TCE Rice Cost of Production Estimates for the 2005 Crop

The planning budgets shown in Table 1 and Table 2 were developed with input from producers, custom service and product suppliers, Texas Cooperative Extension (TCE) specialist and TCE agents. These budgets are based on projections for input and output prices for the 2005 crop year. These budgets are intended to represent the cost structure for a hypothetical 450-acre rice operation on land that requires 18-20 levees per 100 acres. The budget scenario represents a high-yield, high input conventional tillage production system with heavy pest pressure. First and second crop budgets have been separated, and all general and administrative costs, crop insurance, consulting, land and vehicle charges assigned to 1st crop.

Annual usage rates for tractors are projected at 600 hours, with capital recovery factors calculated over a 14-year useful life. Annual usage rate for the combine was estimated at 200 hours with capital recovery factor calculated over a 10-year useful life. Fixed costs shown in the budget represent the cost of owning machinery and equipment, and are the annualized capital recovery cost for owned durable items. No adjustment was made in aerial application costs for irregular shaped fields. Service fees shown in the budget represent a charge for crop management consultant services.

The budgeted fertility program for the main crop includes a base fertilizer application, one pre-flood application and two top-dress applications. The total main crop fertilizer application is comprised of 215 units of N, 33 units of P and 28 units of K. The budgeted main crop herbicide program includes an initial ground applied treatment of clomazone, an aerial application of a general tank-mix over the total planted acreage to control sedges, grasses and broad-leaf weeds along with a follow-up aerial application over one-half the planted acres to control escaped weeds. The budgeted pesticide program for the main crop includes one fungicide application to control foliar diseases, a pyrethroid application to control water weevils, and three applications to control rice stink bugs.

The budgeted irrigation program for the main crop includes 1.57 hours per acre of labor for three flushes, flood maintenance and draining. Total main crop water usage is budgeted at 2.75 acre-feet, with water charges based on projected LCRA Lakeside Irrigation System rates for 2005.

The budgeted fertility program for the second crop includes one top-dress application. The total second crop fertilizer application is comprised of 69 units of N. The budgeted pesticide program for the second crop includes one application to control rice stink bugs.

The budgeted irrigation program for the second crop includes 0.71 hours per acre of labor for one flush, flood maintenance and draining. Total second crop water usage is budgeted at 1.9 acre-feet; with water charges based on projected LCRA Lakeside Irrigation System rates for 2005.

No counter-cyclical or direct payments from USDA are included in these budgets. The breakeven price level needed to cover the budget's direct expenses for the main crop is

$9.94 per hundredweight. The breakeven price level needed to cover the budget's total specified expenses for the main crop is $10.97 per hundredweight. The breakeven price level needed to cover the budget's direct expenses for the second crop is $7.76 per hundredweight. The breakeven price level needed to cover the budget's total specified expenses for the second crop is $8.88 per hundredweight.

An enterprise budget is a statement of what is expected if particular production practices are used to produce a specified amount of product, and is based on the economic and technological relationships between inputs and outputs. The scenario shown in Table 1 and Table 2 represent a general guide and is not intended to predict the costs and returns from any particular farm's operation. For more details related to these budgets, contact your local county Extension office or go to the Extension budget web site maintained by the Texas A&M University Department of Agricultural Economics at agecoext.tamu/budgets/list.htm .

Table 6.D Estimated costs and returns per ACRE
RICE WEST OF HOUSTON - 1ST CROP
450 ACRE FARM, TCE District 11, 2005

ITEM	UNIT	PRICE	QUANTITY	AMOUNT	YOUR FARM
		dollars		dollars	
INCOME					
RICE-1ST CROP LOAN	CWT	6.90	66.0000	455.40	
RICE-1ST CROP PREM.	CWT	2.00	66.0000	132.00	
TOTAL INCOME				587.40	
DIRECT EXPENSES					
ADJUVANTS					
HERB - SURFACTANT	APPL	2.50	2.5000	6.25	
FUNG-SURFACTANT	APPL	0.75	1.0000	0.75	
CUSTOM FERTILIZE					
BASE FERTILIZER	ACRE	4.75	1.0000	4.75	
PRE-FLOOD APP	ACRE	6.00	1.0000	6.00	
TOP DRESS	ACRE	5.25	2.0000	10.50	
CUSTOM SPRAY					
GROUND APPLICATION	ACRE	4.50	1.0000	4.50	
AERIAL APPLICATION	ACRE	5.75	5.5000	31.63	
FERTILIZERS					
23-13-11-12	TON	265.00	0.1270	33.66	
33-0-0	TON	238.00	0.1000	23.80	
46-0-0	TON	285.00	0.0750	21.38	
21-0-0	TON	188.00	0.0500	9.40	
FUNGICIDES					
FUNGICIDE	APPL	26.34	1.0000	26.34	
HERBICIDES					
CLOMAZONE	GAL	85.00	0.1000	8.50	
HERB-POSTEM-1ST TRT.	APPL	41.81	1.0000	41.81	
HERB-POSTEM-2ND TRT.	OZ	1.48	7.0000	10.36	
INSECTICIDES					
WATERWEEVIL	GAL	355.00	0.0111	3.94	
STINKBUGS	PT	3.48	3.0000	10.44	
IRRIGATION SUPPLIES					
BUTT UP FIELD	ACRE	2.75	1.0000	2.75	
PLASTIC	ACRE	3.50	1.0000	3.50	
PIPE	ACRE	3.00	1.0000	3.00	
SEED					
RICE SEED	CWT	27.00	0.9000	24.30	
SURVEY LEVEES					
SURVEY LEVEES	ACRE	4.00	1.0000	4.00	
CROP INSURANCE-RICE					
CROP INSURANCE	ACRE	6.75	1.0000	6.75	
IRRIGATION					
BASE WATER CHARGE	ACRE	47.60	1.0000	47.60	
WATER:MARCH-JUNE	AC FT	11.31	2.7500	31.10	
CHECKOFF/COMMISSION					
CHECK OFF	CWT	0.08	66.0000	5.28	
COMMISSION	CWT	0.08	66.0000	5.28	
DRYING - RICE					
RICE DRYING	CWT	1.10	75.8600	83.45	
RICE HAULING					
RICE HAULING	CWT	0.28	75.8600	21.24	
STORAGE - RICE					
RICE STORAGE	CWT	0.32	66.0000	21.12	
SERVICE FEES					
MNGMNT/CONSULTING	ACRE	20.00	1.0000	20.00	
VEHICLES					
PICKUP CHARGE	ACRE	12.00	1.0000	12.00	
OPERATOR LABOR					
Tractors	hour	10.75	1.1103	11.97	
Self-Propelled	hour	10.75	0.2500	2.69	
RICE WATER LABOR					
Special Labor	hour	10.75	1.5700	16.87	
DIESEL FUEL					
Tractors	gal	1.35	10.2223	13.79	
Self-Propelled	gal	1.35	2.4450	3.30	
REPAIR & MAINTENANCE					
Implements	ACRE	9.76	1.0000	9.76	
Tractors	ACRE	7.96	1.0000	7.96	
Self-Propelled	ACRE	15.00	1.0000	15.00	
FUEL TANKS (4)	ACRE	6.66	0.0022	0.01	
INTEREST ON OP. CAP.	ACRE	29.34	1.0000	29.34	
TOTAL DIRECT EXPENSES				656.08	
RETURNS ABOVE DIRECT EXPENSES				-68.68	
FIXED EXPENSES					
Implements	ACRE	24.23	1.0000	24.23	
Tractors	ACRE	19.97	1.0000	19.97	
Self-Propelled	ACRE	23.38	1.0000	23.38	
FUEL TANKS (4)	each	223.06	0.0022	0.50	
TOTAL FIXED EXPENSES				68.08	
TOTAL SPECIFIED EXPENSES				724.16	
RETURNS ABOVE TOTAL SPECIFIED EXPENSES				-136.76	
RESIDUAL ITEMS					
RICE LAND RENT	acre	75.00	1.0000	75.00	
RESIDUAL RETURNS				-211.76	
G&A OVERHEAD	acre	10.50	1.0000	10.50	
RESIDUAL RETURNS				-222.26	
MANAGEMENT CHARGE	%	587.40	0.0500	29.37	
RESIDUAL RETURNS				-251.63	

Note: Cost of production estimates are based on 18-20 levees per 100 ac

Table 6.A Estimated resource use and costs for field operations, per ACRE
RICE WEST OF HOUSTON - 1ST CROP
450 ACRE FARM, TCE District 11, 2005

OPERATION/ OPERATING INPUT	SIZE/ UNIT	POWER UNIT SIZE	PERF RATE	TIMES OVER	MTH	POWER UNIT COST DIRECT	POWER UNIT COST FIXED	EQUIPMENT COST DIRECT	EQUIPMENT COST FIXED	ALLOC LABOR HOURS	ALLOC LABOR COST	OPERATING/DURABLE INPUT AMOUNT	OPERATING/DURABLE INPUT PRICE	OPERATING/DURABLE INPUT COST	TOTAL COST
						dollars					dollars			dollars	
Disk Down Levees	225 HP/28'	225	0.055	1.00	Aug	1.35	1.21	0.67	1.33	0.05	0.60				5.16
Disk	225HP/28'	225	0.100	1.00	Sep	2.43	2.17	1.21	2.39	0.10	1.08				9.28
Disk	225HP/28'	225	0.100	1.00	Nov	2.43	2.17	1.21	2.39	0.10	1.08				9.28
Shuffle Plane	225 HP	225	0.066	1.00	Dec	1.62	1.45	0.17	0.62	0.06	0.72				4.58
Shuffle Plane	225 HP	225	0.066	1.00	Dec	1.62	1.45	0.17	0.62	0.06	0.72				4.58
Field Cultivate	225 HP/32'	225	0.050	1.00	Jan	1.21	1.09	0.45	1.09	0.05	0.54				4.38
Field Cultivate	225 HP/32'	225	0.050	1.00	Feb	1.21	1.09	0.45	1.09	0.05	0.54				4.38
Field Cultivate	225 HP/32'	225	0.050	1.00	Mar	1.21	1.09	0.45	1.09	0.05	0.54				4.38
Harrow	225 HP/30'	225	0.040	1.00	Mar	0.98	0.87	0.63	1.67	0.04	0.43				4.58
Drill	150 HP/30'	150	0.050	1.00	Mar	0.88	0.91	2.89	6.55	0.05	0.54				11.77
RICE SEED	CWT											0.9000	27.00	24.30	24.30
Roll - Cement Roller	150 HP/36'	150	0.040	1.00	Mar	0.71	0.73	0.12	0.85	0.04	0.43				2.84
SURVEY LEVEES	ACRE			1.00	Mar							1.0000	4.00	4.00	4.00
MNGMNT/CONSULTING	ACRE											1.0000	20.00	20.00	20.00
Pull & Plant Levees	150 HP	150	0.022	1.00	Mar	0.39	0.40	0.44	1.03	0.02	0.24				2.50
Roll levees	100 HP	100	0.022	1.00	Mar	0.24	0.20	0.10	0.24	0.02	0.24				1.02
Plow Bar Pits	100 HP	100	0.033	1.00	Apr	0.36	0.31	0.09	0.82	0.03	0.36				1.94
Make Ditches	100 HP	100	0.030	1.00	Apr	0.33	0.28	0.15	0.47	0.03	0.33				1.56
BUTT UP FIELD	ACRE			1.00	Apr							1.0000	2.75	2.75	2.75
PLASTIC	ACRE			1.00	Apr							1.0000	3.50	3.50	3.50
PIPE	ACRE			1.00	Apr							1.0000	3.00	3.00	3.00
Combine - Rice	22		0.250	1.00	Jul	18.30	23.38			0.25	2.69				44.37
Grain Cart/150 HP	Tractor	150	0.166	1.00	Jul	2.95	3.02	0.28	0.99	0.16	1.79				9.03
Grain Cart/100 HP	Tractor	100	0.166	1.00	Jul	1.83	1.53	0.28	0.99	0.16	1.79				6.42
PICKUP CHARGE	ACRE			1.00	Oct							1.0000	12.00	12.00	12.00
CROP INSURANCE	ACRE			1.00	Nov							1.0000	6.75	6.75	6.75
FUEL TANKS (4)	each			1.00	Nov			0.01	0.50			0.0022			0.51
FERTILIZER-TABLE 7.C	ACRE				Apr							1.0000		109.49	109.49
PESTICIDE-TABLE 8.C	ACRE				Apr							1.0000		144.52	144.52
IRRIGATION-TABLE 9.C	ACRE				Apr					1.57	16.87	1.0000		78.71	95.58
POST HVST-TABLE 10.C	ACRE				Apr							1.0000		136.37	136.37
TOTALS						40.05	43.35	9.77	24.73	2.93	31.53			545.39	694.82
INTEREST ON OPERATING CAPITAL															29.34
UNALLOCATED LABOR															0.00
TOTAL SPECIFIED COST															724.16

Note: Cost of production estimates are based on 18-20 levees per 100 acres.