

UNL-Meat Goat Budget Tool

An Excel spreadsheet for evaluating the value of potential meat goat production revenue, expenses, and profitability



Version: 2021-04-01



INTRODUCTION

The University of Nebraska - Lincoln meat goat budget tool was developed to help producers determine the value of goat production. This tool is NOT intended to represent any one operation but rather market prices and average costs estimates. Each individual operation should adjust key inputs and local market prices to reflect their own situation.

FOR MORE INFORMATION:

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AGRICULTURAL ECONOMICS
Farm and Ranch Management

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Budget Instructions

(1) The "Summary Budget" tab includes total income, total costs, and net revenue, plus breakeven calculations.
(2) DO NOT input numbers directly in the "Summary Budget" tab.
(3) Instead, input numbers directly into "Production Parameters", "Revenue", "Expenses - Variable", "Expenses - Fixed", "Non-Farm Adjustments", and "Taxes" tabs.
(4) Only input numbers and data into the yellow cells. Other numbers will automatically calculate and fill.

Introduction

The University of Nebraska-Lincoln Department of Agricultural Economics Extension and Outreach program has developed sheep and goat budget templates for use by producers in Nebraska. The budget templates contain an interface in which producers can customize production parameters to their specific operations. Enterprise budgets can serve as a useful guide for producers as they make management decisions.

How to Use

Both the sheep and goat production budgets are organized identically and are designed to operate in the same way. The budgets include:

- 1) Instructions – Provides instructions for how to navigate the spreadsheet.
- 2) Summary Budget – Includes total income, variable cost, fixed cost, and breakeven calculations.
- 3) Production Parameters – Contains customizable general flock, feed, and asset value information.
- 4) Revenue – Contains a breakdown of the revenue components of sheep/goat production.
- 5) Expenses -Variable – Includes a breakdown of production expenses that vary from year-to-year.
- 6) Expenses - Fixed – Includes a breakdown of fixed and overhead expenses.
- 7) Taxes – Contains common taxes paid by sheep/goat producers.
- 8) Non-Farm Adjustments – Contains sources of other on and off-farm income that producers may include in their sheep or goat budgets.

To use, please follow the following guidelines:

The "Summary Budget" tab summarizes totals from the various budget worksheets or tabs.

Worksheet users should input numbers directly into the yellow highlighted cells in the "Production Parameters", "Revenue", "Expenses – Variable", "Expenses – Fixed", "Non-Farm Adjustments", and "Taxes" tabs.

Methods

The market prices, average cost estimates, and production parameters outlined in the budget are obtained through input from producers.

First, sample production budgets from Nebraska sheep and goat producers were reviewed.

Second, a sample production budgets were built using data provided by the producers.

Third, the budget template and figures were presented at the annual Nebraska sheep and goat producer meetings.

Fourth, adjustments were made to the budgets according to producers' comments. Fifth, final production budgets were assembled.

Assumptions

Several assumptions were made in an effort to create a sheep budget representative of average operations. A few of the key assumptions are:

Goat Budget

- Herd Size: 70 does
- Kids Born: 105 head/year
- Kids Weaned: 93 head/year
- Kid Weaning Weight: 45 pounds
- Kids Sold at Weaning: 25 head/year
- Total Kids Finished: 66 head/year

Conclusion

The University of Nebraska-Lincoln sheep and goat budget templates were developed to help producers project the value of sheep production and net revenue. This tool is not intended to represent any one operation, but rather to reflect production rates, market prices, and average cost estimates. Each individual operation should adjust key inputs and local market prices to reflect their own situation.

Annual Meat Goat Budget Summary

Revenue	Total	Per Kid
	Total Annual Revenue	Per Kid Sold Revenue
Buck-Related Sales	\$ 213.33	\$ 3.05
Doe-Related Sales	\$ 800.00	\$ 11.43
Weaned Kid Sales	\$ 5,006.25	\$ 71.52
<i>Finished Kid Sales</i>		
Live Weight	\$ 16,315.20	\$ 233.07
Carcass Weight	\$ 3,630.00	\$ 51.86
Other Revenue	\$ -	\$ -
Gross Revenue	\$ 25,964.78	\$ 370.93
Expenses - Variable	Total Annual Expenses - Variable	Per Ewe Annual Expenses - Variable
Total Animal Purchases	\$ 2,000.00	\$ 28.57
Total Feed Expenses	\$ 9,438.71	\$ 134.84
Total Other Expenses	\$ 5,015.10	\$ 71.64
Total Expenses - Variable	\$ 16,453.81	\$ 235.05
Expenses - Fixed	Total Annual Expenses - Fixed	Per Ewe Annual Expenses - Fixed
Total Annualized Fixed Expenses	\$ 7,520.72	\$ 107.44
Total Overhead and Fixed Expenses	\$ 500.00	\$ 7.14
Total Expenses - Fixed & Overhead	\$ 8,020.72	\$ 114.58
Taxes	Total Annual Taxes	Per Ewe Taxes
Total Taxes	\$ 360.00	\$ 5.14
Total Expenses (Variable + Fixed + Taxes)	\$ 24,834.52	\$ 354.78
Net Revenue (Loss)	\$ 1,130	\$ 16.15
Non-Farm Adjustments	Total Annual Adjustments	Per Ewe Adjustments
Total Non-Farm Adjustments	\$ -	\$ -
Grand Total Revenue (Loss)	\$ 1,130	\$ 16.15

Breakeven Prices		
	Breakeven Price (\$/lb)	Sale Price Above Breakeven (\$/lb)
Weaned Breakeven Prices		
Weaned Kid Breakeven Price (\$/lb) Live Weight	\$ 5.61	\$ (1.16)
Finishing Breakeven Prices		
Finished Kid Breakeven Price (\$/lb) Live Weight	\$ 4.70	\$ (0.58)
Finished Kid Breakeven Price (\$/lb) Carcass Weight	\$ 9.41	\$ (3.91)

Breakeven Price Calculations Explanation

All expenses (excluding finishing expenses) divided by total weight of weaned kids.

All expenses times percent sold by live weight divided by total finished kid lbs. sold by a live weight basis.

All expenses times percent sold by carcass weight divided by total finished kid lbs. sold by a carcass weight basis.

General Herd Information

	Quantity	Units
Does		
Herd Size	70	does
Does Culled Per Year	5	does
Doe Deaths Per Year	5	does
Cull Doe Sale Weight	100	pounds
Replacement Does Purchased	10	
Raised Replacement Does	0	head/year
Kidding Rate	1.5	kids per doe
Bucks		
Bucks Needed	2	ram(s)
Buck Use (Years)	3	years
Buck Death Loss Rate	1%	
Cull Buck Sale Weight	200	pounds
Replacement Bucks Purchased	1	head/year
Raised Replacement Bucks	0	head/year
Kids		
Kids Born	105	head/year
Kid Death Loss Rate (Pre-Weaning)	11.3%	
Weaning		
Kids Weaned	93	head/year
Kids Sold at Weaning	25	head/year
Kids Weaning Weight	45	pounds
Feeding		
Days Fed	75	days
Kid Harvest Weight	80	pounds
Average Daily Gain	0.47	pounds per day
Kid Death Loss Rate (Post-Weaning)	3.2%	
Replacement Kids purchased	0	head/year
Total Kids Finished	66	head/year
Marketing		
Carcass Yield	50%	
Percent of finished kids sold Live	75%	
Percent of finished kids sold Carcass	25%	
Finishing Kid Ration		
Corn	75	lbs/kid
37% protein supplement	38	lbs/kid
Prairie Hay	101	lbs/kid
As Fed Intake	2.85	lbs/kid/day

General Feed Information

Feed	Price per Unit	Purchased Unit	Fed Unit	Fed Unit per Purchased Unit	As Fed Price
Prairie Hay	\$ 100.00	ton	pounds	2000	\$ 0.05
Alfalfa Hay	\$ 150.00	ton	pounds	2000	\$ 0.08
Salt & Mineral	\$ 0.63	pound	pounds	1	\$ 0.63
Pasture	\$ 43.00	AUM	AUM	1	\$ 43.00
Corn	\$ 5.50	bu	pounds	56	\$ 0.10
Creep Feed for baby kids	\$ 0.22	day	day	1	\$ 0.22
37% protein finishing supplement	\$ 10.00	bag	pounds	50	\$ 0.20

Fixed Asset Values

	Quantity	Units
Land		
Grazing Land	87	acres
Stocking Density	4	does per acre
Buildings / Barn		
Current Value	\$ 30,000.00	
Future/Salvage Value	\$ 10,000.00	
Depreciable Life	25	years
Fencing Posts		
Cost per post	\$ 6.00	post
Depreciable Life	10	years
Total Fence Posts	1298	posts
Total Post Cost	\$ 7,786.87	
Fencing Panels		
Panel Length	6	feet
Cost per panel	\$ 25.00	panel
Depreciable Life	10	years
Total Fence Panels	1297	panels
Total Panel Cost	\$ 32,420.29	
Machinery & Equipment Used for Enterprise		
Current Value	\$ 30,000.00	
Future/Salvage Value	\$ 15,000.00	
Depreciable Life	10	years

Gross Revenue**\$****25,964.78**

Revenue		Quantity	Units	Price	Per Unit	Total Revenue
Buck-Related Sales						
Cull Buck Sales		1.3	cwt	\$ 160	cwt	\$ 213.33
Doe-Related Sales						
Cull Doe Sales		5.0	cwt	\$ 160	cwt	\$ 800.00
Finishing-Related Sales						
Weaned Kid Sales		11.25	cwt	\$ 445	cwt	\$ 5,006.25
<i>Finished Kid Sales</i>						
Live Weight		39.6	cwt	\$ 412	cwt	\$ 16,315.20
Carcass Weight		6.6	cwt	\$ 550	cwt	\$ 3,630.00
Other Finishing Sales			units		unit	
Other Finishing Sales			units		unit	
Other Revenue						
Other Revenue			units		unit	\$ -
Other Revenue			units		unit	\$ -
Other Revenue			units		unit	\$ -
Gross Revenue						\$ 25,964.78

Total Expenses - Variable **\$ 16,453.81**

Animal Purchases		Quantity	Units	Price	Per Unit	Annual Variable Costs
	Replacement Does Purchased	10	head	\$ 160	head	\$ 1,600.00
	Replacement Buck Purchased	1	head	\$ 400	head	\$ 400.00
	Weaned Kids (Purchased)		head		head	
Other Animal Purchases						
	Other Animal Purchases		unit		unit	
	Other Animal Purchases		unit		unit	
	Other Animal Purchases		unit		unit	
Total Animal Purchases						\$ 2,000.00

Feed Expenses		Quantity per Animal per Year	Units	Price	Per Unit	Annual Variable Costs
Buck Feed						
	Prairie Hay	1200	pounds	\$ 0.05	pounds	\$ 120.00
	Alfalfa Hay	0	pounds	\$ 0.08	pounds	
	Salt & Mineral	0	pounds	\$ 0.63	pounds	
	Pasture	1	AUM	\$ 43.00	AUM	\$ 86.00
	Corn	392	pounds	\$ 0.10	pounds	\$ 77.00
	Other		units		pounds	
Doe Feed						
	Prairie Hay	240	pounds	\$ 0.05	pounds	\$ 840.00
	Alfalfa Hay	240	pounds	\$ 0.08	pounds	\$ 1,260.00
	Salt & Mineral	9.6	pounds	\$ 0.08	pounds	\$ 50.40
	Pasture	0.85	AUM	\$ 43.00	AUM	\$ 2,558.50
	Corn	370	pounds	\$ 0.10	pounds	\$ 2,543.75
	Other		units		pounds	
Pre-Weaning Kid Feed						
	Prairie Hay		pounds	\$ 0.05	pounds	
	Alfalfa Hay	72	pounds	\$ 0.08	pounds	\$ 502.93
	Creep Feed for baby kids	4.02	pounds	\$ 0.22	day	\$ 82.37
	Corn		pounds	\$ 0.10	pounds	
	Other		units		pounds	
Replacement Feed						
	Prairie Hay		pounds	\$ 0.05	pounds	
	Alfalfa Hay		pounds	\$ 0.08	pounds	
	Salt & Mineral		pounds	\$ 0.63	pounds	
	Corn		pounds	\$ 0.10	pounds	
	Other		units		pounds	
Finishing Kid Feed						
	Prairie Hay	102	pounds	\$ 0.05	pounds	\$ 336.60
	Alfalfa Hay		pounds	\$ 0.08	pounds	
	Salt & Mineral		pounds	\$ 0.63	pounds	
	Corn	75	pounds	\$ 0.10	pounds	\$ 486.16
	37% protein finishing supplement	37.5	pounds	\$ 0.20	pounds	\$ 495.00
	Other		pounds		pounds	
	Other		pounds		pounds	
Other Feed Expenses						
	Other Feed Expenses		unit		unit	
	Other Feed Expenses		unit		unit	
	Other Feed Expenses		unit		unit	
Total Feed Expenses						\$ 9,438.71

Other Variable Expenses		Number of Animals	Animal	Price	Per Animal	Annual Variable Costs
Marketing Expenses						
	Cull Buck Marketing		bucks	\$ 7.00	per buck	
	Cull Doe Marketing	5	does	\$ 7.00	per doe	\$ 35.00
	Finished Kid Marketing	66	kids	\$ 7.00	per kid	\$ 462.00
	Weaned Kid Marketing	25	kids	\$ 7.00	per kid	\$ 175.00
	Sale Barn					
	Transportation to Barn					
	Other Marketing Expenses		units		per unit	
Risk Management Expenses						
	Pasture, Rangeland, & Forage Insurance	66	kids	\$ 0.60	per kid	\$ 39.60
	Livestock Revenue Protection Insurance	66	kids		per kid	
	Additional Marketing & Hauling	91	kids	\$ 5.00	per kid	\$ 455.00
	Other Risk Management Expenses		units		per unit	
Predator Control						
	Dog Food	66	kids	\$ 7.00	per kid	\$ 462.00
	Additional Predator Control	66	kids	\$ 1.80	per kid	\$ 118.80
	Other Predator Control		units		unit	
Repair Expenses						
	Housing Improvement & Repairs	70	does	\$ 17.14	per doe	\$ 1,200.00
	Machinery, Equipment, Vehicle Repairs	70	does	\$ 10.00	per doe	\$ 700.00
	Fencing Repairs	70	does	\$ 7.14	per doe	\$ 500.00
	Other Repairs	70	does		per doe	
Other Variable Expenses						
	Labor - Hired	10	days	\$ 25.00	per day	\$ 250.00
	Hauling	120	miles	\$ 1.60	per mile	\$ 192.00
	Veterinary and Medical	66	kids	\$ 5.00	per kid	\$ 330.00
	Supplies	66	kids	\$ 1.45	per kid	\$ 95.70
	Other Variable Expenses		units		per unit	
	Other Variable Expenses		units		per unit	
	Other Variable Expenses		units		per unit	
Total Other Expenses						\$ 5,015.10

Total Expenses - Fixed & Overhead	\$ 8,020.72
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Annualized Fixed Expenses			
	Value	Per Unit	Annualized Fixed Expenses
Annualized Fencing Expenses (Depreciation)			
Buildings /Barn	\$ 11.43	per doe	\$ 800.00
Fence Posts	\$ 11.12	per doe	\$ 778.69
Fence Panels	\$ 46.31	per doe	\$ 3,242.03
Machinery & Equipment Used for Enterprise	\$ 21.43	per doe	\$ 1,500.00
Other Annualized Expenses			
Other Annualized Fixed Expenses	\$ -	per doe	
Other Annualized Fixed Expenses	\$ -	per doe	
Other Annualized Fixed Expenses	\$ -	per doe	
Opportunity Interest Expense	\$ 17.14	per doe	\$ 1,200.00
Total Annualized Fixed Expenses			\$ 7,520.72

Other Expenses: Fixed and Overhead			
	Price	Per Unit	Overhead and Other Fixed Expenses
Overhead Expenses			
Overhead Expense	\$ 7.14	per doe	\$ 500.00
Other Fixed Expenses			
Land Rent	\$ -	per doe	
Other Fixed Expenses	\$ -	per doe	
Other Fixed Expenses	\$ -	per doe	
Total Overhead and Fixed Expenses			\$ 500.00

Total Taxes	\$ 360.00
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Taxes				
	Unit	Price	Per Unit	Annual Tax Expenses
Taxes				
Real Estate Tax				\$ 180.00
Personal Propety Taxes				\$ 180.00
Total Taxes				\$ 360.00

Total Non-Farm Adjustments	\$ -
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Non-Farm Adjustments		Quantity	Units	Price	Per Unit	Total Adjustment Revenue
Off-Farm Wages						
	Custom Feeding	<input type="text"/>	units	<input type="text"/>	per unit	
	Custom Bailing	<input type="text"/>	units	<input type="text"/>	per unit	
	Custom Grazing	<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
	Off-Farm Income					
	Off-Farm Income					
	Off-Farm Income					
Other Non-Farm Adjustments						
		<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
		<input type="text"/>	units	<input type="text"/>	per unit	
Total Non-Farm Adjustments						\$ -