



Projected 2009 Rice Farm Cash Flow Model

A Rice Production Farm Income and Expense Producer Decision Tool

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The Projected 2009 Rice Farm Cash Flow Model was developed to assist producers in planning for the 2009 crop year. The model is an Excel spreadsheet which allows rice producers to enter projected acreage, yield, market price and production cost data for 2009 to estimate net returns above variable production costs and to easily evaluate the impact of changing percent of base planted on net returns. The primary purpose of the model is to evaluate the impact on net returns above variable production costs for alternative rice rental arrangements and percent of base acreage planted. The model also includes entry cells for whole farm fixed expenses to estimate projected returns from rice production over all costs.

Data Input

The Projected 2009 Rice Farm Cash Flow Model calculates projected net returns above variable production costs for a rice farm or specific tract of land of a specified acreage. For each farm or tract, data to be entered into the model includes estimates for the 2009 crop season including rice acreage, base acres, percent of base planted, projected first crop and ratoon crop yields, program yields, projected prices and production costs. Gross returns, variable costs and net returns are calculated for the farm or tract based upon the data entered. Spreadsheet cells in which data must be entered are listed and defined below.

Acreage, Production and Price Data:

The first section of the model contains cells to enter data concerning projected 2009 rice acreage, production and market prices. The specific data entry cells in the spreadsheet (shaded in blue) are listed below.

<u>Spreadsheet Cell</u>	<u>Description</u>
C4	Farm Name
C5	Farm Number
E8	Rice Yield Unit (1 = cwt and 2 = bbls)
E9	Total Rice Base Acres
E10	Percent of Rice Base Planted in 2009
E11	Percent of 2009 Planted Rice Acreage Ratoon Cropped
E12	Projected 2009 Rice First Crop Yield (cwt or bbl)
E13	Projected 2009 Rice Ratoon Crop Yield (cwt or bbl)
E15	Rice Base Payment Acreage Percent
E16	Rice Direct Payment Program Yield (cwt or bbl)
E17	Rice Counter Cyclical Payment Program Yield (cwt or bbl)
E19	Rice Cash Rent (\$ per acre)
E20	Total Acres Cash Rented
E22	Rice Crop Share for Land and Water
E23	Percent of Irrigation Pumping Costs Paid by Grower
E25	Projected 2009 Diesel Price per Gallon
E26	Projected 2009 Nitrogen Price per pound of N
E27	Projected 2009 Phosphorous Price per pound of P
E28	Projected 2009 Potassium Price per pound of K
E30	2009 Rice Direct Payment (\$ per cwt.)
E31	Projected 2009 Rough Rice Market Price (\$ per cwt.)
E32	Projected 2009 World Rice Price (\$ per cwt.)

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Rice Variable Production Cost Data:

The second section of the model contains cells to enter data concerning projected variable rice production costs for the 2009 season. Costs are entered on a dollar per planted acre basis and should include the proportionate additional cost for any ratoon crop acreage. The specific data entry cells (shaded in blue) are listed below.

<u>Spreadsheet Cell</u>	<u>Description</u>
E60	Custom Aerial Application Costs (\$ per acre)
F60	Percent of Aerial Application Cost paid by grower
F61	Percent of Drying Cost paid by grower
C63	Pounds of N applied per acre (lbs per acre)
F63	Percent of Nitrogen Fertilizer Cost paid by grower
C64	Pounds of P applied per acre (lbs per acre)
F64	Percent of Phosphorous Fertilizer Cost paid by grower
C65	Pounds of K applied per acre (lbs per acre)
F65	Percent of Potassium Fertilizer Cost paid by grower
E66	Fungicide Cost (\$ per acre)
F66	Percent of Fungicide Cost paid by grower
E67	Herbicide Cost (\$ per acre)
F67	Percent of Herbicide Cost paid by grower
E68	Insecticide Cost (\$ per acre)
F68	Percent of Insecticide Cost paid by grower
E69	Irrigation Supplies / Gate Cost (\$ per acre)
E70	Seed Cost (\$ per acre)
E71	Fertilizer Application Costs (\$ per acre)
F71	Percent of Fertilizer Application Costs paid by grower
E72	Planting Costs (\$ per acre)
E73	Hauling Costs (\$ per acre)
E74	Labor Costs (\$ per acre)
C75	Gallons of Diesel used for Tillage and Harvest (gallons per acre)
C76	Gallons of Diesel used for Irrigation (gallons per acre)
E77	Repair and Maintenance Costs (\$ per acre)
E78	Other Variable Costs (\$ per acre)
F78	Percent of Other Costs paid by Grower
C79	Interest Rate on Operating Capital (%)
C80	Term of Operating Loan (months)

Rice Fixed Production Cost Data:

The next section of the model contains cells to enter data concerning projected fixed rice production costs for the 2009 season. Costs are entered on a total farm or total tract basis. Fixed costs per planted acre are calculated by dividing total entered fixed costs by planted acres. The specific data entry cells (shaded in blue) are listed below.

<u>Spreadsheet Cell</u>	<u>Description</u>
B88	Name of Fixed Cost Item 1
G88	Value of Fixed Cost Item 1
B89	Name of Fixed Cost Item 2
G89	Value of Fixed Cost Item 2
B90	Name of Fixed Cost Item 3
G90	Value of Fixed Cost Item 3

Net Return Calculation:

Based on the acreage, production, price and cost data entered, the model calculates net returns above variable costs (for the percent of base planted) on a per farm, per acre, per cwt., and per bbl. basis. Net return estimates are also included at the upper portion of the spreadsheet (cells G4:J6) to allow for quick evaluation of the impact of changing percent of base planted on net returns above variable costs. A copy of the entire model along with a set of sample data entered is included below.

	B	C	D	E	F	G	H	I	J	K		
1	Projected 2009 Rice Farm Cash Flow Model					1/9/2009						
2	(Projected Net Returns Above Variable Production Costs)					[Enter values shaded in blue]						
3												
4	Farm Name ABC Rice Farm					Total Rice Net Returns Above Variable Costs						
5	Farm Number Tract 101					Per Farm				Per Acre	Per Cwt	Per Bbl
6						\$11,173.10	\$131.45	\$2.27	\$3.67			
7	[ENTER]											
8	Enter Yield Unit [1 = Cwt 2 = Bbl]					1						
9	Total Rice Base Acres					100.0						
10	Percent of Rice Base Planted in 2009					85%						
11	Percent of 2009 Planted Rice Acreage Ratoon Cropped					0%						
12	Projected 2009 Rice First Crop Yield					58.0 Cwt						
13	Projected 2009 Rice Ratoon Crop Yield					0.00 Cwt						
14						83.3 Paid Rice Base Acres in 2009						
15	Rice Base Payment Acreage Percent					83.3%						
16	Rice Direct Payment Program Yield					42.0 Cwt						
17	Rice Counter Cyclical Payment Program Yield					42.0 Cwt						
18						25.9 Bbl						
19	Rice Cash Rent (\$ per acre)					\$0.00						
20	Total Acres Cash Rented					0						
21						Rice Production						
22	Rice Crop Share for Land and Water					30%						
23	Percent of Irrigation Pumping Costs Paid by Grower					0%						
24						Yield Per Acre						
25	Projected 2009 Diesel Price per Gallon					\$2.20						
26	Projected 2009 Nitrogen Price per lb. of N					\$0.53						
27	Projected 2009 Phosphorous Price per lb. of P					\$0.88						
28	Projected 2009 Potassium Price per lb. of K					\$0.75						
29						Total Production						
30	2009 Direct Payment per Cwt.					\$2.35 per Cwt						
31	Projected 2009 Rough Rice Market Price per Cwt.					\$13.60 per Cwt						
32	Projected 2009 World Market Price					\$12.00 per Cwt						
33						\$3.81 per Barrel						
34						\$22.03 per Barrel						
35	Direct Payment per Cwt					\$2.35 per Cwt						
36	Counter Cyclical Payment per Cwt					\$0.00 per Cwt						
37	LDP Payment per Cwt					\$0.00 per Cwt						
38	U.S. Rough Rice Market Price					\$13.60 per Cwt						
39	World Rough Rice Market Price					\$12.00 per Cwt						
40						\$3.81 per Bbl						
41						\$0.00 per Bbl						
42						\$0.00 per Bbl						
43	Gross Income From Rice Production					Per Harvested Rice Acre						
44	Market Income					\$788.80	Total Farm	\$67,048.00	Per Cwt	\$13.60	Per Bbl	\$22.03
45	Direct Program Payment					\$96.73	\$8,221.71	\$1.67	\$2.70			
46	Counter Cyclical Program Payment					\$0.00	\$0.00	\$0.00	\$0.00			
47	LDP Payment					\$0.00	\$0.00	\$0.00	\$0.00			
48	Total Rice Farm Gross Income					\$885.53	\$75,269.71	\$15.27	\$24.73			
49	Rent - Land and Water											
50	Share Rent (on Planted/Harvested Rice Acres)					\$265.66	\$22,580.91					
51	Cash Rent (on Total Rice Crop Land Acres)					\$0.00	\$0.00					
52												
53												
54	Gross Returns to Grower					\$619.87	\$52,688.80	\$10.69	\$17.31			
55												
56												
57	[ENTER]											
58	Rice Variable Production Costs					Total Costs Per Acre						
59	[Enter production costs per acre including proportionate share of ratoon crop]					Percent Paid By Grower						
60	Custom Aerial Application					\$25.65	100%	\$2,180.25				
61	Drying Charge					\$58.46	70%	\$3,478.61				
62	Fertilizer											
63	Pounds of N per Acre					130 lbs/Acre	\$68.90	100%	\$5,856.50			
64	Pounds of P per Acre					40 lbs/Acre	\$35.20	100%	\$2,992.00			
65	Pounds of K per Acre					60 lbs/Acre	\$45.00	100%	\$3,825.00			
66	Fungicide					\$21.60	100%	\$1,836.00				
67	Herbicides					\$43.30	100%	\$3,680.50				
68	Insecticides					\$12.36	100%	\$1,050.60				
69	Irrigation Supplies / Gates					\$3.65		\$310.25				
70	Seed					\$38.40		\$3,264.00				
71	Fertilizer Application Cost					\$19.00	100%	\$1,615.00				
72	Planting Cost					\$6.72		\$571.20				
73	Hauling Cost					\$17.40		\$1,479.00				
74	Labor Costs					\$16.17		\$1,374.45				
75	Tillage/Harvest Fuel Cost					16 gal/Acre	\$35.20	\$2,992.00				
76	Irrigation Fuel Cost					54 gal/Acre	\$118.80	\$0.00				
77	Repair and Maintenance					\$23.64	0%	\$2,009.40				
78	Other Variable Costs					\$0.00	100%	\$0.00				
79	Interest on Operating Capital					8.5% rate	\$35.31	\$3,000.94				
80												
81	Total Rice Variable Costs					\$488.42	\$41,515.70	\$8.42	\$13.64			
82												
83	Net Returns Above Variable Costs					\$131.45	\$11,173.10	\$2.27	\$3.67			
84												
85												
86	Fixed Costs											
87	[Enter whole farm fixed expenses]											
88	Fixed cost 1					\$0.00	\$0	0.00	\$0.00			
89	Fixed cost 2					\$0.00	\$0	0.00	\$0.00			
90	Fixed cost 3					\$0.00	\$0	0.00	\$0.00			
91	Total Fixed Costs					\$0.00	\$0	\$0.00	\$0.00			
92												
93	Net Returns Above Variable and Fixed Costs					\$131.45	\$11,173.10	\$2.27	\$3.67			
94												
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