

*****DRAFT*****

Dehuller Worksheet

Value Added Grains for Regional and Local Food Systems
November 18, 2014

Step 1: What are your estimated farm-gate prices for hulled and dehulled grains?

- a. Price for dehulled grain: _____ ¢/lb
- b. Price for hulled grain: _____ ¢/lb
- c. Test weight of the dehulled grain: _____ lb / bu
- d. Test weight of the hulled grain: _____ lb / bu (wheat has a standard of 60 lb / bu).
- e. How many pounds of hulled grains do you have to process: _____ lb.
- f. Total value added by dehulling $(b \times d - a \times c) \times e \times (c / d) = \$$ _____

If f is less than zero, stop. It currently does not pay to dehull spelt under current market conditions. If f is positive, then proceed to step 2.

Step 2: What is the cost of using a toll-processor to dehull the grains?

- g. Transportation costs: \$ _____ / bu
- h. Toll for processing hulled grain: \$ _____/bu
- i. Cost per pound of dehulled grain: $(f + g) \div d = \$$ _____

If the transportation and processor toll is greater than the difference between the hulled and dehulled price, it does not pay to have the crop dehulled by a toll processor.

Step 3: Can you afford to invest in a dehuller that can meet your capacity?

- j. Amount available to invest (discount interest payments for loaned capital): \$ _____
- k. Dehuller purchase price: \$ _____
- l. Dehuller installation costs: \$ _____
- m. $j - (k + l) = \$$ _____

If n is a negative number, then stop. You can't afford it. If n is a positive number or zero, proceed.

Step 4: What are the variable costs of the dehuller before depreciation, interest and taxes?

- n. Labor cost per hour: \$ _____
- o. Energy cost per hour: \$ _____ (calculate from kilowatts to run motor times electric rate per kWh)
- p. Hours of operation per year: _____ hrs
- q. Annual operating and maintenance cost: \$ _____
- r. Total annual variable costs: $(n + o) \times p + q = \$$ _____
- s. Variable cost per pound: $r \div d = \$$ _____
- t. Return on investment per pound: $e - t = \$$ _____

If t is greater than zero, then there is a positive return before interest, depreciation and taxes.