

## Return\_to\_Labor.xls

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This spreadsheet calculates the cow's return to labor or the net revenue of a cow before covering the costs of labor. It requires the user to input farm-specific production, prices, and cost information (yellow cells). Using this information, the spreadsheet calculates 1) partial and total revenues (green cells); 2) partial and total costs (blue cells); and 3) milk equivalents sold, total variable cost without labor, and return to labor (orange cells).

The main sources of revenue of a cow are: 1) the milk sold; 2) the slaughter value of a cow in case of being culled; and 3) the calves produced. It is assumed that a cow produces 50% of heifer calves.

The main sources of variable costs are: 1) the feed costs that include forages, corn equivalents, and protein supplements; 2) the value of a heifer replacement in case of need of a cow being culled; and 3) other miscellaneous, non-feed variable costs that may include breeding fees, supplies, veterinarian fees, medicine, and others.

The estimates of milk equivalents sold indicates the amount of milk (cwt) that would have had yielded the same total revenue. It is calculated dividing the total revenues by the milk price. Likewise, the milk equivalents sold is the total costs expressed in cwt of milk. The difference of milk equivalents sold and milk equivalents spent is the milk equivalents net revenue, which multiplied by the milk price (\$/cwt) yields the return to labor.

The spreadsheet includes a sensitivity table of the return to labor with uncertain price of milk and cost of corn. Using the input values of milk price and corn cost as central points, the table calculates 10 and 20% above and below this values and then estimates the return to labor for each scenario. A figure accompanies the table, in which is depicted ranges of return to labor values according to milk prices and corn costs. The center point in the figure indicates the return to labor to original imputed milk price and corn cost.