115--New Mexico sorghum (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	55.42
Total	55.42
Cash expenses:	
Seed	4.03
Chemicals	5.75
Custom operations	5.14
Fuel, lube, and electricity	3.97
Repairs	7.65
Hired labor	2.02
Drying	.09
Technical services	.06
Total, variable cash expenses	28.71
General farm overhead	4.13
Taxes and insurance	3.47
Interest	6.86
Total, fixed cash expenses	14.46
Total, cash expenses	43.17
Receipts less cash expenses	12.25
Capital replacement	19.60
Receipts less cash expenses and replacement	-7.35
Economic (full ownership) costs:	
Variable cash expenses	28.71
General farm overhead	4.13
Taxes and insurance	3.47
Capital replacement	19.60
Allocated returns to owned inputs:	
Return to operating capital	.73
Return to other nonland capital	3.41
Net land rent	13.83
Unpaid labor	12.38
Total, economic costs	86.26
Residual returns to management and risk	-30.84
Harvest-period price (dollars/bu.)	1.81
Yield (bu./planted acre)	30.62

All costs and returns are preliminary as of 08/01/87.

Appendix table 116--New Mexico sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	127.66
Total	127.66
Cash expenses:	
Seed	3.83
Fertilizer	17.85
Chemicals	19.73
Custom operations	10.03
Fuel, lube, and electricity	45.86
Repairs	21.54
Hired labor	3.57
Technical services	.29
Total, variable cash expenses	122.70
General farm overhead	12.77
Taxes and insurance	8.26
Interest	21.26
Total, fixed cash expenses	42.29
Total, cash expenses	164.99
Receipts less cash expenses	-37.33
Capital replacement	47.84
Receipts less cash expenses and replacement	-85.17
Economic (full ownership) costs:	
Variable cash expenses	122.70
General farm overhead	12.77
Taxes and insurance	8.26
Capital replacement	47.84
Allocated returns to owned inputs:	
Return to operating capital	2.32
Return to other nonland capital	8.28
Net land rent	32.11
Unpaid labor	21.91
Total, economic costs	256.19
Residual returns to management and risk	-128.53
Harvest-period price (dollars/bu.)	1.81
Yield (bu./planted acre)	70.53

All costs and returns are preliminary as of 08/01/87.

Appendix table 117--New Mexico hard red winter wheat
(dryland) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	24.86
Secondary crop	5.04
Total	29.90
Cash expenses:	
Seed	2.77
Chemicals	.58
Custom operations	3.44
Fuel, lube, and electricity	3.10
Repairs	6.51
Hired labor	.76
Total, variable cash expenses	17.16
General farm overhead	2.52
Taxes and insurance	2.61
Interest	4.19
Total, fixed cash expenses	9.32
Total, cash expenses	26.48
Receipts less cash expenses	3.42
Capital replacement	14.72
Receipts less cash expenses and replacement	-11.30
Economic (full ownership) costs:	
Variable cash expenses	17.16
General farm overhead	2.52
Taxes and insurance	2.61
Capital replacement	14.72
Allocated returns to owned inputs:	
Return to operating capital	.68
Return to other nonland capital	2.52
Net land rent	7.45
Unpaid labor	8.74
Total, economic costs	56.40
Residual returns to management and risk	-26.50
Harvest-period price (dollars/bu.)	2.25
Yield (bu./planted acre)	11.05

All costs and returns are preliminary as of 08/01/87.

Appendix table 118--New Mexico hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	46.73
Secondary crop	13.16
Total	59.89
Cash expenses:	
Seed	6.65
Fertilizer	19.98
Chemicals	1.97
Custom operations	6.83
Fuel, lube, and electricity	45.08
Repairs	18.66
Hired labor	1.39
Miscellaneous	.06
Technical services	.22
Total, variable cash expenses	100.84
General farm overhead	8.49
Taxes and insurance	5.88
Interest	14.13
Total, fixed cash expenses	28.51
Total, cash expenses	129.35
Receipts less cash expenses	-69.46
Capital replacement	41.68
Receipts less cash expenses and replacement	-111.14
Economic (full ownership) costs:	
Variable cash expenses	100.84
General farm overhead	8.49
Taxes and insurance	5.88
Capital replacement	41.68
Allocated returns to owned inputs:	
Return to operating capital	2.96
Return to other nonland capital	5.45
Net land rent	6.56
Unpaid labor	15.97
Total, economic costs	187.84
Residual returns to management and risk	-127.95
Harvest-period price (dollars/bu.)	2.25
Yield (bu./planted acre)	20.77

All costs and returns are preliminary as of 08/01/87.

Appendix table 119--New Mexico cotton (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	33.96
Secondary crop	4.86
Total	38.82
Cash expenses:	
Seed	9.30
Fertilizer	1.93
Chemicals	8.86
Custom operations	.16
Fuel, lube, and electricity	5.02
Repairs	9.27
Hired labor	4.83
Ginning	7.32
Total, variable cash expenses	46.69
General farm overhead	2.60
Taxes and insurance	3.61
Interest	4.32
Total, fixed cash expenses	10.53
Total, cash expenses	57.22
Receipts less cash expenses	-18.40
Capital replacement	20.40
Receipts less cash expenses and replacement	-38.80
Economic (full ownership) costs:	
Variable cash expenses	46.69
General farm overhead	2.60
Taxes and insurance	3.61
Capital replacement	20.40
Allocated returns to owned inputs:	
Return to operating capital	1.17
Return to other nonland capital	3.57
Net land rent	8.74
Unpaid labor	9.38
Total, economic costs	96.16
Residual returns to management and risk	-57.34
Harvest-period price (dollars/lb.)	.48
Yield (lbs./planted acre)	70.74

All costs and returns are preliminary as of 08/01/87.

Appendix table 120--New Mexico cotton (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	286.28
Secondary crop	50.07
Total	336.35
Cash expenses:	
Seed	10.08
Fertilizer	14.98
Chemicals	13.29
Custom operations	3.09
Fuel, lube, and electricity	33.91
Repairs	21.08
Hired labor	12.26
Ginning	61.79
Technical services	.49
Total, variable cash expenses	170.97
General farm overhead	25.16
Taxes and insurance	8.76
Interest	41.85
Total, fixed cash expenses	75.77
Total, cash expenses	246.74
Receipts less cash expenses	89.61
Capital replacement	44.42
Receipts less cash expenses and replacement	45.19
Economic (full ownership) costs:	
Variable cash expenses	170.97
General farm overhead	25.16
Taxes and insurance	8.76
Capital replacement	44.42
Allocated returns to owned inputs:	
Return to operating capital	2.40
Return to other nonland capital	7.84
Net land rent	52.26
Unpaid labor	23.80
Total, economic costs	335.61
Residual returns to management and risk	.74
Harvest-period price (dollars/lb.)	.48
Yield (lbs./planted acre)	596.42

All costs and returns are preliminary as of 08/01/87.

Appendix table 121--New York corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	160.87
Total	160.87
=====	
Cash expenses:	
Seed	17.48
Fertilizer	42.73
Lime and gypsum	5.77
Chemicals	19.68
Custom operations	7.92
Fuel, lube, and electricity	6.23
Repairs	10.82
Hired labor	1.45
Drying	5.86
Technical services	.28
Total, variable cash expenses	118.22
General farm overhead	28.23
Taxes and insurance	18.73
Interest	43.43
Total, fixed cash expenses	90.38
Total, cash expenses	208.60
Receipts less cash expenses	-47.73
Capital replacement	30.04
Receipts less cash expenses and replacement	-77.77
=====	
Economic (full ownership) costs:	
Variable cash expenses	118.22
General farm overhead	28.23
Taxes and insurance	18.73
Capital replacement	30.04
Allocated returns to owned inputs:	
Return to operating capital	2.83
Return to other nonland capital	5.35
Net land rent	9.39
Unpaid labor	11.73
Total, economic costs	224.51
Residual returns to management and risk	-63.64
=====	
Harvest-period price (dollars/bu.)	1.70
Yield (bu./planted acre)	94.63
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 122--New York oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	40.27
Secondary crop	34.60
Total	74.87
=====	
Cash expenses:	
Seed	7.74
Fertilizer	21.16
Lime and gypsum	7.77
Chemicals	4.20
Custom operations	5.95
Fuel, lube, and electricity	6.67
Repairs	9.80
Hired labor	1.50
Miscellaneous	1.09
Technical services	.32
Total, variable cash expenses	66.19
General farm overhead	9.30
Taxes and insurance	19.78
Interest	14.32
Total, fixed cash expenses	43.40
Total, cash expenses	109.60
Receipts less cash expenses	-34.73
Capital replacement	30.10
Receipts less cash expenses and replacement	-64.83
=====	
Economic (full ownership) costs:	
Variable cash expenses	66.19
General farm overhead	9.30
Taxes and insurance	19.78
Capital replacement	30.10
Allocated returns to owned inputs:	
Return to operating capital	.98
Return to other nonland capital	6.77
Net land rent	.27
Unpaid labor	15.12
Total, economic costs	148.52
Residual returns to management and risk	-73.65
=====	
Harvest-period price (dollars/bu.)	.75
Yield (bu./planted acre)	53.70
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 123--New York soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	102.06
Secondary crop	38.12
Total	140.18
=====	
Cash expenses:	
Seed	13.81
Fertilizer	29.39
Lime and gypsum	2.66
Chemicals	1.88
Custom operations	5.42
Fuel, lube, and electricity	6.29
Repairs	9.35
Hired labor	1.15
Miscellaneous	1.23
Technical services	.19
Total, variable cash expenses	71.37
General farm overhead	12.54
Taxes and insurance	20.34
Interest	19.30
Total, fixed cash expenses	52.19
Total, cash expenses	123.56
Receipts less cash expenses	16.62
Capital replacement	33.43
Receipts less cash expenses and replacement	-16.81
=====	
Economic (full ownership) costs:	
Variable cash expenses	71.37
General farm overhead	12.54
Taxes and insurance	20.34
Capital replacement	33.43
Allocated returns to owned inputs:	
Return to operating capital	2.86
Return to other nonland capital	6.30
Net land rent	12.28
Unpaid labor	13.20
Total, economic costs	172.33
Residual returns to management and risk	-32.15
=====	
Harvest-period price (dollars/bu.)	2.20
Yield (bu./planted acre)	46.39
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 124--North Carolina corn
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	107.89
Total	107.89
=====	
Cash expenses:	
Seed	16.10
Fertilizer	55.12
Lime and gypsum	2.33
Chemicals	21.35
Custom operations	15.98
Fuel, lube, and electricity	4.82
Repairs	9.35
Hired labor	1.89
Drying	1.03
Technical services	.07
Total, variable cash expenses	128.03
General farm overhead	11.59
Taxes and insurance	9.09
Interest	17.68
Total, fixed cash expenses	38.36
Total, cash expenses	166.39
Receipts less cash expenses	-58.50
Capital replacement	22.65
Receipts less cash expenses and replacement	-81.15
=====	
Economic (full ownership) costs:	
Variable cash expenses	128.03
General farm overhead	11.59
Taxes and insurance	9.09
Capital replacement	22.65
Allocated returns to owned inputs:	
Return to operating capital	2.74
Return to other nonland capital	4.18
Net land rent	18.13
Unpaid labor	15.26
Total, economic costs	211.67
Residual returns to management and risk	-103.78
=====	
Harvest-period price (dollars/bu.)	1.69
Yield (bu./planted acre)	63.84
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 125--North Carolina soft red winter
wheat production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	67.90
Total	67.90
=====	
Cash expenses:	
Seed	8.19
Fertilizer	31.08
Lime and gypsum	4.66
Chemicals	3.15
Custom operations	6.20
Fuel, lube, and electricity	3.95
Repairs	6.62
Hired labor	.98
Miscellaneous	1.01
Technical services	.21
Total, variable cash expenses	66.04
General farm overhead	5.13
Taxes and insurance	5.74
Interest	7.81
Total, fixed cash expenses	18.68
Total, cash expenses	84.72
Receipts less cash expenses	-16.82
Capital replacement	18.53
Receipts less cash expenses and replacement	-35.35
=====	
Economic (full ownership) costs:	
Variable cash expenses	66.04
General farm overhead	5.13
Taxes and insurance	5.74
Capital replacement	18.53
Allocated returns to owned inputs:	
Return to operating capital	2.16
Return to other nonland capital	3.24
Net land rent	11.87
Unpaid labor	11.24
Total, economic costs	123.95
Residual returns to management and risk	-56.05
=====	
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	27.16

All costs and returns are preliminary as of 08/01/87.

Appendix table 126--North Carolina soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	109.11
Total	109.11
=====	
Cash expenses:	
Seed	9.28
Fertilizer	11.85
Lime and gypsum	4.89
Chemicals	17.67
Custom operations	8.74
Fuel, lube, and electricity	4.02
Repairs	6.80
Hired labor	1.82
Miscellaneous	.44
Total, variable cash expenses	65.51
General farm overhead	6.25
Taxes and insurance	7.29
Interest	9.53
Total, fixed cash expenses	23.07
Total, cash expenses	88.59
Receipts less cash expenses	20.52
Capital replacement	19.32
Receipts less cash expenses and replacement	1.20
=====	
Economic (full ownership) costs:	
Variable cash expenses	65.51
General farm overhead	6.25
Taxes and insurance	7.29
Capital replacement	19.32
Allocated returns to owned inputs:	
Return to operating capital	1.81
Return to other nonland capital	3.34
Net land rent	17.57
Unpaid labor	12.19
Total, economic costs	133.28
Residual returns to management and risk	-24.17
=====	
Harvest-period price (dollars/bu.)	4.83
Yield (bu./planted acre)	22.59

All costs and returns are preliminary as of 08/01/87.

Appendix table 127--North Carolina peanuts
production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	857.26
Secondary crop	7.45
Total	864.71
Cash expenses:	
Seed	74.59
Fertilizer	7.49
Lime and gypsum	24.64
Chemicals	84.20
Custom operations	14.87
Fuel, lube, and electricity	7.55
Repairs	14.45
Hired labor	7.90
Drying	67.27
Miscellaneous	.01
Technical services	.21
Total, variable cash expenses	303.19
General farm overhead	36.09
Taxes and insurance	14.16
Interest	55.02
Total, fixed cash expenses	105.27
Total, cash expenses	408.45
Receipts less cash expenses	456.26
Capital replacement	48.30
Receipts less cash expenses and replacement	407.96
Economic (full ownership) costs:	
Variable cash expenses	303.19
General farm overhead	36.09
Taxes and insurance	14.16
Capital replacement	48.30
Allocated returns to owned inputs:	
Return to operating capital	5.81
Return to other nonland capital	9.55
Net land rent	169.93
Unpaid labor	26.46
Total, economic costs	613.49
Residual returns to management and risk	251.22
Harvest-period price (dollars/lb.)	.28
Yield (lbs./planted acre)	3,007.93

All costs and returns are preliminary as of 08/01/87.

Appendix table 128--North Carolina cotton
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	309.07
Secondary crop	41.53
Total	350.60
Cash expenses:	
Seed	7.44
Fertilizer	38.11
Lime and gypsum	3.26
Chemicals	42.04
Custom operations	28.60
Fuel, lube, and electricity	6.25
Repairs	19.92
Hired labor	8.23
Ginning	63.96
Technical services	2.47
Total, variable cash expenses	220.27
General farm overhead	21.12
Taxes and insurance	12.21
Interest	32.18
Total, fixed cash expenses	65.51
Total, cash expenses	285.78
Receipts less cash expenses	64.81
Capital replacement	41.38
Receipts less cash expenses and replacement	23.43
Economic (full ownership) costs:	
Variable cash expenses	220.27
General farm overhead	21.12
Taxes and insurance	12.21
Capital replacement	41.38
Allocated returns to owned inputs:	
Return to operating capital	3.22
Return to other nonland capital	7.50
Net land rent	55.77
Unpaid labor	15.97
Total, economic costs	377.44
Residual returns to management and risk	-26.84
Harvest-period price (dollars/lb.)	.48
Yield (lbs./planted acre)	643.90

All costs and returns are preliminary as of 08/01/87.

Appendix table 129--North Dakota barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	54.27
Total	54.27
Cash expenses:	
Seed	3.38
Fertilizer	13.60
Chemicals	5.46
Custom operations	.65
Fuel, lube, and electricity	3.21
Repairs	7.45
Hired labor	1.06
Technical services	.19
Total, variable cash expenses	35.00
General farm overhead	6.09
Taxes and insurance	7.61
Interest	14.32
Total, fixed cash expenses	28.02
Total, cash expenses	63.02
Receipts less cash expenses	-8.75
Capital replacement	20.66
Receipts less cash expenses and replacement	-29.41
Economic (full ownership) costs:	
Variable cash expenses	35.00
General farm overhead	6.09
Taxes and insurance	7.61
Capital replacement	20.66
Allocated returns to owned inputs:	
Return to operating capital	.72
Return to other nonland capital	4.13
Net land rent	18.36
Unpaid labor	7.11
Total, economic costs	99.68
Residual returns to management and risk	-45.41
Harvest-period price (dollars/bu.)	1.06
Yield (bu./planted acre)	51.20
All costs and returns are preliminary as of 08/01/87.	

Appendix table 130--North Dakota barley
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	38.86
Secondary crop	.67
Total	39.53
Cash expenses:	
Seed	3.22
Fertilizer	4.00
Chemicals	6.05
Custom operations	1.43
Fuel, lube, and electricity	4.21
Repairs	8.50
Hired labor	1.48
Miscellaneous	.26
Technical services	.10
Total, variable cash expenses	29.25
General farm overhead	5.49
Taxes and insurance	9.77
Interest	12.92
Total, fixed cash expenses	28.19
Total, cash expenses	57.43
Receipts less cash expenses	-17.90
Capital replacement	23.81
Receipts less cash expenses and replacement	-41.71
Economic (full ownership) costs:	
Variable cash expenses	29.25
General farm overhead	5.49
Taxes and insurance	9.77
Capital replacement	23.81
Allocated returns to owned inputs:	
Return to operating capital	.78
Return to other nonland capital	4.54
Net land rent	19.12
Unpaid labor	9.90
Total, economic costs	102.66
Residual returns to management and risk	-63.13
Harvest-period price (dollars/bu.)	1.06
Yield (bu./planted acre)	36.66
All costs and returns are preliminary as of 08/01/87.	

Appendix table 131--North Dakota oats
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	31.17
Secondary crop	4.67
Total	35.84
Cash expenses:	
Seed	2.99
Fertilizer	5.59
Chemicals	1.04
Custom operations	.53
Fuel, lube, and electricity	2.92
Repairs	5.76
Hired labor	.70
Miscellaneous	.36
Technical services	.05
Total, variable cash expenses	19.94
General farm overhead	3.75
Taxes and insurance	5.59
Interest	8.83
Total, fixed cash expenses	18.18
Total, cash expenses	38.11
Receipts less cash expenses	-2.27
Capital replacement	15.26
Receipts less cash expenses and replacement	-17.53
Economic (full ownership) costs:	
Variable cash expenses	19.94
General farm overhead	3.75
Taxes and insurance	5.59
Capital replacement	15.26
Allocated returns to owned inputs:	
Return to operating capital	.31
Return to other nonland capital	3.04
Net land rent	11.42
Unpaid labor	7.05
Total, economic costs	66.36
Residual returns to management and risk	-30.52
Harvest-period price (dollars/bu.)	.85
Yield (bu./planted acre)	36.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 132--North Dakota hard red spring
wheat (after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	72.29
Secondary crop	.85
Total	73.14
Cash expenses:	
Seed	6.32
Fertilizer	13.34
Chemicals	7.60
Custom operations	.80
Fuel, lube, and electricity	2.88
Repairs	7.22
Hired labor	.61
Miscellaneous	.26
Technical services	.35
Total, variable cash expenses	39.38
General farm overhead	6.17
Taxes and insurance	7.31
Interest	14.51
Total, fixed cash expenses	27.98
Total, cash expenses	67.36
Receipts less cash expenses	5.78
Capital replacement	20.34
Receipts less cash expenses and replacement	-14.56
Economic (full ownership) costs:	
Variable cash expenses	39.38
General farm overhead	6.17
Taxes and insurance	7.31
Capital replacement	20.34
Allocated returns to owned inputs:	
Return to operating capital	.58
Return to other nonland capital	3.93
Net land rent	21.88
Unpaid labor	7.02
Total, economic costs	106.60
Residual returns to management and risk	-33.46
Harvest-period price (dollars/bu.)	2.32
Yield (bu./planted acre)	31.16

All costs and returns are preliminary as of 08/01/87.

Appendix table 133--North Dakota hard red spring wheat (after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	68.09
Secondary crop	.56
Total	68.65
Cash expenses:	
Seed	6.28
Fertilizer	5.07
Chemicals	5.07
Custom operations	1.04
Fuel, lube, and electricity	3.74
Repairs	7.60
Hired labor	.82
Miscellaneous	.26
Technical services	.32
Total, variable cash expenses	30.20
General farm overhead	5.93
Taxes and insurance	9.14
Interest	13.94
Total, fixed cash expenses	29.01
Total, cash expenses	59.21
Receipts less cash expenses	9.44
Capital replacement	21.43
Receipts less cash expenses and replacement	-11.99
Economic (full ownership) costs:	
Variable cash expenses	30.20
General farm overhead	5.93
Taxes and insurance	9.14
Capital replacement	21.43
Allocated returns to owned inputs:	
Return to operating capital	.74
Return to other nonland capital	4.05
Net land rent	26.85
Unpaid labor	9.43
Total, economic costs	107.76
Residual returns to management and risk	-39.11
Harvest-period price (dollars/bu.)	2.32
Yield (bu./planted acre)	29.35

All costs and returns are preliminary as of 08/01/87.

Appendix table 134--North Dakota durum wheat (after crop) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	65.42
Secondary crop	.85
Total	66.27
Cash expenses:	
Seed	6.32
Fertilizer	13.34
Chemicals	7.60
Custom operations	.80
Fuel, lube, and electricity	2.76
Repairs	6.93
Hired labor	.59
Miscellaneous	.26
Technical services	.35
Total, variable cash expenses	38.94
General farm overhead	5.92
Taxes and insurance	6.77
Interest	13.92
Total, fixed cash expenses	26.60
Total, cash expenses	65.55
Receipts less cash expenses	.72
Capital replacement	19.74
Receipts less cash expenses and replacement	-19.02
Economic (full ownership) costs:	
Variable cash expenses	38.94
General farm overhead	5.92
Taxes and insurance	6.77
Capital replacement	19.74
Allocated returns to owned inputs:	
Return to operating capital	.58
Return to other nonland capital	3.77
Net land rent	20.25
Unpaid labor	6.74
Total, economic costs	102.71
Residual returns to management and risk	-36.44
Harvest-period price (dollars/bu.)	2.14
Yield (bu./planted acre)	30.57

All costs and returns are preliminary as of 08/01/87.

Appendix table 135--North Dakota durum wheat
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	61.70
Secondary crop	.56
Total	62.26
=====	
Cash expenses:	
Seed	6.28
Fertilizer	5.07
Chemicals	5.07
Custom operations	1.04
Fuel, lube, and electricity	3.60
Repairs	7.27
Hired labor	.79
Miscellaneous	.26
Technical services	.32
Total, variable cash expenses	29.70
General farm overhead	6.22
Taxes and insurance	8.99
Interest	14.62
Total, fixed cash expenses	29.82
Total, cash expenses	59.52
Receipts less cash expenses	2.74
Capital replacement	20.74
Receipts less cash expenses and replacement	-18.00
=====	
Economic (full ownership) costs:	
Variable cash expenses	29.70
General farm overhead	6.22
Taxes and insurance	8.99
Capital replacement	20.74
Allocated returns to owned inputs:	
Return to operating capital	.74
Return to other nonland capital	3.87
Net land rent	25.03
Unpaid labor	9.13
Total, economic costs	104.41
Residual returns to management and risk	-42.15
=====	
Harvest-period price (dollars/bu.)	2.14
Yield (bu./planted acre)	28.83

All costs and returns are preliminary as of 08/01/87.

Appendix table 136--North Dakota sunflower
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	81.76
Total	81.76
=====	
Cash expenses:	
Seed	9.43
Fertilizer	8.14
Chemicals	16.00
Custom operations	1.71
Fuel, lube, and electricity	3.05
Repairs	6.12
Hired labor	.07
Drying	2.66
Technical services	.41
Total, variable cash expenses	47.59
General farm overhead	7.83
Taxes and insurance	6.41
Interest	18.43
Total, fixed cash expenses	32.67
Total, cash expenses	80.26
Receipts less cash expenses	1.50
Capital replacement	18.12
Receipts less cash expenses and replacement	-16.62
=====	
Economic (full ownership) costs:	
Variable cash expenses	47.59
General farm overhead	7.83
Taxes and insurance	6.41
Capital replacement	18.12
Allocated returns to owned inputs:	
Return to operating capital	.99
Return to other nonland capital	3.48
Net land rent	19.98
Unpaid labor	7.37
Total, economic costs	111.77
Residual returns to management and risk	-30.01
=====	
Harvest-period price (dollars/cwt.)	6.27
Yield (cwt./planted acre)	13.04

All costs and returns are preliminary as of 08/01/87.

Appendix table 137--North Dakota flaxseed
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	60.72
Secondary crop	5.04
Total	65.76
=====	
Cash expenses:	
Seed	5.82
Fertilizer	3.18
Chemicals	4.77
Custom operations	.33
Fuel, lube, and electricity	3.58
Repairs	7.34
Hired labor	.10
Miscellaneous	.51
Technical services	.12
Total, variable cash expenses	25.75
General farm overhead	4.60
Taxes and insurance	7.18
Interest	10.81
Total, fixed cash expenses	22.59
Total, cash expenses	48.34
Receipts less cash expenses	17.42
Capital replacement	21.24
Receipts less cash expenses and replacement	-3.82
=====	
Economic (full ownership) costs:	
Variable cash expenses	25.75
General farm overhead	4.60
Taxes and insurance	7.18
Capital replacement	21.24
Allocated returns to owned inputs:	
Return to operating capital	.46
Return to other nonland capital	4.18
Net land rent	15.33
Unpaid labor	9.69
Total, economic costs	88.43
Residual returns to management and risk	-22.67
=====	
Harvest-period price (dollars/bu.)	3.66
Yield (bu./planted acre)	16.59
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 138--Ohio corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	175.70
Total	175.70
=====	
Cash expenses:	
Seed	17.58
Fertilizer	61.80
Lime and gypsum	2.41
Chemicals	19.45
Custom operations	5.02
Fuel, lube, and electricity	6.44
Repairs	11.07
Hired labor	1.69
Drying	6.37
Miscellaneous	.28
Technical services	.32
Total, variable cash expenses	132.43
General farm overhead	12.93
Taxes and insurance	17.29
Interest	38.12
Total, fixed cash expenses	68.34
Total, cash expenses	200.77
Receipts less cash expenses	-25.07
Capital replacement	34.87
Receipts less cash expenses and replacement	-59.94
=====	
Economic (full ownership) costs:	
Variable cash expenses	132.43
General farm overhead	12.93
Taxes and insurance	17.29
Capital replacement	34.87
Allocated returns to owned inputs:	
Return to operating capital	2.76
Return to other nonland capital	6.69
Net land rent	38.95
Unpaid labor	13.72
Total, economic costs	259.64
Residual returns to management and risk	-83.94
=====	
Harvest-period price (dollars/bu.)	1.38
Yield (bu./planted acre)	127.32
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 139--Ohio oats production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	36.95
Secondary crop	15.71
Total	52.66
Cash expenses:	
Seed	7.06
Fertilizer	25.02
Lime and gypsum	3.68
Chemicals	1.93
Custom operations	4.84
Fuel, lube, and electricity	4.86
Repairs	6.41
Hired labor	1.27
Miscellaneous	.80
Technical services	.21
Total, variable cash expenses	56.09
General farm overhead	5.74
Taxes and insurance	15.41
Interest	16.93
Total, fixed cash expenses	38.09
Total, cash expenses	94.17
Receipts less cash expenses	-41.51
Capital replacement	21.95
Receipts less cash expenses and replacement	-63.46
Economic (full ownership) costs:	
Variable cash expenses	56.09
General farm overhead	5.74
Taxes and insurance	15.41
Capital replacement	21.95
Allocated returns to owned inputs:	
Return to operating capital	.85
Return to other nonland capital	4.81
Net land rent	2.65
Unpaid labor	12.90
Total, economic costs	120.39
Residual returns to management and risk	-67.73
Harvest-period price (dollars/bu.)	.79
Yield (bu./planted acre)	46.77

All costs and returns are preliminary as of 08/01/87.

Appendix table 140--Ohio soft red winter wheat
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	92.40
Secondary crop	20.90
Total	113.30
Cash expenses:	
Seed	10.67
Fertilizer	35.94
Lime and gypsum	1.27
Chemicals	.14
Custom operations	5.39
Fuel, lube, and electricity	4.87
Repairs	6.09
Hired labor	1.16
Miscellaneous	1.07
Technical services	.17
Total, variable cash expenses	66.76
General farm overhead	7.66
Taxes and insurance	15.18
Interest	22.57
Total, fixed cash expenses	45.41
Total, cash expenses	112.17
Receipts less cash expenses	1.13
Capital replacement	22.70
Receipts less cash expenses and replacement	-21.57
Economic (full ownership) costs:	
Variable cash expenses	66.76
General farm overhead	7.66
Taxes and insurance	15.18
Capital replacement	22.70
Allocated returns to owned inputs:	
Return to operating capital	2.23
Return to other nonland capital	4.39
Net land rent	22.10
Unpaid labor	13.29
Total, economic costs	154.32
Residual returns to management and risk	-41.02
Harvest-period price (dollars/bu.)	2.20
Yield (bu./planted acre)	42.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 141--Ohio soybeans production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	188.30
Total	188.30
=====	
Cash expenses:	
Seed	10.17
Fertilizer	10.99
Chemicals	20.49
Custom operations	2.45
Fuel, lube, and electricity	4.87
Repairs	6.38
Hired labor	1.44
Miscellaneous	.09
Total, variable cash expenses	56.88
General farm overhead	12.21
Taxes and insurance	15.45
Interest	35.99
Total, fixed cash expenses	63.65
Total, cash expenses	120.53
Receipts less cash expenses	67.77
Capital replacement	25.12
Receipts less cash expenses and replacement	42.65
=====	
Economic (full ownership) costs:	
Variable cash expenses	56.88
General farm overhead	12.21
Taxes and insurance	15.45
Capital replacement	25.12
Allocated returns to owned inputs:	
Return to operating capital	1.34
Return to other nonland capital	4.48
Net land rent	56.68
Unpaid labor	9.63
Total, economic costs	181.79
Residual returns to management and risk	6.51
=====	
Harvest-period price (dollars/bu.)	4.63
Yield (bu./planted acre)	40.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 142--Oklahoma sorghum (dryland)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	58.29
Total	58.29
=====	
Cash expenses:	
Seed	2.56
Fertilizer	11.82
Lime and gypsum	.20
Chemicals	4.84
Custom operations	3.97
Fuel, lube, and electricity	3.41
Repairs	6.11
Hired labor	1.49
Drying	.11
Total, variable cash expenses	34.51
General farm overhead	4.12
Taxes and insurance	4.50
Interest	6.53
Total, fixed cash expenses	15.15
Total, cash expenses	49.67
Receipts less cash expenses	8.62
Capital replacement	15.10
Receipts less cash expenses and replacement	-6.39
=====	
Economic (full ownership) costs:	
Variable cash expenses	34.51
General farm overhead	4.12
Taxes and insurance	4.50
Capital replacement	15.01
Allocated returns to owned inputs:	
Return to operating capital	.82
Return to other nonland capital	2.60
Net land rent	12.60
Unpaid labor	9.19
Total, economic costs	83.35
Residual returns to management and risk	-25.06
=====	
Harvest-period price (dollars/bu.)	1.64
Yield (bu./planted acre)	35.54

All costs and returns are preliminary as of 08/01/87.

Appendix table 143--Oklahoma sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	132.43
Total	132.43
Cash expenses:	
Seed	3.25
Fertilizer	35.04
Chemicals	13.58
Custom operations	5.11
Fuel, lube, and electricity	63.16
Repairs	23.92
Hired labor	2.45
Drying	.06
Miscellaneous	.66
Total, variable cash expenses	147.23
General farm overhead	10.76
Taxes and insurance	7.78
Interest	17.07
Total, fixed cash expenses	35.60
Total, cash expenses	182.83
Receipts less cash expenses	-50.40
Capital replacement	41.49
Receipts less cash expenses and replacement	-91.89
Economic (full ownership) costs:	
Variable cash expenses	147.23
General farm overhead	10.76
Taxes and insurance	7.78
Capital replacement	41.49
Allocated returns to owned inputs:	
Return to operating capital	2.50
Return to other nonland capital	7.23
Net land rent	13.31
Unpaid labor	15.08
Total, economic costs	245.37
Residual returns to management and risk	-112.94
Harvest-period price (dollars/bu.)	1.64
Yield (bu./planted acre)	80.75

All costs and returns are preliminary as of 08/01/87.

Appendix table 144--Oklahoma barley
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	41.58
Total	41.58
Cash expenses:	
Seed	3.91
Fertilizer	7.22
Chemicals	2.14
Custom operations	6.54
Fuel, lube, and electricity	3.47
Repairs	6.21
Hired labor	1.15
Total, variable cash expenses	30.64
General farm overhead	3.51
Taxes and insurance	4.69
Interest	5.58
Total, fixed cash expenses	13.78
Total, cash expenses	44.41
Receipts less cash expenses	-2.83
Capital replacement	13.69
Receipts less cash expenses and replacement	-16.52
Economic (full ownership) costs:	
Variable cash expenses	30.64
General farm overhead	3.51
Taxes and insurance	4.69
Capital replacement	13.69
Allocated returns to owned inputs:	
Return to operating capital	1.06
Return to other nonland capital	2.44
Net land rent	11.98
Unpaid labor	7.67
Total, economic costs	75.68
Residual returns to management and risk	-34.10
Harvest-period price (dollars/bu.)	1.65
Yield (bu./planted acre)	25.20

All costs and returns are preliminary as of 08/01/87.

Appendix table 145--Oklahoma hard red winter wheat
(after crop) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	41.53
Secondary crop	9.69
Total	51.22
=====	
Cash expenses:	
Seed	5.27
Fertilizer	10.68
Chemicals	2.18
Custom operations	6.89
Fuel, lube, and electricity	3.35
Repairs	5.96
Hired labor	.68
Total, variable cash expenses	35.01
General farm overhead	5.91
Taxes and insurance	4.62
Interest	9.37
Total, fixed cash expenses	19.90
Total, cash expenses	54.91
Receipts less cash expenses	-3.69
Capital replacement	13.48
Receipts less cash expenses and replacement	-17.17
=====	
Economic (full ownership) costs:	
Variable cash expenses	35.01
General farm overhead	5.91
Taxes and insurance	4.62
Capital replacement	13.48
Allocated returns to owned inputs:	
Return to operating capital	1.15
Return to other nonland capital	2.32
Net land rent	10.71
Unpaid labor	7.84
Total, economic costs	81.04
Residual returns to management and risk	-29.82
=====	
Harvest-period price (dollars/bu.)	2.13
Yield (bu./planted acre)	19.50

All costs and returns are preliminary as of 08/01/87.

Appendix table 146--Oklahoma hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	52.08
Secondary crop	3.73
Total	55.81
=====	
Cash expenses:	
Seed	2.71
Fertilizer	2.04
Chemicals	1.23
Custom operations	4.72
Fuel, lube, and electricity	4.33
Repairs	7.38
Hired labor	1.04
Total, variable cash expenses	23.45
General farm overhead	4.30
Taxes and insurance	4.94
Interest	6.82
Total, fixed cash expenses	16.06
Total, cash expenses	39.51
Receipts less cash expenses	16.30
Capital replacement	14.28
Receipts less cash expenses and replacement	2.02
=====	
Economic (full ownership) costs:	
Variable cash expenses	23.45
General farm overhead	4.30
Taxes and insurance	4.94
Capital replacement	14.28
Allocated returns to owned inputs:	
Return to operating capital	.92
Return to other nonland capital	2.36
Net land rent	14.36
Unpaid labor	11.91
Total, economic costs	76.52
Residual returns to management and risk	-20.71
=====	
Harvest-period price (dollars/bu.)	2.13
Yield (bu./planted acre)	24.45

All costs and returns are preliminary as of 08/01/87.

Appendix table 147--Oklahoma hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	108.52
Secondary crop	18.50
Total	127.02
Cash expenses:	
Seed	5.32
Fertilizer	17.15
Chemicals	2.13
Custom operations	7.22
Fuel, lube, and electricity	27.30
Repairs	17.84
Hired labor	1.04
Technical services	.07
Total, variable cash expenses	78.07
General farm overhead	8.18
Taxes and insurance	7.06
Interest	12.98
Total, fixed cash expenses	28.21
Total, cash expenses	106.29
Receipts less cash expenses	20.73
Capital replacement	39.26
Receipts less cash expenses and replacement	-18.53
Economic (full ownership) costs:	
Variable cash expenses	78.07
General farm overhead	8.18
Taxes and insurance	7.06
Capital replacement	39.26
Allocated returns to owned inputs:	
Return to operating capital	2.20
Return to other nonland capital	6.57
Net land rent	18.17
Unpaid labor	11.99
Total, economic costs	171.50
Residual returns to management and risk	-44.48
Harvest-period price (dollars/bu.)	2.13
Yield (bu./planted acre)	50.95

All costs and returns are preliminary as of 08/01/87.

Appendix table 148--Oklahoma peanuts (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	293.12
Secondary crop	20.58
Total	313.70
Cash expenses:	
Seed	46.66
Fertilizer	16.45
Lime and gypsum	.79
Chemicals	18.11
Custom operations	2.77
Fuel, lube, and electricity	6.92
Repairs	13.12
Hired labor	6.17
Drying	11.22
Technical services	.26
Total, variable cash expenses	122.47
General farm overhead	12.11
Taxes and insurance	8.10
Interest	19.22
Total, fixed cash expenses	39.44
Total, cash expenses	161.90
Receipts less cash expenses	151.80
Capital replacement	28.87
Receipts less cash expenses and replacement	122.93
Economic (full ownership) costs:	
Variable cash expenses	122.47
General farm overhead	12.11
Taxes and insurance	8.10
Capital replacement	28.87
Allocated returns to owned inputs:	
Return to operating capital	2.87
Return to other nonland capital	5.94
Net land rent	43.31
Unpaid labor	20.65
Total, economic costs	244.32
Residual returns to management and risk	69.38
Harvest-period price (dollars/lb.)	.34
Yield (lbs./planted acre)	864.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 149--Oklahoma peanuts (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	840.72
Secondary crop	35.19
Total	875.91
Cash expenses:	
Seed	55.84
Fertilizer	25.33
Chemicals	59.04
Custom operations	4.95
Fuel, lube, and electricity	41.96
Repairs	33.94
Hired labor	11.81
Drying	20.74
Miscellaneous	.04
Technical services	1.01
Total, variable cash expenses	254.66
General farm overhead	30.89
Taxes and insurance	14.37
Interest	49.02
Total, fixed cash expenses	94.28
Total, cash expenses	348.94
Receipts less cash expenses	526.97
Capital replacement	76.14
Receipts less cash expenses and replacement	450.83
Economic (full ownership) costs:	
Variable cash expenses	254.66
General farm overhead	30.89
Taxes and insurance	14.37
Capital replacement	76.14
Allocated returns to owned inputs:	
Return to operating capital	5.17
Return to other nonland capital	14.40
Net land rent	173.10
Unpaid labor	39.52
Total, economic costs	608.25
Residual returns to management and risk	267.66
Harvest-period price (dollars/lb.)	.34
Yield (lbs./planted acre)	2,480.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 150--Oklahoma cotton (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	129.19
Secondary crop	17.84
Total	147.03
Cash expenses:	
Seed	6.57
Fertilizer	4.77
Chemicals	7.78
Custom operations	3.32
Fuel, lube, and electricity	4.68
Repairs	8.44
Hired labor	6.88
Ginning	22.79
Technical services	.10
Total, variable cash expenses	65.32
General farm overhead	4.55
Taxes and insurance	5.12
Interest	7.22
Total, fixed cash expenses	16.89
Total, cash expenses	82.22
Receipts less cash expenses	64.81
Capital replacement	18.06
Receipts less cash expenses and replacement	46.75
Economic (full ownership) costs:	
Variable cash expenses	65.32
General farm overhead	4.55
Taxes and insurance	5.12
Capital replacement	18.06
Allocated returns to owned inputs:	
Return to operating capital	1.24
Return to other nonland capital	3.07
Net land rent	24.73
Unpaid labor	13.35
Total, economic costs	135.44
Residual returns to management and risk	11.59
Harvest-period price (dollars/lb.)	.53
Yield (lbs./planted acre)	241.92

All costs and returns are preliminary as of 08/01/87.

Appendix table 151--Oklahoma cotton (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	227.61
Secondary crop	31.44
Total	259.05
=====	
Cash expenses:	
Seed	7.63
Fertilizer	21.66
Chemicals	40.09
Custom operations	14.09
Fuel, lube, and electricity	20.49
Repairs	22.84
Hired labor	12.48
Purchased irrigation water	10.09
Ginning	41.17
Technical services	1.25
Total, variable cash expenses	191.79
General farm overhead	14.60
Taxes and insurance	9.55
Interest	23.17
Total, fixed cash expenses	47.32
Total, cash expenses	239.12
Receipts less cash expenses	19.93
Capital replacement	46.43
Receipts less cash expenses and replacement	-26.50
=====	
Economic (full ownership) costs:	
Variable cash expenses	191.79
General farm overhead	14.60
Taxes and insurance	9.55
Capital replacement	46.43
Allocated returns to owned inputs:	
Return to operating capital	3.43
Return to other nonland capital	8.04
Net land rent	34.81
Unpaid labor	24.24
Total, economic costs	332.89
Residual returns to management and risk	-73.84
=====	
Harvest-period price (dollars/lb.)	.53
Yield (lbs./planted acre)	426.24
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 152--Oregon barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	70.34
Total	70.34
=====	
Cash expenses:	
Seed	4.77
Fertilizer	17.24
Chemicals	8.28
Custom operations	.73
Fuel, lube, and electricity	3.93
Repairs	9.74
Hired labor	1.19
Total, variable cash expenses	45.88
General farm overhead	8.17
Taxes and insurance	9.88
Interest	11.96
Total, fixed cash expenses	30.00
Total, cash expenses	75.88
Receipts less cash expenses	-5.54
Capital replacement	24.53
Receipts less cash expenses and replacement	-30.07
=====	
Economic (full ownership) costs:	
Variable cash expenses	45.88
General farm overhead	8.17
Taxes and insurance	9.88
Capital replacement	24.53
Allocated returns to owned inputs:	
Return to operating capital	.64
Return to other nonland capital	4.37
Net land rent	14.78
Unpaid labor	7.95
Total, economic costs	116.20
Residual returns to management and risk	-45.86
=====	
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	47.53
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 153--Oregon barley (after fallow)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	66.32
Total	66.32
=====	
Cash expenses:	
Seed	3.32
Fertilizer	6.18
Chemicals	6.58
Custom operations	.23
Fuel, lube, and electricity	4.65
Repairs	11.66
Hired labor	1.48
Technical services	.10
Total, variable cash expenses	34.20
General farm overhead	8.10
Taxes and insurance	12.05
Interest	11.86
Total, fixed cash expenses	32.01
Total, cash expenses	66.21
Receipts less cash expenses	.11
Capital replacement	23.64
Receipts less cash expenses and replacement	-23.53
=====	
Economic (full ownership) costs:	
Variable cash expenses	34.20
General farm overhead	8.10
Taxes and insurance	12.05
Capital replacement	23.64
Allocated returns to owned inputs:	
Return to operating capital	.80
Return to other nonland capital	4.22
Net land rent	10.96
Unpaid labor	9.88
Total, economic costs	103.85
Residual returns to management and risk	-37.53
=====	
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	44.81

All costs and returns are preliminary as of 08/01/87.

Appendix table 154--Oregon barley (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	113.96
Secondary crop	8.28
Total	122.24
=====	
Cash expenses:	
Seed	6.99
Fertilizer	25.02
Chemicals	5.19
Custom operations	11.76
Fuel, lube, and electricity	17.69
Repairs	22.61
Hired labor	2.99
Purchased irrigation water	6.46
Miscellaneous	.72
Technical services	.19
Total, variable cash expenses	99.62
General farm overhead	13.01
Taxes and insurance	17.57
Interest	19.03
Total, fixed cash expenses	49.60
Total, cash expenses	149.23
Receipts less cash expenses	-26.99
Capital replacement	36.98
Receipts less cash expenses and replacement	-63.97
=====	
Economic (full ownership) costs:	
Variable cash expenses	99.62
General farm overhead	13.01
Taxes and insurance	17.57
Capital replacement	36.98
Allocated returns to owned inputs:	
Return to operating capital	1.37
Return to other nonland capital	6.58
Net land rent	24.40
Unpaid labor	20.03
Total, economic costs	219.56
Residual returns to management and risk	-97.32
=====	
Harvest-period price (dollars/bu.)	1.48
Yield (bu./planted acre)	77.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 155--Oregon white wheat (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	144.05
Secondary crop	4.08
Total	148.13
Cash expenses:	
Seed	10.91
Fertilizer	34.63
Chemicals	29.17
Custom operations	3.28
Fuel, lube, and electricity	5.47
Repairs	13.06
Hired labor	.99
Miscellaneous	.81
Total, variable cash expenses	98.32
General farm overhead	13.17
Taxes and insurance	14.90
Interest	19.27
Total, fixed cash expenses	47.34
Total, cash expenses	145.66
Receipts less cash expenses	2.47
Capital replacement	25.99
Receipts less cash expenses and replacement	-23.52
Economic (full ownership) costs:	
Variable cash expenses	98.32
General farm overhead	13.17
Taxes and insurance	14.90
Capital replacement	25.99
Allocated returns to owned inputs:	
Return to operating capital	2.98
Return to other nonland capital	5.02
Net land rent	35.04
Unpaid labor	11.40
Total, economic costs	206.82
Residual returns to management and risk	-58.69
Harvest-period price (dollars/bu.)	2.40
Yield (bu./planted acre)	60.02

All costs and returns are preliminary as of 08/01/87.

Appendix table 156--Oregon white wheat (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	92.18
Secondary crop	.96
Total	93.14
Cash expenses:	
Seed	6.83
Fertilizer	12.33
Chemicals	9.37
Custom operations	1.32
Fuel, lube, and electricity	4.61
Repairs	11.37
Hired labor	.92
Miscellaneous	.10
Total, variable cash expenses	46.85
General farm overhead	10.66
Taxes and insurance	12.39
Interest	15.60
Total, fixed cash expenses	38.65
Total, cash expenses	85.50
Receipts less cash expenses	7.64
Capital replacement	23.95
Receipts less cash expenses and replacement	-16.31
Economic (full ownership) costs:	
Variable cash expenses	46.85
General farm overhead	10.66
Taxes and insurance	12.39
Capital replacement	23.95
Allocated returns to owned inputs:	
Return to operating capital	1.39
Return to other nonland capital	4.25
Net land rent	18.25
Unpaid labor	10.54
Total, economic costs	128.28
Residual returns to management and risk	-35.14
Harvest-period price (dollars/bu.)	2.40
Yield (bu./planted acre)	38.41

All costs and returns are preliminary as of 08/01/87.

Appendix table 157--Oregon white wheat (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	201.14
Secondary crop	8.16
Total	209.30
Cash expenses:	
Seed	11.19
Fertilizer	44.83
Chemicals	10.88
Custom operations	13.92
Fuel, lube, and electricity	33.05
Repairs	22.34
Hired labor	1.97
Purchased irrigation water	8.14
Miscellaneous	2.35
Technical services	.43
Total, variable cash expenses	149.10
General farm overhead	17.42
Taxes and insurance	18.60
Interest	25.49
Total, fixed cash expenses	61.51
Total, cash expenses	210.61
Receipts less cash expenses	-1.31
Capital replacement	44.97
Receipts less cash expenses and replacement	-46.28
Economic (full ownership) costs:	
Variable cash expenses	149.10
General farm overhead	17.42
Taxes and insurance	18.60
Capital replacement	44.97
Allocated returns to owned inputs:	
Return to operating capital	3.69
Return to other nonland capital	7.74
Net land rent	32.15
Unpaid labor	22.62
Total, economic costs	296.29
Residual returns to management and risk	-86.99
Harvest-period price (dollars/bu.)	2.40
Yield (bu./planted acre)	83.81

All costs and returns are preliminary as of 08/01/87.

Appendix table 158--Pennsylvania corn
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	165.28
Total	165.28
Cash expenses:	
Seed	15.56
Fertilizer	40.96
Lime and gypsum	9.99
Chemicals	18.83
Custom operations	8.23
Fuel, lube, and electricity	7.31
Repairs	12.40
Hired labor	2.10
Drying	4.37
Miscellaneous	.35
Technical services	.11
Total, variable cash expenses	120.21
General farm overhead	23.00
Taxes and insurance	22.59
Interest	35.39
Total, fixed cash expenses	80.98
Total, cash expenses	201.19
Receipts less cash expenses	-35.91
Capital replacement	30.84
Receipts less cash expenses and replacement	-66.75
Economic (full ownership) costs:	
Variable cash expenses	120.21
General farm overhead	23.00
Taxes and insurance	22.59
Capital replacement	30.84
Allocated returns to owned inputs:	
Return to operating capital	2.42
Return to other nonland capital	6.75
Net land rent	18.38
Unpaid labor	16.99
Total, economic costs	241.18
Residual returns to management and risk	-75.90
Harvest-period price (dollars/bu.)	1.76
Yield (bu./planted acre)	93.91

All costs and returns are preliminary as of 08/01/87.

Appendix table 159--Pennsylvania barley
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	74.09
Secondary crop	51.85
Total	125.94
Cash expenses:	
Seed	9.26
Fertilizer	17.50
Lime and gypsum	4.88
Chemicals	.19
Custom operations	6.93
Fuel, lube, and electricity	6.72
Repairs	8.50
Hired labor	2.48
Miscellaneous	1.98
Total, variable cash expenses	58.45
General farm overhead	9.92
Taxes and insurance	23.35
Interest	15.26
Total, fixed cash expenses	48.53
Total, cash expenses	106.97
Receipts less cash expenses	18.97
Capital replacement	28.93
Receipts less cash expenses and replacement	-9.96
Economic (full ownership) costs:	
Variable cash expenses	58.45
General farm overhead	9.92
Taxes and insurance	23.35
Capital replacement	28.93
Allocated returns to owned inputs:	
Return to operating capital	.73
Return to other nonland capital	6.47
Net land rent	26.26
Unpaid labor	16.63
Total, economic costs	170.73
Residual returns to management and risk	-44.79
Harvest-period price (dollars/bu.)	1.33
Yield (bu./planted acre)	55.71

All costs and returns are preliminary as of 08/01/87.

Appendix table 160--Pennsylvania oats
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	52.55
Secondary crop	41.18
Total	93.73
Cash expenses:	
Seed	7.55
Fertilizer	16.60
Lime and gypsum	11.32
Chemicals	2.43
Custom operations	5.16
Fuel, lube, and electricity	6.37
Repairs	9.11
Hired labor	1.81
Miscellaneous	1.43
Technical services	.05
Total, variable cash expenses	61.83
General farm overhead	9.14
Taxes and insurance	19.07
Interest	14.06
Total, fixed cash expenses	42.27
Total, cash expenses	104.09
Receipts less cash expenses	-10.36
Capital replacement	29.57
Receipts less cash expenses and replacement	-39.93
Economic (full ownership) costs:	
Variable cash expenses	61.83
General farm overhead	9.14
Taxes and insurance	19.07
Capital replacement	29.57
Allocated returns to owned inputs:	
Return to operating capital	1.18
Return to other nonland capital	6.73
Net land rent	10.99
Unpaid labor	18.28
Total, economic costs	156.79
Residual returns to management and risk	-63.06
Harvest-period price (dollars/bu.)	.91
Yield (bu./planted acre)	57.75

All costs and returns are preliminary as of 08/01/87.

Appendix table 161--Pennsylvania soft red winter
wheat production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	111.54
Secondary crop	64.60
Total	176.14
=====	
Cash expenses:	
Seed	13.66
Fertilizer	19.99
Lime and gypsum	7.99
Chemicals	.30
Custom operations	5.68
Fuel, lube, and electricity	7.28
Repairs	9.71
Hired labor	1.93
Miscellaneous	2.37
Technical services	.14
Total, variable cash expenses	69.05
General farm overhead	11.44
Taxes and insurance	23.47
Interest	17.60
Total, fixed cash expenses	52.50
Total, cash expenses	121.56
Receipts less cash expenses	54.58
Capital replacement	33.62
Receipts less cash expenses and replacement	20.96
=====	
Economic (full ownership) costs:	
Variable cash expenses	69.05
General farm overhead	11.44
Taxes and insurance	23.47
Capital replacement	33.62
Allocated returns to owned inputs:	
Return to operating capital	2.59
Return to other nonland capital	7.12
Net land rent	16.76
Unpaid labor	22.17
Total, economic costs	186.22
Residual returns to management and risk	-10.08
=====	
Harvest-period price (dollars/bu.)	2.65
Yield (bu./planted acre)	42.09

All costs and returns are preliminary as of 08/01/87.

Appendix table 162--South Carolina corn
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	69.13
Total	69.13
=====	
Cash expenses:	
Seed	16.00
Fertilizer	52.39
Lime and gypsum	7.22
Chemicals	21.72
Custom operations	7.66
Fuel, lube, and electricity	4.57
Repairs	8.07
Hired labor	1.31
Drying	1.45
Miscellaneous	.17
Technical services	.06
Total, variable cash expenses	120.62
General farm overhead	7.87
Taxes and insurance	4.96
Interest	21.06
Total, fixed cash expenses	33.89
Total, cash expenses	154.51
Receipts less cash expenses	-85.38
Capital replacement	16.98
Receipts less cash expenses and replacement	-102.36
=====	
Economic (full ownership) costs:	
Variable cash expenses	120.62
General farm overhead	7.87
Taxes and insurance	4.96
Capital replacement	16.98
Allocated returns to owned inputs:	
Return to operating capital	3.17
Return to other nonland capital	2.81
Net land rent	22.61
Unpaid labor	10.56
Total, economic costs	189.58
Residual returns to management and risk	-120.45
=====	
Harvest-period price (dollars/bu.)	1.65
Yield (bu./planted acre)	41.90

All costs and returns are preliminary as of 08/01/87.

Appendix table 163--South Carolina soft red winter wheat production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	56.55
Secondary crop	.52
Total	57.07
=====	
Cash expenses:	
Seed	8.20
Fertilizer	40.26
Lime and gypsum	4.66
Chemicals	3.35
Custom operations	8.31
Fuel, lube, and electricity	3.95
Repairs	6.74
Hired labor	.75
Miscellaneous	.16
Technical services	.12
Total, variable cash expenses	76.50
General farm overhead	3.33
Taxes and insurance	3.65
Interest	8.91
Total, fixed cash expenses	15.88
Total, cash expenses	92.38
Receipts less cash expenses	-35.31
Capital replacement	15.91
Receipts less cash expenses and replacement	-51.22
=====	
Economic (full ownership) costs:	
Variable cash expenses	76.50
General farm overhead	3.33
Taxes and insurance	3.65
Capital replacement	15.91
Allocated returns to owned inputs:	
Return to operating capital	2.22
Return to other nonland capital	2.66
Net land rent	11.36
Unpaid labor	8.57
Total, economic costs	124.20
Residual returns to management and risk	-67.13
=====	
Harvest-period price (dollars/bu.)	2.45
Yield (bu./planted acre)	23.08

All costs and returns are preliminary as of 08/01/87.

Appendix table 164--South Carolina soybeans production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	71.00
Total	71.00
=====	
Cash expenses:	
Seed	7.47
Fertilizer	12.20
Lime and gypsum	4.43
Chemicals	23.17
Custom operations	4.95
Fuel, lube, and electricity	4.72
Repairs	7.65
Hired labor	1.49
Miscellaneous	.14
Technical services	.40
Total, variable cash expenses	66.63
General farm overhead	4.25
Taxes and insurance	4.83
Interest	11.38
Total, fixed cash expenses	20.47
Total, cash expenses	87.09
Receipts less cash expenses	-16.09
Capital replacement	17.60
Receipts less cash expenses and replacement	-33.69
=====	
Economic (full ownership) costs:	
Variable cash expenses	66.63
General farm overhead	4.25
Taxes and insurance	4.83
Capital replacement	17.60
Allocated returns to owned inputs:	
Return to operating capital	1.90
Return to other nonland capital	3.04
Net land rent	17.22
Unpaid labor	10.01
Total, economic costs	125.48
Residual returns to management and risk	-54.48
=====	
Harvest-period price (dollars/bu.)	4.84
Yield (bu./planted acre)	14.67

All costs and returns are preliminary as of 08/01/87.

Appendix table 165--South Carolina cotton
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	173.41
Secondary crop	16.18
Total	189.59
=====	
Cash expenses:	
Seed	5.99
Fertilizer	48.03
Lime and gypsum	6.29
Chemicals	133.72
Custom operations	9.71
Fuel, lube, and electricity	7.76
Repairs	18.26
Hired labor	7.37
Ginning	30.29
Miscellaneous	4.94
Technical services	2.80
Total, variable cash expenses	275.16
General farm overhead	16.61
Taxes and insurance	10.64
Interest	44.47
Total, fixed cash expenses	71.73
Total, cash expenses	346.89
Receipts less cash expenses	-157.30
Capital replacement	52.51
Receipts less cash expenses and replacement	-209.81
=====	
Economic (full ownership) costs:	
Variable cash expenses	275.16
General farm overhead	16.61
Taxes and insurance	10.64
Capital replacement	52.51
Allocated returns to owned inputs:	
Return to operating capital	4.86
Return to other nonland capital	8.75
Net land rent	28.96
Unpaid labor	14.31
Total, economic costs	411.80
Residual returns to management and risk	-222.21
=====	
Harvest-period price (dollars/lb.)	.49
Yield (lbs./planted acre)	353.90
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 166--South Dakota corn
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	102.89
Total	102.89
=====	
Cash expenses:	
Seed	11.54
Fertilizer	12.54
Chemicals	8.50
Custom operations	3.69
Fuel, lube, and electricity	3.85
Repairs	8.16
Hired labor	1.36
Drying	2.69
Technical services	.25
Total, variable cash expenses	52.58
General farm overhead	9.45
Taxes and insurance	10.32
Interest	22.22
Total, fixed cash expenses	41.99
Total, cash expenses	94.57
Receipts less cash expenses	8.32
Capital replacement	21.44
Receipts less cash expenses and replacement	-13.12
=====	
Economic (full ownership) costs:	
Variable cash expenses	52.58
General farm overhead	9.45
Taxes and insurance	10.32
Capital replacement	21.44
Allocated returns to owned inputs:	
Return to operating capital	1.35
Return to other nonland capital	4.69
Net land rent	23.08
Unpaid labor	11.05
Total, economic costs	133.96
Residual returns to management and risk	-31.07
=====	
Harvest-period price (dollars/bu.)	1.29
Yield (bu./planted acre)	79.76
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 167--South Dakota sorghum
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	38.66
Total	38.66
=====	
Cash expenses:	
Seed	2.97
Fertilizer	2.71
Chemicals	4.61
Custom operations	1.76
Fuel, lube, and electricity	2.70
Repairs	5.23
Hired labor	1.04
Drying	.70
Miscellaneous	.08
Technical services	.17
Total, variable cash expenses	21.97
General farm overhead	6.74
Taxes and insurance	6.99
Interest	15.87
Total, fixed cash expenses	29.60
Total, cash expenses	51.57
Receipts less cash expenses	-12.91
Capital replacement	14.71
Receipts less cash expenses and replacement	-27.62
=====	
Economic (full ownership) costs:	
Variable cash expenses	21.97
General farm overhead	6.74
Taxes and insurance	6.99
Capital replacement	14.71
Allocated returns to owned inputs:	
Return to operating capital	.57
Return to other nonland capital	2.84
Net land rent	8.59
Unpaid labor	6.38
Total, economic costs	68.80
Residual returns to management and risk	-30.14
=====	
Harvest-period price (dollars/bu.)	1.24
Yield (bu./planted acre)	31.18

All costs and returns are preliminary as of 08/01/87.

Appendix table 168--South Dakota barley (after crop)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	48.17
Secondary crop	.56
Total	48.73
=====	
Cash expenses:	
Seed	3.87
Fertilizer	6.39
Chemicals	2.72
Custom operations	2.13
Fuel, lube, and electricity	3.32
Repairs	6.65
Hired labor	1.08
Miscellaneous	.26
Technical services	.05
Total, variable cash expenses	26.47
General farm overhead	5.24
Taxes and insurance	7.96
Interest	12.33
Total, fixed cash expenses	25.54
Total, cash expenses	52.00
Receipts less cash expenses	-3.27
Capital replacement	17.85
Receipts less cash expenses and replacement	-21.12
=====	
Economic (full ownership) costs:	
Variable cash expenses	26.47
General farm overhead	5.24
Taxes and insurance	7.96
Capital replacement	17.85
Allocated returns to owned inputs:	
Return to operating capital	.47
Return to other nonland capital	3.70
Net land rent	12.50
Unpaid labor	7.23
Total, economic costs	81.42
Residual returns to management and risk	-32.69
=====	
Harvest-period price (dollars/bu.)	1.20
Yield (bu./planted acre)	40.14

All costs and returns are preliminary as of 08/01/87.

Appendix table 169--South Dakota barley
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	40.55
Secondary crop	.21
Total	40.76
=====	
Cash expenses:	
Seed	3.55
Fertilizer	3.99
Chemicals	1.22
Custom operations	4.77
Fuel, lube, and electricity	3.70
Repairs	7.79
Hired labor	1.32
Miscellaneous	.26
Total, variable cash expenses	26.59
General farm overhead	5.66
Taxes and insurance	10.53
Interest	13.31
Total, fixed cash expenses	29.50
Total, cash expenses	56.09
Receipts less cash expenses	-15.33
Capital replacement	20.83
Receipts less cash expenses and replacement	-36.16
=====	
Economic (full ownership) costs:	
Variable cash expenses	26.59
General farm overhead	5.66
Taxes and insurance	10.53
Capital replacement	20.83
Allocated returns to owned inputs:	
Return to operating capital	.59
Return to other nonland capital	3.84
Net land rent	8.30
Unpaid labor	8.80
Total, economic costs	85.14
Residual returns to management and risk	-44.38
=====	
Harvest-period price (dollars/bu.)	1.20
Yield (bu./planted acre)	33.79

All costs and returns are preliminary as of 08/01/87.

Appendix table 170--South Dakota oats
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	24.95
Secondary crop	7.31
Total	32.26
=====	
Cash expenses:	
Seed	4.30
Fertilizer	6.42
Chemicals	1.25
Custom operations	2.01
Fuel, lube, and electricity	2.72
Repairs	5.43
Hired labor	.76
Miscellaneous	.38
Total, variable cash expenses	23.27
General farm overhead	4.19
Taxes and insurance	7.69
Interest	9.84
Total, fixed cash expenses	21.72
Total, cash expenses	44.99
Receipts less cash expenses	-12.73
Capital replacement	13.49
Receipts less cash expenses and replacement	-26.22
=====	
Economic (full ownership) costs:	
Variable cash expenses	23.27
General farm overhead	4.19
Taxes and insurance	7.69
Capital replacement	13.49
Allocated returns to owned inputs:	
Return to operating capital	.38
Return to other nonland capital	2.85
Net land rent	6.80
Unpaid labor	7.72
Total, economic costs	66.39
Residual returns to management and risk	-34.13
=====	
Harvest-period price (dollars/bu.)	.81
Yield (bu./planted acre)	30.80

All costs and returns are preliminary as of 08/01/87.

Appendix table 171--South Dakota hard red winter wheat (after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	63.27
Secondary crop	.90
Total	64.17
=====	
Cash expenses:	
Seed	4.80
Fertilizer	6.09
Chemicals	2.49
Custom operations	7.56
Fuel, lube, and electricity	2.42
Repairs	4.52
Hired labor	.50
Miscellaneous	.26
Technical services	.09
Total, variable cash expenses	28.73
General farm overhead	7.12
Taxes and insurance	6.11
Interest	16.75
Total, fixed cash expenses	29.98
Total, cash expenses	58.71
Receipts less cash expenses	5.46
Capital replacement	15.14
Receipts less cash expenses and replacement	-9.68
=====	
Economic (full ownership) costs:	
Variable cash expenses	28.73
General farm overhead	7.12
Taxes and insurance	6.11
Capital replacement	15.14
Allocated returns to owned inputs:	
Return to operating capital	.95
Return to other nonland capital	2.75
Net land rent	14.46
Unpaid labor	5.75
Total, economic costs	81.01
Residual returns to management and risk	-16.84
=====	
Harvest-period price (dollars/bu.)	2.01
Yield (bu./planted acre)	31.48
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 172--South Dakota hard red winter wheat (after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	60.12
Secondary crop	.67
Total	60.79
=====	
Cash expenses:	
Seed	4.22
Fertilizer	1.40
Chemicals	2.85
Custom operations	9.54
Fuel, lube, and electricity	3.18
Repairs	5.47
Hired labor	.68
Miscellaneous	.26
Total, variable cash expenses	27.59
General farm overhead	8.45
Taxes and insurance	8.19
Interest	19.87
Total, fixed cash expenses	36.50
Total, cash expenses	64.10
Receipts less cash expenses	-3.31
Capital replacement	14.81
Receipts less cash expenses and replacement	-18.12
=====	
Economic (full ownership) costs:	
Variable cash expenses	27.59
General farm overhead	8.45
Taxes and insurance	8.19
Capital replacement	14.81
Allocated returns to owned inputs:	
Return to operating capital	.89
Return to other nonland capital	2.65
Net land rent	15.54
Unpaid labor	7.77
Total, economic costs	85.89
Residual returns to management and risk	-25.10
=====	
Harvest-period price (dollars/bu.)	2.01
Yield (bu./planted acre)	29.91
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 173--South Dakota hard red spring wheat (after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	55.60
Secondary crop	.90
Total	56.50
=====	
Cash expenses:	
Seed	6.08
Fertilizer	7.01
Chemicals	2.63
Custom operations	3.62
Fuel, lube, and electricity	2.84
Repairs	5.75
Hired labor	.60
Miscellaneous	.26
Technical services	.10
Total, variable cash expenses	28.88
General farm overhead	5.67
Taxes and insurance	7.30
Interest	13.33
Total, fixed cash expenses	26.29
Total, cash expenses	55.18
Receipts less cash expenses	1.32
Capital replacement	15.84
Receipts less cash expenses and replacement	-14.52
=====	
Economic (full ownership) costs:	
Variable cash expenses	28.88
General farm overhead	5.67
Taxes and insurance	7.30
Capital replacement	15.84
Allocated returns to owned inputs:	
Return to operating capital	.50
Return to other nonland capital	3.16
Net land rent	12.53
Unpaid labor	6.88
Total, economic costs	80.76
Residual returns to management and risk	-24.26
=====	
Harvest-period price (dollars/bu.)	2.47
Yield (bu./planted acre)	22.51

All costs and returns are preliminary as of 08/01/87.

Appendix table 174--South Dakota hard red spring wheat (after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	53.01
Secondary crop	.90
Total	53.91
=====	
Cash expenses:	
Seed	5.40
Fertilizer	3.54
Chemicals	2.88
Custom operations	5.42
Fuel, lube, and electricity	3.33
Repairs	6.32
Hired labor	.84
Miscellaneous	.26
Total, variable cash expenses	27.99
General farm overhead	6.07
Taxes and insurance	9.65
Interest	14.28
Total, fixed cash expenses	30.00
Total, cash expenses	57.99
Receipts less cash expenses	-4.08
Capital replacement	16.75
Receipts less cash expenses and replacement	-20.83
=====	
Economic (full ownership) costs:	
Variable cash expenses	27.99
General farm overhead	6.07
Taxes and insurance	9.65
Capital replacement	16.75
Allocated returns to owned inputs:	
Return to operating capital	.65
Return to other nonland capital	3.15
Net land rent	13.66
Unpaid labor	9.67
Total, economic costs	87.59
Residual returns to management and risk	-33.68
=====	
Harvest-period price (dollars/bu.)	2.47
Yield (bu./planted acre)	21.46

All costs and returns are preliminary as of 08/01/87.

Appendix table 175--South Dakota durum wheat
(after crop) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	52.32
Secondary crop	.90
Total	53.22
=====	
Cash expenses:	
Seed	6.08
Fertilizer	7.01
Chemicals	2.63
Custom operations	3.76
Fuel, lube, and electricity	2.86
Repairs	5.78
Hired labor	.59
Miscellaneous	.26
Technical services	.10
Total, variable cash expenses	29.07
General farm overhead	6.16
Taxes and insurance	7.49
Interest	14.48
Total, fixed cash expenses	28.13
Total, cash expenses	57.20
Receipts less cash expenses	-3.98
Capital replacement	16.00
Receipts less cash expenses and replacement	-19.98
=====	
Economic (full ownership) costs:	
Variable cash expenses	29.07
General farm overhead	6.16
Taxes and insurance	7.49
Capital replacement	16.00
Allocated returns to owned inputs:	
Return to operating capital	.50
Return to other nonland capital	3.19
Net land rent	11.55
Unpaid labor	6.80
Total, economic costs	80.75
Residual returns to management and risk	-27.53
=====	
Harvest-period price (dollars/bu.)	2.18
Yield (bu./planted acre)	24.00
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 176--South Dakota durum wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	88.07
Secondary crop	.90
Total	88.97
=====	
Cash expenses:	
Seed	5.40
Fertilizer	3.54
Chemicals	2.88
Custom operations	5.55
Fuel, lube, and electricity	3.66
Repairs	7.20
Hired labor	.90
Miscellaneous	.26
Total, variable cash expenses	29.38
General farm overhead	6.69
Taxes and insurance	10.87
Interest	15.74
Total, fixed cash expenses	33.29
Total, cash expenses	62.68
Receipts less cash expenses	26.29
Capital replacement	19.64
Receipts less cash expenses and replacement	6.65
=====	
Economic (full ownership) costs:	
Variable cash expenses	29.38
General farm overhead	6.69
Taxes and insurance	10.87
Capital replacement	19.64
Allocated returns to owned inputs:	
Return to operating capital	.62
Return to other nonland capital	3.78
Net land rent	20.72
Unpaid labor	10.33
Total, economic costs	102.03
Residual returns to management and risk	-13.06
=====	
Harvest-period price (dollars/bu.)	2.18
Yield (bu./planted acre)	40.40
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 177--South Dakota soybeans
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	133.77
Total	133.77
=====	
Cash expenses:	
Seed	6.33
Fertilizer	3.81
Chemicals	13.05
Custom operations	5.84
Fuel, lube, and electricity	3.19
Repairs	6.19
Hired labor	1.79
Total, variable cash expenses	40.20
General farm overhead	12.03
Taxes and insurance	9.99
Interest	28.32
Total, fixed cash expenses	50.34
Total, cash expenses	90.55
Receipts less cash expenses	43.22
Capital replacement	17.95
Receipts less cash expenses and replacement	25.27
=====	
Economic (full ownership) costs:	
Variable cash expenses	40.20
General farm overhead	12.03
Taxes and insurance	9.99
Capital replacement	17.95
Allocated returns to owned inputs:	
Return to operating capital	.94
Return to other nonland capital	3.50
Net land rent	34.47
Unpaid labor	12.01
Total, economic costs	131.09
Residual returns to management and risk	2.68
=====	
Harvest-period price (dollars/bu.)	4.38
Yield (bu./planted acre)	30.54
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 178--South Dakota sunflower
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	83.81
Total	83.81
=====	
Cash expenses:	
Seed	9.70
Fertilizer	4.37
Chemicals	8.23
Custom operations	3.17
Fuel, lube, and electricity	3.14
Repairs	6.09
Hired labor	.08
Drying	1.08
Miscellaneous	.08
Total, variable cash expenses	35.94
General farm overhead	7.85
Taxes and insurance	7.23
Interest	18.46
Total, fixed cash expenses	33.54
Total, cash expenses	69.48
Receipts less cash expenses	14.33
Capital replacement	17.18
Receipts less cash expenses and replacement	-2.85
=====	
Economic (full ownership) costs:	
Variable cash expenses	35.94
General farm overhead	7.85
Taxes and insurance	7.23
Capital replacement	17.18
Allocated returns to owned inputs:	
Return to operating capital	.78
Return to other nonland capital	3.39
Net land rent	19.16
Unpaid labor	7.66
Total, economic costs	99.19
Residual returns to management and risk	-15.38
=====	
Harvest-period price (dollars/cwt.)	6.25
Yield (cwt./planted acre)	13.41
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 179—South Dakota flaxseed
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	49.39
Secondary crop	-9.53
Total	58.92
=====	
Cash expenses:	
Seed	7.23
Fertilizer	1.70
Chemicals	2.52
Custom operations	3.12
Fuel, lube, and electricity	3.55
Repairs	7.33
Hired labor	.12
Miscellaneous	1.27
Total, variable cash expenses	26.84
General farm overhead	5.01
Taxes and insurance	8.71
Interest	11.79
Total, fixed cash expenses	25.51
Total, cash expenses	52.35
Receipts less cash expenses	6.57
Capital replacement	20.38
Receipts less cash expenses and replacement	-13.81
=====	
Economic (full ownership) costs:	
Variable cash expenses	26.84
General farm overhead	5.01
Taxes and insurance	8.71
Capital replacement	20.38
Allocated returns to owned inputs:	
Return to operating capital	.41
Return to other nonland capital	4.00
Net land rent	11.99
Unpaid labor	11.71
Total, economic costs	89.06
Residual returns to management and risk	-30.14
=====	
Harvest-period price (dollars/bu.)	3.73
Yield (bu./planted acre)	13.24
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 180--Tennessee corn production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	116.88
Total	116.88
=====	
Cash expenses:	
Seed	16.13
Fertilizer	51.35
Lime and gypsum	1.29
Chemicals	19.54
Custom operations	4.47
Fuel, lube, and electricity	6.09
Repairs	10.77
Hired labor	1.68
Drying	3.16
Miscellaneous	.04
Total, variable cash expenses	114.52
General farm overhead	10.63
Taxes and insurance	8.85
Interest	16.20
Total, fixed cash expenses	35.68
Total, cash expenses	150.20
Receipts less cash expenses	-33.32
Capital replacement	27.46
Receipts less cash expenses and replacement	-60.78
=====	
Economic (full ownership) costs:	
Variable cash expenses	114.52
General farm overhead	10.63
Taxes and insurance	8.85
Capital replacement	27.46
Allocated returns to owned inputs:	
Return to operating capital	2.46
Return to other nonland capital	5.07
Net land rent	22.14
Unpaid labor	13.57
Total, economic costs	204.70
Residual returns to management and risk	-87.82
=====	
Harvest-period price (dollars/bu.)	1.60
Yield (bu./planted acre)	73.05
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 181--Tennessee soft red winter
wheat production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	62.35
Secondary crop	6.50
Total	68.85
Cash expenses:	
Seed	10.79
Fertilizer	32.70
Lime and gypsum	1.93
Chemicals	3.18
Custom operations	4.25
Fuel, lube, and electricity	4.36
Repairs	6.74
Hired labor	.90
Miscellaneous	.42
Total, variable cash expenses	65.27
General farm overhead	4.89
Taxes and insurance	5.54
Interest	7.45
Total, fixed cash expenses	17.87
Total, cash expenses	83.15
Receipts less cash expenses	-14.30
Capital replacement	16.86
Receipts less cash expenses and replacement	-31.16
Economic (full ownership) costs:	
Variable cash expenses	65.27
General farm overhead	4.89
Taxes and insurance	5.54
Capital replacement	16.86
Allocated returns to owned inputs:	
Return to operating capital	2.25
Return to other nonland capital	2.99
Net land rent	16.20
Unpaid labor	10.37
Total, economic costs	124.37
Residual returns to management and risk	-55.52
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	24.94

All costs and returns are preliminary as of 08/01/87.

Appendix table 182--Tennessee soybeans
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	118.29
Total	118.29
Cash expenses:	
Seed	7.36
Fertilizer	12.47
Lime and gypsum	2.25
Chemicals	19.12
Custom operations	3.79
Fuel, lube, and electricity	4.86
Repairs	7.26
Hired labor	1.61
Miscellaneous	.38
Technical services	.08
Total, variable cash expenses	59.18
General farm overhead	6.99
Taxes and insurance	6.84
Interest	10.66
Total, fixed cash expenses	24.49
Total, cash expenses	83.68
Receipts less cash expenses	34.61
Capital replacement	25.72
Receipts less cash expenses and replacement	8.89
Economic (full ownership) costs:	
Variable cash expenses	59.18
General farm overhead	6.99
Taxes and insurance	6.84
Capital replacement	25.72
Allocated returns to owned inputs:	
Return to operating capital	1.72
Return to other nonland capital	3.96
Net land rent	27.72
Unpaid labor	10.79
Total, economic costs	142.92
Residual returns to management and risk	-24.63
Harvest-period price (dollars/bu.)	4.89
Yield (bu./planted acre)	24.19

All costs and returns are preliminary as of 08/01/87.

Appendix table 183--Tennessee cotton
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	267.11
Secondary crop	33.16
Total	300.27
=====	
Cash expenses:	
Seed	8.92
Fertilizer	39.74
Lime and gypsum	.80
Chemicals	26.85
Custom operations	15.36
Fuel, lube, and electricity	7.77
Repairs	28.42
Hired labor	6.62
Ginning	27.16
Miscellaneous	.53
Technical services	.66
Total, variable cash expenses	162.83
General farm overhead	18.88
Taxes and insurance	11.48
Interest	28.78
Total, fixed cash expenses	59.15
Total, cash expenses	221.98
Receipts less cash expenses	78.29
Capital replacement	51.15
Receipts less cash expenses and replacement	27.14
=====	
Economic (full ownership) costs:	
Variable cash expenses	162.83
General farm overhead	18.88
Taxes and insurance	11.48
Capital replacement	51.15
Allocated returns to owned inputs:	
Return to operating capital	2.39
Return to other nonland capital	8.45
Net land rent	48.09
Unpaid labor	12.84
Total, economic costs	316.12
Residual returns to management and risk	-15.85
=====	
Harvest-period price (dollars/lb.)	.47
Yield (lbs./planted acre)	564.71
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 184--Texas corn (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	150.00
Total	150.00
=====	
Cash expenses:	
Seed	14.34
Fertilizer	30.51
Lime and gypsum	1.41
Chemicals	12.67
Custom operations	8.04
Fuel, lube, and electricity	5.57
Repairs	9.35
Hired labor	1.54
Drying	.18
Miscellaneous	.47
Total, variable cash expenses	84.09
General farm overhead	10.67
Taxes and insurance	7.35
Interest	16.92
Total, fixed cash expenses	34.94
Total, cash expenses	119.03
Receipts less cash expenses	30.97
Capital replacement	22.92
Receipts less cash expenses and replacement	8.05
=====	
Economic (full ownership) costs:	
Variable cash expenses	84.09
General farm overhead	10.67
Taxes and insurance	7.35
Capital replacement	22.92
Allocated returns to owned inputs:	
Return to operating capital	2.30
Return to other nonland capital	4.00
Net land rent	27.34
Unpaid labor	12.50
Total, economic costs	171.16
Residual returns to management and risk	-21.16
=====	
Harvest-period price (dollars/bu.)	1.90
Yield (bu./planted acre)	78.95
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 185--Texas corn (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	279.93
Total	279.93
=====	
Cash expenses:	
Seed	18.85
Fertilizer	55.68
Chemicals	21.56
Custom operations	19.37
Fuel, lube, and electricity	84.30
Repairs	23.96
Hired labor	3.38
Purchased irrigation water	4.56
Drying	1.23
Miscellaneous	1.18
Technical services	.75
Total, variable cash expenses	234.82
General farm overhead	20.68
Taxes and insurance	8.95
Interest	32.82
Total, fixed cash expenses	62.45
Total, cash expenses	297.27
Receipts less cash expenses	-17.34
Capital replacement	43.53
Receipts less cash expenses and replacement	-60.87
=====	
Economic (full ownership) costs:	
Variable cash expenses	234.82
General farm overhead	20.68
Taxes and insurance	8.95
Capital replacement	43.53
Allocated returns to owned inputs:	
Return to operating capital	5.39
Return to other nonland capital	7.70
Net land rent	44.47
Unpaid labor	27.31
Total, economic costs	392.86
Residual returns to management and risk	-112.93
=====	
Harvest-period price (dollars/bu.)	1.90
Yield (bu./planted acre)	147.33
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 186--Texas sorghum (dryland)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	80.61
Total	80.61
=====	
Cash expenses:	
Seed	4.09
Fertilizer	14.81
Chemicals	5.67
Custom operations	4.16
Fuel, lube, and electricity	5.12
Repairs	8.44
Hired labor	1.98
Drying	.14
Miscellaneous	.50
Technical services	.05
Total, variable cash expenses	44.96
General farm overhead	6.55
Taxes and insurance	6.15
Interest	10.39
Total, fixed cash expenses	23.09
Total, cash expenses	68.06
Receipts less cash expenses	12.55
Capital replacement	19.96
Receipts less cash expenses and replacement	-7.41
=====	
Economic (full ownership) costs:	
Variable cash expenses	44.96
General farm overhead	6.55
Taxes and insurance	6.15
Capital replacement	19.96
Allocated returns to owned inputs:	
Return to operating capital	1.16
Return to other nonland capital	3.49
Net land rent	18.97
Unpaid labor	12.17
Total, economic costs	113.41
Residual returns to management and risk	-32.80
=====	
Harvest-period price (dollars/bu.)	1.67
Yield (bu./planted acre)	48.27
=====	

All costs and returns are preliminary as of 08/01/87.

Appendix table 187--Texas sorghum (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	122.41
Total	122.41
=====	
Cash expenses:	
Seed	4.79
Fertilizer	31.43
Chemicals	15.04
Custom operations	9.21
Fuel, lube, and electricity	54.39
Repairs	19.78
Hired labor	3.49
Purchased irrigation water	3.05
Miscellaneous	.58
Technical services	.26
Total, variable cash expenses	142.02
General farm overhead	10.39
Taxes and insurance	7.83
Interest	16.48
Total, fixed cash expenses	34.70
Total, cash expenses	176.72
Receipts less cash expenses	-54.31
Capital replacement	37.44
Receipts less cash expenses and replacement	-91.75
=====	
Economic (full ownership) costs:	
Variable cash expenses	142.02
General farm overhead	10.39
Taxes and insurance	7.83
Capital replacement	37.44
Allocated returns to owned inputs:	
Return to operating capital	2.12
Return to other nonland capital	6.48
Net land rent	19.64
Unpaid labor	21.47
Total, economic costs	247.39
Residual returns to management and risk	-124.98
=====	
Harvest-period price (dollars/bu.)	1.67
Yield (bu./planted acre)	73.30

All costs and returns are preliminary as of 08/01/87.

Appendix table 188--Texas hard red winter wheat
(dryland) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	27.85
Secondary crop	7.32
Total	35.17
=====	
Cash expenses:	
Seed	5.51
Fertilizer	10.96
Chemicals	1.82
Custom operations	5.27
Fuel, lube, and electricity	3.24
Repairs	5.46
Hired labor	.71
Total, variable cash expenses	32.97
General farm overhead	2.78
Taxes and insurance	3.67
Interest	4.41
Total, fixed cash expenses	10.86
Total, cash expenses	43.83
Receipts less cash expenses	-8.66
Capital replacement	11.46
Receipts less cash expenses and replacement	-20.12
=====	
Economic (full ownership) costs:	
Variable cash expenses	32.97
General farm overhead	2.78
Taxes and insurance	3.67
Capital replacement	11.46
Allocated returns to owned inputs:	
Return to operating capital	1.10
Return to other nonland capital	1.93
Net land rent	6.00
Unpaid labor	8.17
Total, economic costs	68.08
Residual returns to management and risk	-32.91
=====	
Harvest-period price (dollars/bu.)	2.21
Yield (bu./planted acre)	12.60

All costs and returns are preliminary as of 08/01/87.

Appendix table 189--Texas hard red winter wheat
(irrigated) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	65.48
Secondary crop	20.59
Total	86.07
=====	
Cash expenses:	
Seed	5.99
Fertilizer	29.19
Chemicals	2.23
Custom operations	8.57
Fuel, lube, and electricity	72.90
Repairs	20.08
Hired labor	1.49
Miscellaneous	.06
Technical services	.06
Total, variable cash expenses	140.57
General farm overhead	7.61
Taxes and insurance	6.53
Interest	12.07
Total, fixed cash expenses	26.21
Total, cash expenses	166.78
Receipts less cash expenses	-80.71
Capital replacement	35.13
Receipts less cash expenses and replacement	-115.84
=====	
Economic (full ownership) costs:	
Variable cash expenses	140.57
General farm overhead	7.61
Taxes and insurance	6.53
Capital replacement	35.13
Allocated returns to owned inputs:	
Return to operating capital	3.65
Return to other nonland capital	5.87
Unpaid labor	17.09
Total, economic costs	216.45
Residual returns to management and risk	-130.38
=====	
Harvest-period price (dollars/bu.)	2.21
Yield (bu./planted acre)	29.63

All costs and returns are preliminary as of 08/01/87.	

Appendix table 190--Texas Gulf Coast (upper counties)
rice production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	227.82
Total	227.82
=====	
Cash expenses:	
Seed	25.75
Fertilizer	36.42
Chemicals	.38
Custom operations	70.17
Fuel, lube, and electricity	31.33
Repairs	25.06
Hired labor	15.58
Purchased irrigation water	55.95
Drying	58.11
Technical services	4.38
Total, variable cash expenses	323.13
General farm overhead	19.21
Taxes and insurance	11.38
Interest	30.48
Total, fixed cash expenses	61.07
Total, cash expenses	384.21
Receipts less cash expenses	-156.39
Capital replacement	36.69
Receipts less cash expenses and replacement	-193.08
=====	
Economic (full ownership) costs:	
Variable cash expenses	323.13
General farm overhead	19.21
Taxes and insurance	11.38
Capital replacement	36.69
Allocated returns to owned inputs:	
Return to operating capital	6.15
Return to other nonland capital	7.79
Net land rent	8.60
Unpaid labor	26.54
Total, economic costs	439.49
Residual returns to management and risk	-211.67
=====	
Harvest-period price (dollars/cwt.)	4.03
Yield (cwt./planted acre)	56.53

All costs and returns are preliminary as of 08/01/87.	

Appendix table 191--Texas Gulf Coast (lower counties)
rice production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	269.73
Total	269.73
Cash expenses:	
Seed	26.50
Fertilizer	38.56
Chemicals	2.91
Custom operations	79.96
Fuel, lube, and electricity	34.42
Repairs	33.76
Hired labor	17.85
Purchased irrigation water	73.61
Drying	57.43
Technical services	7.62
Total, variable cash expenses	372.62
General farm overhead	23.21
Taxes and insurance	15.06
Interest	36.84
Total, fixed cash expenses	75.11
Total, cash expenses	447.73
Receipts less cash expenses	-178.00
Capital replacement	66.25
Receipts less cash expenses and replacement	-244.25
Economic (full ownership) costs:	
Variable cash expenses	372.62
General farm overhead	23.21
Taxes and insurance	15.06
Capital replacement	66.25
Allocated returns to owned inputs:	
Return to operating capital	6.07
Return to other nonland capital	11.75
Net land rent	10.68
Unpaid labor	30.40
Total, economic costs	536.04
Residual returns to management and risk	-266.31
Harvest-period price (dollars/cwt.)	4.03
Yield (cwt./planted acre)	66.93
All costs and returns are preliminary as of 08/01/87.	

Appendix table 192--Texas peanuts (dryland)
production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	265.74
Secondary crop	8.71
Total	274.45
Cash expenses:	
Seed	41.47
Fertilizer	14.21
Lime and gypsum	1.41
Chemicals	23.16
Custom operations	4.87
Fuel, lube, and electricity	7.32
Repairs	12.60
Hired labor	6.87
Drying	15.10
Technical services	.17
Total, variable cash expenses	127.18
General farm overhead	8.20
Taxes and insurance	8.53
Interest	13.00
Total, fixed cash expenses	29.73
Total, cash expenses	156.91
Receipts less cash expenses	117.54
Capital replacement	29.85
Receipts less cash expenses and replacement	87.69
Economic (full ownership) costs:	
Variable cash expenses	127.18
General farm overhead	8.20
Taxes and insurance	8.53
Capital replacement	29.85
Allocated returns to owned inputs:	
Return to operating capital	2.31
Return to other nonland capital	5.93
Net land rent	39.37
Unpaid labor	23.01
Total, economic costs	244.38
Residual returns to management and risk	30.07
Harvest-period price (dollars/lb.)	.30
Yield (lbs./planted acre)	891.76
All costs and returns are preliminary as of 08/01/87.	

Appendix table 193--Texas peanuts (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts:	
Primary crop	724.65
Secondary crop	17.41
Total	742.06
=====	
Cash expenses:	
Seed	41.47
Fertilizer	20.76
Chemicals	45.33
Custom operations	15.41
Fuel, lube, and electricity	61.64
Repairs	33.10
Hired labor	10.40
Drying	25.08
Technical services	.94
Total, variable cash expenses	254.13
General farm overhead	32.90
Taxes and insurance	13.25
Interest	52.21
Total, fixed cash expenses	98.36
Total, cash expenses	352.48
Receipts less cash expenses	389.58
Capital replacement	69.92
Receipts less cash expenses and replacement	319.66
=====	
Economic (full ownership) costs:	
Variable cash expenses	254.13
General farm overhead	32.90
Taxes and insurance	13.25
Capital replacement	69.92
Allocated returns to owned inputs:	
Return to operating capital	4.39
Return to other nonland capital	12.57
Net land rent	108.20
Unpaid labor	34.80
Total, economic costs	530.16
Residual returns to management and risk	211.90
=====	
Harvest-period price (dollars/lb.)	.30
Yield (lbs./planted acre)	2,431.71

All costs and returns are preliminary as of 08/01/87.

Appendix table 194--Texas cotton (dryland)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	94.17
Secondary crop	19.73
Total	113.90
=====	
Cash expenses:	
Seed	8.10
Fertilizer	5.43
Chemicals	18.35
Custom operations	5.08
Fuel, lube, and electricity	6.25
Repairs	10.76
Hired labor	7.23
Ginning	26.34
Technical services	0.21
Total, variable cash expenses	87.74
General farm overhead	7.50
Taxes and insurance	5.84
Interest	11.90
Total, fixed cash expenses	25.25
Total, cash expenses	112.99
Receipts less cash expenses	0.91
Capital replacement	23.57
Receipts less cash expenses and replacement	-22.66
=====	
Economic (full ownership) costs:	
Variable cash expenses	87.74
General farm overhead	7.50
Taxes and insurance	5.84
Capital replacement	23.57
Allocated returns to owned inputs:	
Return to operating capital	1.63
Return to other nonland capital	3.95
Net land rent	20.36
Unpaid labor	14.02
Total, economic costs	164.62
Residual returns to management and risk	-50.72
=====	
Harvest-period price (dollars/lb.)	.48
Yield (lbs./planted acre)	196.19

All costs and returns are preliminary as of 08/01/87.

Appendix table 195--Texas cotton (irrigation)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	177.39
Secondary crop	40.60
Total	217.99
Cash expenses:	
Seed	9.21
Fertilizer	12.41
Chemicals	35.52
Custom operations	11.93
Fuel, lube, and electricity	36.78
Repairs	21.22
Hired labor	12.18
Purchased irrigation water	3.58
Ginning	38.66
Technical services	1.17
Total, variable cash expenses	182.65
General farm overhead	10.33
Taxes and insurance	8.98
Interest	16.40
Total, fixed cash expenses	35.71
Total, cash expenses	218.36
Receipts less cash expenses	-0.37
Capital replacement	45.61
Receipts less cash expenses and replacement	-45.98
Economic (full ownership) costs:	
Variable cash expenses	182.65
General farm overhead	10.33
Taxes and insurance	8.98
Capital replacement	45.61
Allocated returns to owned inputs:	
Return to operating capital	3.37
Return to other nonland capital	7.88
Net land rent	35.36
Unpaid labor	23.64
Total, economic costs	317.83
Residual returns to management and risk	-99.84
Harvest-period price (dollars/lb.)	.48
Yield (lbs./planted acre)	369.57

All costs and returns are preliminary as of 08/01/87.

Appendix table 196--Virginia corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	87.90
Total	87.90
Cash expenses:	
Seed	16.26
Fertilizer	45.07
Lime and gypsum	7.69
Chemicals	23.95
Custom operations	10.97
Fuel, lube, and electricity	3.66
Repairs	8.13
Hired labor	1.39
Drying	.79
Miscellaneous	.03
Technical services	.68
Total, variable cash expenses	118.62
General farm overhead	13.61
Taxes and insurance	8.63
Interest	20.75
Total, fixed cash expenses	42.99
Total, cash expenses	161.61
Receipts less cash expenses	-73.71
Capital replacement	21.26
Receipts less cash expenses and replacement	-94.97
Economic (full ownership) costs:	
Variable cash expenses	118.62
General farm overhead	13.61
Taxes and insurance	8.63
Capital replacement	21.26
Allocated returns to owned inputs:	
Return to operating capital	2.72
Return to other nonland capital	3.84
Net land rent	22.34
Unpaid labor	11.28
Total, economic costs	202.30
Residual returns to management and risk	-114.40
Harvest-period price (dollars/bu.)	1.75
Yield (bu./planted acre)	50.23

All costs and returns are preliminary as of 08/01/87.

Appendix table 197--Virginia soft red winter wheat
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	79.20
Total	79.20
Cash expenses:	
Seed	9.22
Fertilizer	28.18
Lime and gypsum	4.66
Chemicals	3.15
Custom operations	4.59
Fuel, lube, and electricity	3.27
Repairs	5.41
Hired labor	.77
Miscellaneous	1.01
Technical services	.21
Total, variable cash expenses	60.46
General farm overhead	5.38
Taxes and insurance	5.61
Interest	8.20
Total, fixed cash expenses	19.19
Total, cash expenses	79.65
Receipts less cash expenses	-4.5
Capital replacement	15.24
Receipts less cash expenses and replacement	-15.69
Economic (full ownership) costs:	
Variable cash expenses	60.46
General farm overhead	5.38
Taxes and insurance	5.61
Capital replacement	15.24
Allocated returns to owned inputs:	
Return to operating capital	2.00
Return to other nonland capital	2.73
Net land rent	15.07
Unpaid labor	8.83
Total, economic costs	115.32
Residual returns to management and risk	-36.12
Harvest-period price (dollars/bu.)	2.50
Yield (bu./planted acre)	31.68

All costs and returns are preliminary as of 08/01/87.

Appendix table 198--Virginia soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	114.71
Total	114.71
Cash expenses:	
Seed	7.66
Fertilizer	16.88
Lime and gypsum	6.76
Chemicals	21.59
Custom operations	5.95
Fuel, lube, and electricity	2.74
Repairs	5.77
Hired labor	1.14
Technical services	.22
Total, variable cash expenses	68.71
General farm overhead	6.84
Taxes and insurance	6.44
Interest	10.43
Total, fixed cash expenses	23.71
Total, cash expenses	92.41
Receipts less cash expenses	22.30
Capital replacement	20.04
Receipts less cash expenses and replacement	2.26
Economic (full ownership) costs:	
Variable cash expenses	68.71
General farm overhead	6.84
Taxes and insurance	6.44
Capital replacement	20.04
Allocated returns to owned inputs:	
Return to operating capital	1.93
Return to other nonland capital	3.10
Net land rent	22.44
Unpaid labor	7.62
Total, economic costs	137.12
Residual returns to management and risk	-22.41
Harvest-period price (dollars/bu.)	4.90
Yield (bu./planted acre)	23.41

All costs and returns are preliminary as of 08/01/87.

Appendix table 199--Virginia peanuts
production costs per planted acre

Item	1986
	Dollars
Cash receipts:	
Primary crop	784.30
Secondary crop	26.85
Total	811.15
Cash expenses:	
Seed	77.62
Fertilizer	9.56
Lime and gypsum	21.14
Chemicals	126.85
Custom operations	2.29
Fuel, lube, and electricity	9.12
Repairs	17.23
Hired labor	6.92
Drying	62.11
Miscellaneous	.58
Total, variable cash expenses	333.42
General farm overhead	34.95
Taxes and insurance	15.68
Interest	53.28
Total, fixed cash expenses	103.91
Total, cash expenses	437.33
Receipts less cash expenses	373.82
Capital replacement	61.99
Receipts less cash expenses and replacement	311.83
Economic (full ownership) costs:	
Variable cash expenses	333.42
General farm overhead	34.95
Taxes and insurance	15.68
Capital replacement	61.99
Allocated returns to owned inputs:	
Return to operating capital	7.05
Return to other nonland capital	12.01
Net land rent	89.62
Unpaid labor	23.18
Total, economic costs	577.89
Residual returns to management and risk	233.26
Harvest-period price (dollars/lb.)	.25
Yield (lbs./planted acre)	3,100.00

All costs and returns are preliminary as of 08/01/87.

Appendix table 200--Washington barley (after crop)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	72.88
Total	72.88
Cash expenses:	
Seed	5.49
Fertilizer	16.65
Chemicals	10.73
Custom operations	1.94
Fuel, lube, and electricity	3.01
Repairs	9.37
Hired labor	.97
Miscellaneous	.61
Total, variable cash expenses	48.76
General farm overhead	9.62
Taxes and insurance	8.63
Interest	14.07
Total, fixed cash expenses	32.32
Total, cash expenses	81.08
Receipts less cash expenses	-8.20
Capital replacement	22.10
Receipts less cash expenses and replacement	-30.30
Economic (full ownership) costs:	
Variable cash expenses	48.76
General farm overhead	9.62
Taxes and insurance	8.63
Capital replacement	22.10
Allocated returns to owned inputs:	
Return to operating capital	.61
Return to other nonland capital	3.91
Net land rent	14.87
Unpaid labor	6.46
Total, economic costs	114.97
Residual returns to management and risk	-42.09
Harvest-period price (dollars/bu.)	1.49
Yield (bu./planted acre)	48.91

All costs and returns are preliminary as of 08/01/87.

Appendix table 201--Washington barley (after fallow)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	63.53
Total	63.53
Cash expenses:	
Seed	5.00
Fertilizer	12.19
Chemicals	8.63
Custom operations	.84
Fuel, lube, and electricity	3.49
Repairs	10.89
Hired labor	1.34
Total, variable cash expenses	42.38
General farm overhead	8.61
Taxes and insurance	13.04
Interest	12.59
Total, fixed cash expenses	34.24
Total, cash expenses	76.63
Receipts less cash expenses	-13.10
Capital replacement	22.10
Receipts less cash expenses and replacement	-35.20
Economic (full ownership) costs:	
Variable cash expenses	42.38
General farm overhead	8.61
Taxes and insurance	13.04
Capital replacement	22.10
Allocated returns to owned inputs:	
Return to operating capital	.74
Return to other nonland capital	4.02
Net land rent	7.59
Unpaid labor	9.00
Total, economic costs	107.48
Residual returns to management and risk	-43.95
Harvest-period price (dollars/bu.)	1.49
Yield (bu./planted acre)	42.64

All costs and returns are preliminary as of 08/01/87.

Appendix table 202--Washington barley (irrigated)
production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	124.94
Secondary crop	9.37
Total	134.31
Cash expenses:	
Seed	6.42
Fertilizer	23.95
Chemicals	8.18
Custom operations	15.63
Fuel, lube, and electricity	31.00
Repairs	22.12
Hired labor	2.46
Purchased irrigation water	8.16
Miscellaneous	.54
Technical services	.54
Total, variable cash expenses	119.00
General farm overhead	13.35
Taxes and insurance	27.39
Interest	19.54
Total, fixed cash expenses	60.28
Total, cash expenses	179.28
Receipts less cash expenses	-44.97
Capital replacement	53.76
Receipts less cash expenses and replacement	-98.73
Economic (full ownership) costs:	
Variable cash expenses	119.00
General farm overhead	13.35
Taxes and insurance	27.39
Capital replacement	53.76
Allocated returns to owned inputs:	
Return to operating capital	1.52
Return to other nonland capital	9.35
Net land rent	16.27
Unpaid labor	16.48
Total, economic costs	257.12
Residual returns to management and risk	-122.81
Harvest-period price (dollars/bu.)	1.49
Yield (bu./planted acre)	83.85

All costs and returns are preliminary as of 08/01/87.

Appendix table 203--Washington white winter wheat
(after crop) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	153.13
Secondary crop	1.51
Total	154.64
=====	
Cash expenses:	
Seed	7.33
Fertilizer	33.74
Chemicals	18.41
Custom operations	4.21
Fuel, lube, and electricity	3.54
Repairs	10.98
Hired labor	.70
Technical services	.26
Total, variable cash expenses	79.17
General farm overhead	15.22
Taxes and insurance	9.67
Interest	22.27
Total, fixed cash expenses	47.16
Total, cash expenses	126.33
Receipts less cash expenses	28.31
Capital replacement	21.55
Receipts less cash expenses and replacement	6.76
=====	
Economic (full ownership) costs:	
Variable cash expenses	79.17
General farm overhead	15.22
Taxes and insurance	9.67
Capital replacement	21.55
Allocated returns to owned inputs:	
Return to operating capital	2.52
Return to other nonland capital	4.12
Net land rent	40.33
Unpaid labor	8.10
Total, economic costs	180.68
Residual returns to management and risk	-26.04
=====	
Harvest-period price (dollars/bu.)	2.38
Yield (bu./planted acre)	64.34

All costs and returns are preliminary as of 08/01/87.

Appendix table 204--Washington white winter wheat
(after fallow) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	118.93
Secondary crop	.61
Total	119.54
=====	
Cash expenses:	
Seed	4.77
Fertilizer	15.27
Chemicals	6.89
Custom operations	2.35
Fuel, lube, and electricity	4.00
Repairs	10.66
Hired labor	.86
Miscellaneous	.09
Technical services	.10
Total, variable cash expenses	44.99
General farm overhead	12.14
Taxes and insurance	12.55
Interest	17.76
Total, fixed cash expenses	42.45
Total, cash expenses	87.44
Receipts less cash expenses	32.10
Capital replacement	26.69
Receipts less cash expenses and replacement	5.41
=====	
Economic (full ownership) costs:	
Variable cash expenses	44.99
General farm overhead	12.14
Taxes and insurance	12.55
Capital replacement	26.69
Allocated returns to owned inputs:	
Return to operating capital	1.53
Return to other nonland capital	4.57
Net land rent	27.88
Unpaid labor	9.84
Total, economic costs	140.18
Residual returns to management and risk	-20.64
=====	
Harvest-period price (dollars/bu.)	2.38
Yield (bu./planted acre)	49.97

All costs and returns are preliminary as of 08/01/87.

Appendix table 205--Washington white winter wheat
(irrigated) production costs per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	249.64
Secondary crop	4.84
Total	254.48
=====	
Cash expenses:	
Seed	7.66
Fertilizer	51.98
Chemicals	10.70
Custom operations	9.19
Fuel, lube, and electricity	27.03
Repairs	21.48
Hired labor	1.80
Purchased irrigation water	9.46
Miscellaneous	1.27
Technical services	.70
Total, variable cash expenses	141.27
General farm overhead	21.63
Taxes and insurance	28.57
Interest	31.66
Total, fixed cash expenses	81.86
Total, cash expenses	223.13
Receipts less cash expenses	31.35
Capital replacement	46.67
Receipts less cash expenses and replacement	-15.32
=====	
Economic (full ownership) costs:	
Variable cash expenses	141.27
General farm overhead	21.63
Taxes and insurance	28.57
Capital replacement	46.67
Allocated returns to owned inputs:	
Return to operating capital	4.14
Return to other nonland capital	8.04
Net land rent	36.84
Unpaid labor	20.67
Total, economic costs	307.84
Residual returns to management and risk	-53.36
=====	
Harvest-period price (dollars/bu.)	2.38
Yield (bu./planted acre)	104.89

All costs and returns are preliminary as of 08/01/87.

Appendix table 206--Wisconsin corn production costs
per planted acre

Item	1986
	Dollars
Cash receipts (excl. direct Gov't. payments):	
Primary crop	165.43
Total	165.43
=====	
Cash expenses:	
Seed	15.23
Fertilizer	38.50
Lime and gypsum	2.41
Chemicals	19.67
Custom operations	7.99
Fuel, lube, and electricity	6.55
Repairs	9.59
Hired labor	1.66
Drying	3.12
Miscellaneous	.46
Technical services	.60
Total, variable cash expenses	105.78
General farm overhead	19.17
Taxes and insurance	25.48
Interest	61.81
Total, fixed cash expenses	106.46
Total, cash expenses	212.24
Receipts less cash expenses	-46.81
Capital replacement	31.72
Receipts less cash expenses and replacement	-78.53
=====	
Economic (full ownership) costs:	
Variable cash expenses	105.78
General farm overhead	19.17
Taxes and insurance	25.48
Capital replacement	31.72
Allocated returns to owned inputs:	
Return to operating capital	2.65
Return to other nonland capital	6.97
Net land rent	21.87
Unpaid labor	13.42
Total, economic costs	227.07
Residual returns to management and risk	-61.64
=====	
Harvest-period price (dollars/bu.)	1.42
Yield (bu./planted acre)	116.50

All costs and returns are preliminary as of 08/01/87.

Appendix table 207--Wisconsin oats production costs
per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	36.45
Secondary crop	35.64
Total	72.09
=====	
Cash expenses:	
Seed	6.07
Fertilizer	10.50
Lime and gypsum	4.06
Chemicals	2.18
Custom operations	4.67
Fuel, lube, and electricity	5.86
Repairs	7.30
Hired labor	1.49
Miscellaneous	1.26
Technical services	.15
Total, variable cash expenses	43.55
General farm overhead	5.43
Taxes and insurance	21.55
Interest	17.50
Total, fixed cash expenses	44.47
Total, cash expenses	88.02
Receipts less cash expenses	-15.93
Capital replacement	23.15
Receipts less cash expenses and replacement	-39.08
=====	
Economic (full ownership) costs:	
Variable cash expenses	43.55
General farm overhead	5.43
Taxes and insurance	21.55
Capital replacement	23.15
Allocated returns to owned inputs:	
Return to operating capital	1.00
Return to other nonland capital	5.03
Net land rent	15.06
Unpaid labor	15.10
Total, economic costs	129.86
Residual returns to management and risk	-57.77
=====	
Harvest-period price (dollars/bu.)	.83
Yield (bu./planted acre)	43.92

All costs and returns are preliminary as of 08/01/87.

Appendix table 208--Wisconsin soybeans
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	156.40
Total	156.40
=====	
Cash expenses:	
Seed	10.67
Fertilizer	12.86
Lime and gypsum	2.54
Chemicals	24.27
Custom operations	2.24
Fuel, lube, and electricity	4.95
Repairs	6.91
Hired labor	1.42
Miscellaneous	.34
Technical services	.49
Total, variable cash expenses	66.69
General farm overhead	16.54
Taxes and insurance	26.27
Interest	53.32
Total, fixed cash expenses	96.12
Total, cash expenses	162.81
Receipts less cash expenses	-6.41
Capital replacement	27.64
Receipts less cash expenses and replacement	-34.05
=====	
Economic (full ownership) costs:	
Variable cash expenses	66.69
General farm overhead	16.54
Taxes and insurance	26.27
Capital replacement	27.64
Allocated returns to owned inputs:	
Return to operating capital	1.53
Return to other nonland capital	5.27
Net land rent	43.04
Unpaid labor	9.53
Total, economic costs	196.50
Residual returns to management and risk	-40.10
=====	
Harvest-period price (dollars/bu.)	4.48
Yield (bu./planted acre)	34.91

All costs and returns are preliminary as of 08/01/87.

Appendix table 209--Wyoming barley (irrigated)
production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	84.87
Secondary crop	18.81
Total	103.68
=====	
Cash expenses:	
Seed	5.68
Fertilizer	10.78
Chemicals	5.81
Custom operations	1.68
Fuel, lube, and electricity	16.42
Repairs	12.33
Hired labor	3.42
Purchased irrigation water	6.74
Miscellaneous	.73
Total, variable cash expenses	63.59
General farm overhead	17.70
Taxes and insurance	11.47
Interest	29.45
Total, fixed cash expenses	58.62
Total, cash expenses	122.21
Receipts less cash expenses	-18.53
Capital replacement	32.90
Receipts less cash expenses and replacement	-51.43
=====	
Economic (full ownership) costs:	
Variable cash expenses	63.59
General farm overhead	17.70
Taxes and insurance	11.47
Capital replacement	32.90
Allocated returns to owned inputs:	
Return to operating capital	.96
Return to other nonland capital	6.76
Net land rent	15.27
Unpaid labor	22.90
Total, economic costs	171.55
Residual returns to management and risk	-67.87
=====	
Harvest-period price (dollars/bu.)	1.33
Yield (bu./planted acre)	63.81

All costs and returns are preliminary as of 08/01/87.

Appendix table 210--Wyoming hard red winter wheat
(after fallow) production costs per planted acre

Item	1986
	<u>Dollars</u>
Cash receipts (excl. direct Gov't. payments):	
Primary crop	47.65
Total	47.65
=====	
Cash expenses:	
Seed	3.05
Fertilizer	6.85
Chemicals	.54
Custom operations	8.23
Fuel, lube, and electricity	4.76
Repairs	7.11
Hired labor	.66
Total, variable cash expenses	31.20
General farm overhead	7.35
Taxes and insurance	4.90
Interest	12.23
Total, fixed cash expenses	24.48
Total, cash expenses	55.67
Receipts less cash expenses	-8.02
Capital replacement	17.39
Receipts less cash expenses and replacement	-25.41
=====	
Economic (full ownership) costs:	
Variable cash expenses	31.20
General farm overhead	7.35
Taxes and insurance	4.90
Capital replacement	17.39
Allocated returns to owned inputs:	
Return to operating capital	1.25
Return to other nonland capital	2.95
Net land rent	14.73
Unpaid labor	7.57
Total, economic costs	87.34
Residual returns to management and risk	-39.69
=====	
Harvest-period price (dollars/bu.)	2.10
Yield (bu./planted acre)	22.69

All costs and returns are preliminary as of 08/01/87.

