

Worksheet 1
Enterprise Budgets

Assume you have a chance to rent 1,000 acres of cropland for 6 years. You can raise only wheat. Your problem is to develop an enterprise budget to see if this venture will be profitable before you sign the lease and purchase the necessary machinery.

A. MACHINERY NEEDED (Use only for the 1,000 acres of wheat.)

<u>Machine</u>	<u>Cost</u>	<u>Salvage Value</u>	<u>Useful life</u>	<u>Annual Taxes</u>	<u>Annual Insurance</u>
1. Tractor	\$150,000	\$50,000	6 yrs.	\$65	\$150
2. Chisel	\$17,600	\$ 6,000	6 yrs.	\$20	\$ 45
3. Disk	\$18,800	\$ 7,500	6 yrs.	\$20	\$ 45
4. Grain drill	\$19,800	\$ 5,700	6 yrs.	\$20	\$ 55
5. Pickup	\$19,700	\$ 3,800	6 yrs.	\$95	\$620

B. MACHINERY CALCULATIONS - AVERAGE ANNUAL FIXED COSTS (Use 8% opportunity cost for capital.)

	Depreciation	Interest	Taxes	Insurance
Tractor				
Chisel				
Disk				
Grain drill				
Pickup				
TOTALS				
Cost per acre				

C. OTHER INFORMATION

- | | |
|----------------------------|------------------|
| 1. Expected yield | 35.0 bu per acre |
| 2. Selling price | \$ 3.25 per bu. |
| 3. Labor cost - preharvest | \$ 7.80 per acre |
| 4. Land rent | \$27.50 per acre |
| 5. Fertilizer cost | \$16.50 per acre |
| 6. Seed cost | \$15.00 per acre |
| 7. Chemical cost | \$ 8.75 per acre |

C. OTHER INFORMATION (CONT.)

- 8. Tractor variable cost (fuel/lube, etc.) \$ 8.20 per acre
- 9. Variable cost on other mach. & equip. \$ 3.65 per acre
- 10. Custom harvesting, hauling, etc. \$18.00 per acre
- 11. Compute interest on total preharvest costs @ 8% for 6 months.

Use the information above and your machinery calculations to complete the enterprise budget on the next page, then answer the following questions.

1. With yield of 35 bu. per acre, what is the break-even selling price?

Ans. _____

2. If the selling price was only \$2.85 per bu., what per acre yield would be necessary to break-even?

Ans. _____

3. If the expected yield was only 30 bu. per acre, what selling price would be required to just break-even on the operation?

Ans. _____

4. According to your budget, what is the Cost of Production per bu.?

Ans. _____

5. Would you sign this lease and purchase the machinery? WHY?

6. If you had already signed the lease and purchased the machinery, how low must the price of wheat fall before you should stop production?

Ans. _____

WHEAT BUDGET

I. INCOME

Total Income

II. VARIABLE COSTS

Preharvest

Harvest

Total Variable Costs

Income above VC

III. FIXED COSTS

Total Fixed Costs

Total Costs

Net Return