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Small-Scale Livestock Enterprises: Goat Enterprise Budget

Introduction

Are you considering starting a small-scale goat enterprise? Perhaps you are also considering other small-scale livestock operations. This publication will enable you to evaluate alternatives and assess costs and returns for a small-scale goat enterprise. The Purdue Comparative Decision Support (PCDS) matrix and PCDS2 profit/loss analysis tools are designed to help you take cost and price information to identify profitability and resource needs for small-scale livestock enterprises. If you are still considering different small-scale livestock operations you may want to refer to EC-800-W (*Small-Scale Livestock Enterprises: Tools for Choosing the Right Enterprise for You*) for additional discussion about how to use the PCDS and PCDS2 tools and compare alternative investments. This publication will help you assess the viability of a small-scale goat operation given your needs and resources.

Goat Budget

One important goal, if you are going to start a goat operation, is whether or not it will be profitable. Example budgets for operations and investment are presented in Tables 1 and 2. The examples reflects a doe herd enterprise that seeks to market meat goat kids at a weight of 80 pounds. This budget was designed with a 100-doe unit-flock scale. (A doe unit is 1 doe, .2 replacement does, 1.53 kids, and 0.03 bucks.) Price data were taken from national estimates when available and are provided to serve as a baseline for your planning process. We encourage you to replace price estimates with your farm level data and local market prices. You can find the budgets, along with the PCDS and PCDS2 tools at https://ag.purdue.edu/agecon/Pages/Livestock-Enterprise.aspx. Click on the "assumptions" sheet of the file, and replace the price values with your own. Working with different input values, you can use the budget templates to optimize the effectiveness of your expected budget.

The operations budget presented in Table 1 (page 2) contains revenue, variable costs, and fixed costs. Input your expected revenue per pound to find your incoming cash flow. Variable costs reflect assumed production decisions (i.e., feed ration and veterinary expenses). Once again, we encourage you to use the spreadsheet tool and adjust your farm estimates whenever possible. A labor expense of \$14 per hour is assumed to take into account the value of your time. Fixed costs reflect the investment portion of the budget on a per-doe unit basis and are presented in Table 2 (page 3). Depreciation, interest, taxes, and insurance on the facilities and machinery investment are estimated at 14% and herd interest and insurance are estimated at 10%. The assumed goat investment captured in these fixed costs in the operating budget is included on page 2 of this publication.



EC-803-W Production Economics

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Audience: Individuals operating or seeking to begin a small-scale goat enterprise.

Content: Provides estimates for operating and investment budgets for a small-scale goat enterprise. This publication also provides a framework for individuals to estimate their own input needs and use their expected prices.

Outcome: Readers will have a baseline of expected costs and input needs for the assumed goat enterprise from the interactive web-based decision support tools (PCDS and PCDS2) and corresponding budgets found at https://ag.purdue.edu/agecon/Pages/ Livestock-Enterprise.aspx. They will be able to modify the estimates to fit their own goat enterprise.



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Table 1. Operating Budget for Small-Scale Goat Enterprise

	Go	oat–One	e Doe Ur	nit			
	Quantity		Price		Cash Flow		Your Farm
Revenue							
Kids (1.53 head x \$/lb)	80	lbs		lb	\$		\$
Cull does (.20 head x \$/lb)	150	lbs	\$	lb	\$		\$
Total Revenue					\$		\$
Variable Costs							
Feed Costs							
Pasture	0.3	acres	\$ 35.00	acre	\$	10.50	\$
Pasture fert, misc costs	0.3	acres	\$ 20.00	acre	\$	6.00	\$
Corn	3.27	bu	\$ 5.50	bu	\$	17.99	\$
Soyben Meal 48%	0.17	cwt	\$ 19.76	cwt	\$	3.36	\$
Salt/Mineral	0.2	cwt	\$ 22.00	cwt	\$	4.40	\$
Нау	0.09	tons	\$ 150.00	ton	\$	13.50	\$
Grinding/Mixing	2.01	cwt	\$ 1.40	cwt	\$	2.81	\$
Limestone	0.01	cwt	\$ 2.50	cwt	\$	0.03	\$
Total Feed Costs					\$	58.58	\$
Veterinary and health					\$	8.08	\$
Building use					\$	3.00	\$
Marketing					\$	6.35	\$
Miscellaneous					\$	5.48	\$
Interest on variable costs	6	months	9%		\$	3.67	\$
Labor	2	hours	\$14.00	hour	\$	28.00	\$
Total Variable Costs					\$	113.16	\$
Fixed Costs							
Machinery, equipment, fences					\$	23.10	\$
Interest, insurance on herd @10%					\$	15.40	\$
Buck depreciation/replacement					\$	3.03	\$
Total Fixed Costs					\$	41.53	\$
Total of all costs					\$	154.69	\$
Profit					\$		\$
Breakeven selling price per lb.					\$	1.02	\$

Breakeven selling price per pound assumes a cull doe selling price of \$100/lb.

Goat–Investment	<u>, , , , , ,</u>	
Breeding herd investment per doe unit		
Doe	\$	125.00
Replacement doe (\$100 x 0.20 head/doe unit)	\$	20.00
Buck (\$300.00 divided by 33 does)	\$	9.00
Per doe unit	\$	154.00
Buck replacement cost per doe unit		
Buck cost	\$	300.00
Cull value	\$	100.00
Number of does per buck		33
Number of years		2
Per doe unit	\$	3.03
Facilities and machinery investment		
(100 doe herd assumed, replacement cost)		
Utility tractor (\$18,000 x 25% goat use)	\$	4,500.00
Fences (\$100.00 per acre x 30 acres)	\$	3,000.00
Feed Storage	\$	2,000.00
Barns, pens, feeders, etc.	\$	7,000.00
Total	\$	16,500.00
Per doe unit	\$	165.00
Depreciation, interest, taxes, insurance @ 14% annually	\$	23.10

Table 2. Investment Budget for Small-Scale Goat Enterprise

Conclusions: Making your Decision

All investment decisions are individual. Investment in a smallscale goat operation is no exception and only you can decide whether it is right for you. As you use this publication and the corresponding PCDS and PCDS2 tools keep the following questions in mind:

- What are your goals and objectives for entering into a small-scale goat operation?
- What is the worst financial scenario you could encounter with this investment? (Note: you can determine this by inserting the "worst case" values in the "assumptions" sheet and view the outcome.) Do you have the resources to withstand this financial scenario?
- What is the best financial scenario you could encounter with this investment? (Again, use the computer tool to enter the "best case" values into the "assumptions" sheet and view the outcome.) Consider the return you would earn under the "best-case" scenario. Is this investment attractive enough for you to undertake?

If a small-scale goat enterprise is a good match with your goals and objectives and you are comfortable with your responses to the questions associated with return then it could be rational to proceed. Otherwise, you should consider waiting for the next investment opportunity.

Sources

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The PCDS Tools

Find the interactive PCDS tools on the Purdue Agricultural Economics Extension website at

https://ag.purdue.edu/Agecon/Pages/Livestock-Enterprise.aspx.

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To find out more about how to use the PCDS and PCDS2 tools to compare alternative investments, see EC-800-W (Small-Scale Livestock Enterprises: Tools for Choosing the Right Enterprise for You).



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