

# **SAMPLE COSTS**

# **RICE PRODUCTION**



## **Butte County**

UNIVERSITY OF CALIFORNIA  
COOPERATIVE EXTENSION

Carl M. Wick  
Farm Advisor

Karen Klonsky  
Area Farm Mgmt  
Specialist

University of California  
Cooperative Extension  
Butte County

Agricultural Economics  
University of California  
Cooperative Extension  
Davis, California

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## 1984 SAMPLE COSTS TO PRODUCE RICE

The cost figures, amounts of materials, and yields shown in this study are not averages or recommendations. Cultural practices, equipment, size of operation, soils, and grower preference and experience will vary for each farming operation.

This cost-of-production model for rice in Butte County, California, should not be used as an actual budget, but as a guide for growers to use when budgeting for cash expenses and figuring fixed costs. A column is provided for growers to list actual cash and fixed costs which should reflect their individual operation.

The costs in this study are based on a 600-acre hypothetical rice farming operation in Butte County, California where rice is grown in two or more fields. Two or more variety maturity groups are planted each season to facilitate harvesting. Fields are leveled to grade with straight levees, boxes set, border roads and drains in place.

Optional practices Several optional practices are included in the cost study and are designated by an asterisk. The cost of these practices are not included in the total cost. However, growers are urged to include them in the "Your Cost" column where applicable.

Yield A 70 cwt/acre dry paddy rice yield (13% moisture) is assumed for the purpose of this study and does reflect locally attainable average yields when growers use the new short stature rice varieties and current cultural technology.

Pest Control For pest control recommendations see "Insect and Disease Control Recommendations for Rice" UC leaflet 2748 and "Weed Control in Rice" UC Leaflet 21087 and the IPM Rice manual.

Investment in equipment reflects current prices for new equipment shown in the inventory. Typical grower inventory value is estimated at 60% of current new value.

Interest on investment is figured at 13% of one-half of the original cost.

Depreciation is based on a 10 or 15 year useful life of all items except buildings, which are based on a 30-year useful life. Depreciation is calculated on a straight line basis.

Taxes were calculated by taking 2.5% of the investment per acre.

Cash Overhead was calculated as 8% of total cultural, harvest and post-harvest costs. It includes telephone, office, bookkeeping and other miscellaneous expenses.

Labor costs were calculated assuming one full-time employee at \$6.00 per hour plus 20% fringe benefits (\$7.20 per hour), and employment of seasonal workers as combine and bankout drivers at \$7.50 plus 20% (\$9.00 per hour).

Laser Leveling is expected to be done once every three years. In this study, one-third of the laser leveling costs were amortized to the 1984 budget. The land was assumed to be previously leveled to grade with straight levees and irrigation boxes in place, intake structures for surface water delivery from irrigation canals, drop outlet for drainage into a drainage ditch and road pad borders.

Water costs for surface water vary between irrigation districts. Seasonal pumping, 5-7 acre-feet depending on variety maturity group and soil type, costs for ground water vary from \$100 to \$125 per acre.

Custom-Air A fuel surcharge may be added when necessary. 10% discount is given for accounts paid in 15 days or less.

COOPERATIVE EXTENSION  
UNIVERSITY OF CALIFORNIA

2279 Del Oro Ave., Suite B  
Oroville, California 95965

Telephone (916) 538-7201

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Operation	Hours per Acre	Labor	Fuel & Repairs	Kind & Quantity	Materials	CASH AND LABOR COSTS PER ACRE		% of Acreage Treated	Total Cost	Your Cost
						\$ per Acre	\$ per Acre			
Post harvest costs:										
row levees	0.03	0.22	1.00					100.00	1.22	
clean around boxes	0.07	0.50	0.29						0.79	
encroachment notice, flag people, burn permit & safety equip.	0.09	0.65	0.29						0.94	
sanitation burning	0.09	0.65	0.14						0.79	
water spray equipment	0.05	0.36	0.36						0.72	
TOTAL POST-HARVEST COST										
									4.46	

Overhead costs:  
misc. office, bookkeeping, etc.

TOTAL CASH OVERHEAD 37.76

INVESTMENT COSTS	\$/Acre	Annual Cost	Interest	Total
Equipment & buildings	\$493.86	Depreciation \$40.72	Interest \$32.10	72.82

TOTAL COST PER ACRE EXCLUDING LAND COSTS 492.63  
 TOTAL COST PER CWT @ 70 CWT PER ACRE EXCLUDING LAND COSTS 7.04  
 TOTAL COST PER CWT @ 70 CWT PER ACRE, 17.5 CWT PAID TO LANDLORD AND 52.5 CWT SOLD BY GROWER 9.38

\* Optional practices which may or may not be used by growers

EQUIPMENT AND BUILDING LIST  
600-acre Farm

Equipment Name	New Cost	Cost per Acre	Years of Life	-----COST PER ACRE-----		
				Depreciation Straight Line	Interest 13%	Total
<b>Tractors:</b>						
4WD diesel 200 drawbar hp	103000.00	171.67	10.00	17.17	11.16	28.32
Crawler 125 drawbar hp (inc. tool bar + dozer blade)	108320.00	180.53	15.00	12.04	11.73	23.77
Wheel tractor 40 hp	17000.00	28.33	10.00	2.83	1.84	4.67
100 HP wheel diesel	45000.00	75.00	10.00	7.50	4.88	12.38
3 wheel plane	15000.00	25.00	15.00	1.67	1.63	3.29
Chisel plow 16'	5300.00	8.83	10.00	0.88	0.57	1.46
Offset disc (stubble plow) 1	23000.00	38.33	10.00	3.83	2.49	6.32
Offset disc harrow 21'	22500.00	37.50	10.00	3.75	2.44	6.19
Spiketooth harrow 20'	6000.00	10.00	15.00	0.67	0.65	1.32
Sprayer	5500.00	9.17	10.00	0.92	0.60	1.51
Mower 7'	2800.00	4.67	10.00	0.47	0.30	0.77
Rice ridger	6400.00	10.67	10.00	1.07	0.69	1.76
Implement carrier	9700.00	16.17	10.00	1.62	1.05	2.67
2 pickups 4WD power+alr	29000.00	48.33	7.00	6.90	3.14	10.05
Tools + shop equipment	11340.00	18.90	10.00	1.89	1.23	3.12
Shop & equipment storage	84000.00	140.00	30.00	4.67	9.10	13.77
<b>TOTAL COST</b>	<b>493860.00</b>	<b>823.10</b>		<b>67.86</b>	<b>53.50</b>	<b>121.37</b>
Typical grower inventory 60% of 1983 new cost	296316.00	493.86		40.72	32.10	72.82
<b>Harvest Equipment (optional If custom harvested)</b>						
2 combines SP cab + alr, tracks & draper ext.	224000.00	373.33	10.00	37.33	24.27	61.60
Blowout SP, cab+alr, 160cwt	62500.00	104.17	8.00	13.02	6.77	19.79
<b>TOTAL HARVEST EQUIPMENT</b>	<b>286500.00</b>	<b>477.50</b>		<b>50.35</b>	<b>31.04</b>	<b>81.39</b>

COST OF PRODUCING RICE AT VARYING YIELDS  
(Cost of land ownership or rental is not included in costs)

	CWT SOLD PER ACRE							
	50	55	60	65	70	75	80	85
Cultural costs	229.21	229.21	229.21	229.21	229.21	229.21	229.21	229.21
Harvest cost	93.95	103.02	112.09	121.16	130.23	139.30	148.37	157.44
Cash overhead	32.32	33.22	34.13	35.04	35.94	36.85	37.76	38.67
<b>Total cash cost</b>	<b>355.48</b>	<b>365.45</b>	<b>375.43</b>	<b>385.41</b>	<b>395.38</b>	<b>405.36</b>	<b>415.34</b>	<b>425.32</b>
Investment cost	72.82	72.82	72.82	72.82	72.82	72.82	72.82	72.82
<b>Total cost</b>	<b>428.30</b>	<b>438.27</b>	<b>448.25</b>	<b>458.23</b>	<b>468.20</b>	<b>478.18</b>	<b>488.16</b>	<b>498.14</b>

Income Above Cash Costs at Varying Yields & Prices

\$ PER CWT*	CWT SOLD PER ACRE							
	50	55	60	65	70	75	80	85
6.50	-30.48	-7.95	14.57	37.09	59.62	82.14	104.66	127.19
7.00	-5.48	19.55	44.57	69.59	94.62	119.64	144.66	169.69
7.50	19.52	47.05	74.57	102.09	129.62	157.14	184.66	212.19
8.00	44.52	74.55	104.57	134.59	164.62	194.64	224.66	254.69
8.50	69.52	102.05	134.57	167.09	199.62	232.14	264.66	297.19
9.00	94.52	129.55	164.57	199.59	234.62	269.64	304.66	339.69
10.00	144.52	184.55	224.57	264.59	304.62	344.64	384.66	424.69
11.00	194.52	239.55	284.57	329.59	374.62	419.64	464.66	509.69
11.50	219.52	267.05	314.57	362.09	409.62	457.14	504.66	552.19

Income Above all Costs Excluding Land Costs at Varying Yields & Prices

\$ PER CWT*	CWT SOLD PER ACRE							
	50	55	60	65	70	75	80	85
6.50	-103.30	-80.77	-58.25	-35.73	-13.20	9.32	31.84	54.37
7.00	-78.30	-53.27	-28.25	-3.23	21.80	46.82	71.84	96.87
7.50	-53.30	-25.77	1.75	29.27	56.80	84.32	111.84	139.37
8.00	-28.30	1.73	31.75	61.77	91.80	121.82	151.84	181.87
8.50	-3.30	29.23	61.75	94.27	126.80	159.32	191.84	224.37
9.00	21.70	56.73	91.75	126.77	161.80	196.82	231.84	266.87
10.00	71.70	111.73	151.75	191.77	231.80	271.82	311.84	351.87
11.00	121.70	166.73	211.75	256.77	301.80	346.82	391.84	436.87
11.50	146.70	194.23	241.75	289.27	336.80	384.32	431.84	479.37

\* Value less storage and milling costs