

# COST OF PRODUCTION WORKSHEET- INCOME STATEMENT FOR CROPS - Page 1

Farm Name \_\_\_\_\_ Production Year \_\_\_\_\_ Date Completed \_\_\_\_\_

ITEM	Column 1 CASH SALES	Column 2 BEGINNING INVENTORY	Column 3 ENDING INVENTORY	Column 4 GROSS PROFIT
Corn				
Soybeans				
Wheat				
Dry Beans				
Other 1				
Other 2				
Government Prog. Payments*				
Other Income Items				
TOTALS				
Gross Revenues	Column 1 (-)	Column 2 (+)	Column 3 (=)	(A)\$

\*Government Program payments received are sales and those due are ending inventories, with those due from previous years being the beginning inventory.

## COST OF PRODUCTION WORKSHEET

This cost of production worksheet is designed to help you determine your cost of producing crops. Knowing your own costs can be important in developing a marketing plan for your farm. Enter your own costs under the headings of Direct and Overhead costs. Direct costs can be thought of those cost directly associated with a specific crop or enterprise while overhead costs are those required for the farm business to run but may not vary greatly by individual crop enterprises. An enterprise can be any segment of the farm business that can be segmented by its returns and associated costs of production. The first page is designed to help capture all incomes and cost. If the various cost of productions are accurate for a given time period, you should be able to recreate the income statement from the cost of production analysis for the same time period. The business profit or loss is directly the result of the price received above or below the various "Cost of Productions". Consider this a reality check for accuracy.

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## Farm Expenses

### Direct Expenses

Seed  
Fertilizer  
Crop Chemicals  
Drying Fuel  
Repairs  
Utilities  
Hauling and Trucking  
Marketing/Crop Expense  
Overhead Expenses  
Interest  
Hired Labor  
Land Rent/Machine Lease  
Real Estate Taxes  
Farm Insurance  
Miscellaneous Expense  
Accrual Expense Change

Depreciation  
TOTAL EXPENSES  
(B)

NET FARM INCOME A-B=C  
(Return to Unpaid  
Labor & Owner Equity)



13. Crop haul & truck	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
14. Crop Marketing	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
15. Crop Insurance	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
16. Other	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
17. TOTAL DIRECT COST/Ac	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____

18. GROSS MARGIN=G.I.-D.C./Ac      \$ \_\_\_\_\_    \$ \_\_\_\_\_    \$ \_\_\_\_\_    \$ \_\_\_\_\_    \$ \_\_\_\_\_    \$ \_\_\_\_\_    \$ \_\_\_\_\_

19. Acres Cropped \_\_\_\_\_      Column 1  
OVERHEAD COSTS for Farm

20. Interest	\$ _____
21. Hired Labor	\$ _____
22. Land Rents	\$ _____
23. Machinery Leases	\$ _____
24. Real Estate Taxes	\$ _____
25. Farm Insurance	\$ _____
26. Farm Utilities	\$ _____
27. Other Expenses	\$ _____
28. Depreciation	\$ _____
29. Tot.Accounting Ovrhd.Cost	\$ _____

1.Gross Margin can be used in determining which crops will contribute more toward Overhead Cost.

2. Accounting Costs of Production is the summation of direct variable (or allocable) and of overhead (or non-allocable) cost.

3. Economic Costs is the summation of total accounting costs plus the opportunity costs of resources used in the business; e.g. for equity capital and for unpaid family labor. Being able to price a commodity at your economic cost would provide the returns to unpaid resources (lines 30 and 31). Selling at less than the economic cost indicates that the price received is not adequate to earn the desired rates of return on unpaid resources.

ADD (lines 20 through 28)

30. Value Unpaid Family Labor \$ \_\_\_\_\_

4.Economic Cost includes a value for any unpaid labor.

31. Val. Unpaid Equity Capital\$ \_\_\_\_\_

5.Economic Cost includes opportunity cost of Equity. (5%? of Net Worth)

32. Total Econ. Overhead Cost \$ \_\_\_\_\_

ADD (lines 29, 30 and 31)

33. Total Econ. Ovrhd.Cost/Ac \$ \_\_\_\_\_

(line 32) DIVIDED BY (line 19)

	<u>CORN</u>	<u>SOYBEANS</u>	<u>WHEAT</u>	<u>OTHER1</u>	<u>OTHER2</u>	<u>OTHER3</u>	<u>OTHER4</u>
34. Total Economic Costs / Ac	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
(line 17 for each crop) PLUS (line33)							

35. Total Economic Cost / Bu	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
For each crop(line 34) DIVIDED BY (line 1)							

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	<u>CORN</u>	<u>SOYBEANS</u>	<u>WHEAT</u>	<u>OTHER1</u>	<u>OTHER2</u>	<u>OTHER3</u>	<u>OTHER4</u>
36. Acres planted each crop	_____	_____	_____	_____	_____	_____	_____
37. Total Direct Cost/Ac (line 17)	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
38. Direct Cost per Bushel	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
	For each crop (line 37) DIVIDED BY (line 1)						
39. Total Direct Cost for Crop	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
	For each crop (line 36) TIMES (line 37)						
40. Total Direct Cost for all crops combined	\$ _____			(SUM of each column in line 39)			

### Crop Prices and Crop Revenues Needed to Maintain Net Worth

41. Total Economic Overhead Cost (line 32)	\$ _____	This calculation is used to determine the crop price
42. Minus Gov. Program & Other Net Incomes	- \$ _____	required after receipt of other farm income; e.g. fixed
43. Minus Value of Unpaid Equity (line 31)	- \$ _____	government payments, custom work. It covers direct
44. Plus Income Taxes	+ \$ _____	costs associated with the crop, its share of the farm
45. Minus Value Unpaid Family Labor (line 30)	- \$ _____	overhead, plus expenditures required for family living
46. Plus Actual Family Living & Other Draws	+ \$ _____	and income taxes.
47. "Maintain Net Worth Overhead Cost"	= \$ _____	
48. "Maintain Net Worth Overhead Cost" per Acre	\$ _____	(line 47) DIVIDED BY (line 19)
49. Total Crop Revenues Needed to Maintain Net Worth	\$ _____	(line 40) PLUS (line 47)

	<u>CORN</u>	<u>SOYBEANS</u>	<u>WHEAT</u>	<u>OTHER1</u>	<u>OTHER2</u>	<u>OTHER3</u>	<u>OTHER4</u>
50. Total Crop Revenues Needed / Acre	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
	(line 37 for each crop) PLUS (line 48)						
51. Maintain Net Worth Price per Bu	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
	For each crop (line 50) DIVIDED BY (line 1)						

### Crop Prices and Crop Revenues Required to Meet Cash Flow Demands

52. "Maintain Net Worth Overhead Cost" (line 47)	\$ _____	This calculation is to determine the crop price
53. Minus Depreciation (line 28)	- \$ _____	required after receipt of other farm income; e.g.
54. Minus Interest Expense (line 20)	- \$ _____	government payments and custom work, that covers
55. Plus Scheduled Principal and Interest	+ \$ _____	all cash flow expenditures for the farm business to
56. Plus Cash required for Capital Replacement	+ \$ _____	continue which includes annual principal payments to
57. "Meet Cash Flow Demands Overhead Cost"	= \$ _____	service debt and an annual planned expenditure for
		replacement and growth of the farm infrastructure
		e.g. machinery, equipment, tile, and buildings.
58. "Meet Cash Flow Overhead Cost" per Acre	\$ _____	(line 57) DIVIDED BY (line 19)

59. Total Crop Revenues Needed to Meet Cash Flow Demands \$\_\_\_\_\_ (line 40) PLUS (line 57)  
CORN SOYBEANS WHEAT OTHER1 OTHER2 OTHER3 OTHER4

60. Total Crop Revenue Needed per Acre \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_  
\$\_\_\_\_\_  
(line 37 for each crop) PLUS (line 58)

61. Meet Cash Flow Demands per Bu \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_ \$\_\_\_\_\_  
For each crop (line 60) DIVIDED BY (line 1)

### \*\*\* GOVERNMENT PROGRAM PAYMENTS (2002 -2007)

The following tables represents the Direct Payments and the Counter-Cyclical Payments for each commodity for the years 2002-2007. The Counter-Cyclical Payment is in addition to the Direct Payment but is tied to National Average Prices. If prices are low, the Counter-Cyclical Payment usually is larger, (often much larger) than the Direct Payment.

#### Direct Payment Table

Base Acreage X .85 X D.P. Yield X Payment Rate = Annual Direct Payment

Crop	Program Base Acreage	X Factor	X Direct Payment Yield Bu/Ac	= Payment Bushels	X Direct Payment Rate/Bu	= Annual Direct Payment
Corn		X 0.85			X \$0.28	\$
Barley		X 0.85			X \$0.24	\$
Oats		X 0.85			X \$0.024	\$
Wheat		X 0.85			X \$0.52	\$
Soybeans		X 0.85			X \$0.44	\$
					Total Direct Payments	\$

#### Counter-Cyclical Payment Estimator

Base Acreage X .85 X C-C Yield X Payment Rate = Counter-Cyclical Payment

Crop	Program Base Acreage (same)	X Factor	X Counter Cyclical Yield Bu/Ac	= Payment Bushels	X Counter-Cyclical Payment Rate/Bu **	= Total Counter-Cyclical Payment
Corn		X 0.85			X \$0.	\$
Barley		X 0.85			X \$0.	\$
Oats		X 0.85			X \$0.	\$
Wheat		X 0.85			X \$0.	\$
Soybeans		X 0.85			X \$0.	\$
		X 0.85			X \$0.	\$
					Total C-C Payments	\$

\*\*The C-C Payment Rate=Target Price-Direct Payment Rate-(Higher of Nat. Loan Rate or Nat. Price)

Total Government Program Payments (Direct & Counter-Cyclical)= \$ \_\_\_\_\_