Meat Goat Budgeting and Marketing

Meat goats are goats grown for meat production, and they are the predominant type of goats raised in the United States and Mississippi today. Meat goat producers are faced with many different management and marketing decisions. Understanding basic economics and markets for meat goats can help producers improve the profitability of their operations.

This publication discusses enterprise budgeting and marketing for meat goat production. A sample production budget that can be adapted to an individual operation is included (see **Table 1**). This budget is designed for both small and commercial producers interested in raising meat-type goats.

A variety of marketing channels are available to meat goat producers. Meat goat marketing outlets include private treaty sale (directly off the farm), auction market sales, and cooperative marketing efforts with other producers. Meat goats can be sold as weanlings, stocker, or fed goats. Understanding market conditions is important when making production decisions.

These are some considerations to keep in mind:

- Develop a budget that coincides with your desired production level.
- Decide what market channels to target before purchasing any goats.
- Compare production costs (see **Table 1**) with a realistic market to determine profitability.
- Start small and develop a realistic market before establishing a large-scale enterprise.

Budgets

Budgeting is a tool used to determine expenditures and revenues for a certian period of time. It allows producers to plan ahead for expected cash flows. Producers can also use a year-end budget to evaluate how well the operation performed relative to the pre-production budget and adjust future management and marketing practices accordingly. For example, reviewing a year-end budget can reveal that nutrition-related costs made up a larger proportion of expenditures than expected. An enterprise budget is a projection of income and expenses for a certain time period for the entire meat goat enterprise. A sample meat goat enterprise budget appears in **Table 1**.

Partial Budgeting

In addition to the enterprise budget, a partial budget can be used to evaluate a single management or marketing decision on a meat goat operation. For instance, a partial budget could be used to decide whether or not to creep feed kids. A partial budget considers the additional costs and returns as well as the reduced costs and returns from adopting a certain management or marketing practice. A sample partial budget appears in **Table 2**.

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Table 1. Estimated annual income and expenses, typical meat goat operation in Mississippi, 2013.

	Head	Unit	Quantity	Price or Cost per Unit	Total Value/ Cost	Value/ Cost per Head	Your Farm
INCOME							
Market Kids	37	pounds	2,775.0	$1.50	$4,162.50	$112.50	_____
Cull Does	3	pounds	390.0	$0.60	$234.00	$6.32	_____
GROSS INCOME					$4,396.50	$175.86	_____
DIRECT EXPENSES							
Pasture Cost		acres	5.0	$162.66	$813.32	$32.53	_____
Supplemental Feed (does)		pounds	1,200.0	$0.30	$360.00	$14.40	_____
Creep Feed (kids)		pounds	1,110.0	$0.30	$333.00	$13.32	_____
Hay		round bales	10.9	$50.00	$546.88	$21.88	_____
Salt & Mineral		pounds	50.0	$0.56	$28.00	$1.12	_____
Vet & Medicine		head	26.0	$6.00	$156.00	$6.24	_____
Deworming							
breeding stock		doses	52.0	$1.00	$52.00	$2.08	_____
kids		doses	114.0	$0.25	$28.50	$1.14	_____
Vaccinations							
breeding stock		doses	52.0	$0.55	$28.60	$1.14	_____
kids		doses	76.0	$0.60	$45.60	$1.82	_____
Hired Labor		hours	12.5	$8.00	$100.00	$4.00	_____
Miscellaneous Supplies		head	25.0	$1.50	$37.50	$1.50	_____
Buck Maintenance Expense		head	1.0	$175.00	$175.00	$7.00	_____
Repair & Maintenance (Buildings/Equipment)		dollars			$34.39	$1.38	_____
Vehicle Fuel & Oil		dollars			$215.71	$8.63	_____
Buck Replacement		head	0.3	$250.00	$116.67	$4.67	_____
Doe Replacement		head	3.0	$120.00	$360.00	$14.40	_____
Marketing Expenses		head	40	$4.00	$160.00	$6.40	_____
Yearly Financing Expenses		percent	6.5%	$0.00	$0.00	$0.00	_____
TOTAL DIRECT EXPENSES					$3,591.17	$143.65	_____
RETURN OVER DIRECT EXPENSES					$805.33	$32.21	_____
FIXED EXPENSES							
General Overhead		head	25	$1.25	$31.25	$1.25	_____
Interest on Buildings and Equipment		percent	0.065	$3,595.00	$38.41	$1.54	_____
Depreciation		dollars			$193.13	$7.73	_____
Taxes & Insurance		dollars			$62.91	$2.52	_____
TOTAL FIXED EXPENSES					$325.70	$13.03	_____
TOTAL SPECIFIED EXPENSES					$3,916.87	$156.67	_____
RETURN OVER TOTAL SPECIFIED EXPENSES					$479.63	$19.19	_____

Notes:

1. This budget is for planning purposes. Use it only as a guide. Use the Your Farm column to adjust these figures to fit your operation.
2. Expense items are based on the production parameters specified as:

Does per acre	6.0	Average pounds feed/day – kids	0.50
Number of does	25.00	Days fed – kids	60.00
Number of bucks	1.00	Pounds hay/day – does and bucks	3.50
Pounds feed/day – does	0.80	Days fed hay – does	150.00
Pounds feed/day – bucks	2.00	Kids sold per doe	1.50
Days fed – does	60.00	Investment per doe	$120.00
Days fed – bucks	30.00	Buck investment	$250.00

Table 2. Partial budget example: Meat goat herd expansion, from 20 head to 35 head carried over six years.

Increased Costs		Increased Revenues	
15 additional does	$1,800	22 additional kids [1]	$12,170
Direct expenses [1]	$10,596	Cull value of does [1]	$1,104
Additional buck purchases [1] [2]	$668	Cull value of bucks [1] [2]	$220
Fixed expenses	$0		
Total increased costs	$13,064	Total increased revenues	$13,494
Decreased Revenues		**Decreased Costs**	
None		None	

[1] Six-year cost/revenue stream is discounted to present value.

[2] One additional buck purchased and sold every other year.

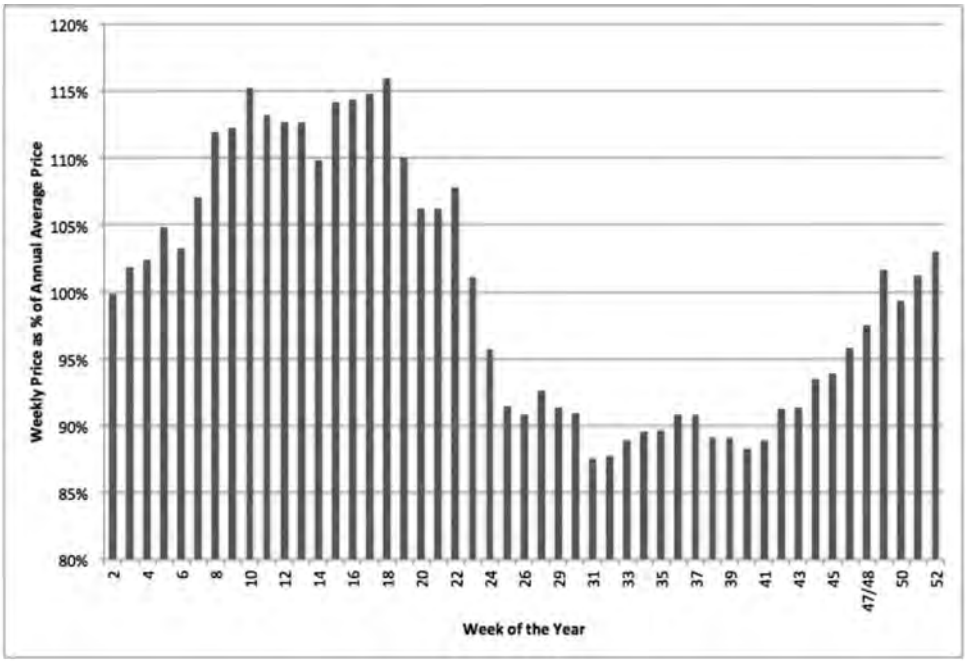

Figure 1. Ten-year average price index of 60- to 80-pound No. 1 slaughter kids in San Angelo, Texas (2003-2012).

Marketing

Commodities that are not able to be stored and have lengthy production cycles often have prices that follow a pattern throughout the year. This is referred to as a seasonal trend. **Figure 1** shows the historical price index for 60- to 80-pound No. 1 slaughter kids in San Angelo, Texas. (No historical prices are currently available for Mississippi, and San Angelo is the closest market with the most complete set of prices.) An index relates prices at a point in time to the annual average price, thus providing a point of reference for prices throughout the year. The first thing to notice from **Figure 1** is that prices are higher in the early weeks of the year (weeks 2 through 22, or roughly January through April). Prices then decline during the summer and early fall before increasing again from week 42 through the end of the year (around November and December). Prices are typically 10–15 percent above the annual average price in the spring and are typically 10 percent below the annual average in the summer.

Figure 2 plots the difference in price between 60- to 80-pound kids and 40- to 60-pound kids. Not surprisingly, the price of heavier meat goat kids is typically less than lighter kids. This is common across livestock species. However, this is not always the case in the early summer when heavier kids are sold at a premium to lighter animals. **Figure 2** indicates that the gap between the two weights is widest at the turn of the year (late December and early January) and narrowest in late spring.

Table 3 provides these index values for both 60- to 80-pound meat goat kids and 40- to 60-pound kids. This table is useful when trying to determine prices in the future since prices typically follow the same pattern throughout the year. To calculate an expected future cash meat goat price, use the price and index for the current date and the index for the date to be predicted.

This is the formula:

Predicted price = (Current cash price / Current index value) x Index value for time of prediction

For example, with respect to a meat goat kid between 60 and 80 pounds, assume the current price at week 10 is $1.50 per pound and you want to predict a price for week 25. To do this, use the index for week 10, 115.2 percent, and week 25, 91.5 percent. The predicted price using the formula above would be $1.19 per pound:

($1.50 per pound / 115.2%) x 91.5% = $1.19 per pound

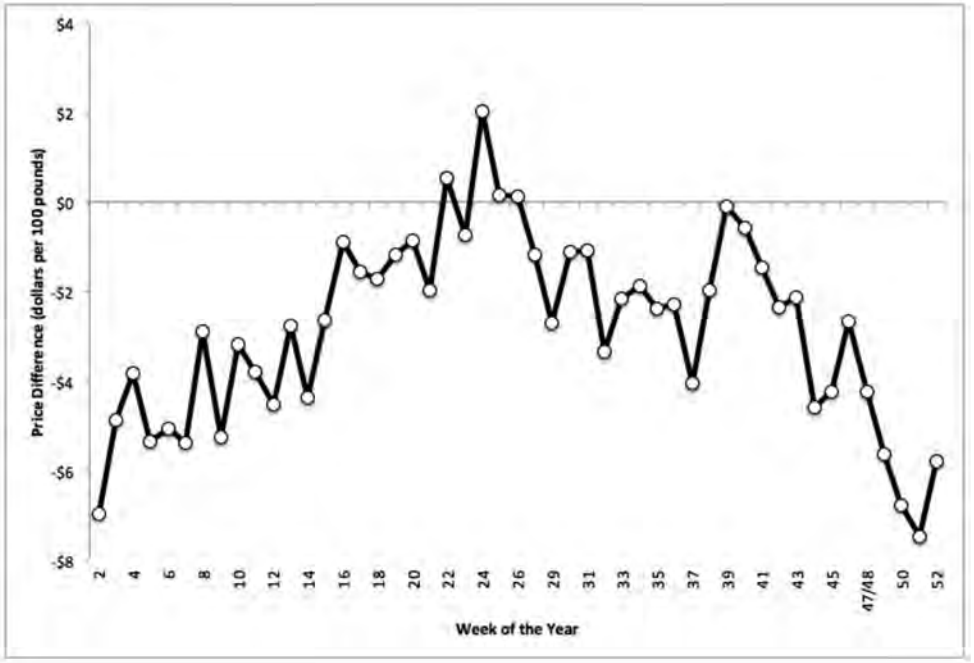

Figure 2. Ten-year average price difference of No. 1 slaughter kids, 60- to 80-pound kids minus 40- to 60-pound kids (2003-2012).

Table 3. Weekly price as a percent of annual average price (price index).

Week of the Year	40- to 60-lb Price Index	60- to 80-lb Price Index
2	102.6%	99.9%
3	103.1%	101.9%
4	103.2%	102.4%
5	106.1%	104.9%
6	104.5%	103.2%
7	109.1%	107.1%
8	111.8%	111.9%
9	113.5%	112.3%
10	115.5%	115.2%
11	114.0%	113.2%
12	113.9%	112.7%
13	112.5%	112.7%
14	110.7%	109.9%
15	113.7%	114.2%
16	112.8%	114.4%
17	113.8%	114.8%
18	115.1%	116.0%
19	108.7%	110.0%
20	104.9%	106.2%
21	105.2%	106.2%
22	105.6%	107.8%
23	99.9%	101.1%
24	92.9%	95.8%
25	89.7%	91.5%
26	89.0%	90.8%
27/28	91.6%	92.7%
29	91.4%	91.4%
30	90.1%	90.9%
31	86.6%	87.5%
32	88.1%	87.8%
33	88.9%	88.9%
34	89.3%	89.6%
35	89.7%	89.6%
36	90.9%	90.8%
37	91.4%	90.8%
38	88.8%	89.1%
39	87.5%	89.1%
40	87.3%	88.3%
41	88.1%	88.9%
42	91.0%	91.2%
43	91.1%	91.4%
44	94.5%	93.5%
45	94.5%	93.9%
46	95.8%	95.8%
47/48	98.1%	97.5%
49	103.2%	101.6%
50	101.5%	99.3%
51	104.0%	101.3%
52	104.7%	103.0%

Data Source: Index values are based on historical San Angelo, Texas, cash market prices published by the United States Department of Agriculture, Agricultural Marketing Service (Report: SA_LS320).

Using the Mississippi Meat Goat Production Budget

These instructions are intended to accompany the Excel-based **Mississippi Meat Goat Production Budget** file that can be downloaded at ***http://msucares.com/livestock/smallruminant/ms_meat_goat_budget_2013.xlsm***. It provides detailed descriptions and definitions necessary to tailor the budget to an individual meat goat operation.

The meat goat budget uses macros to operate. The macros used in this file will not harm your computer; however, the potential exists for other macro-based Excel files from less reliable sources to inflict harm. Before opening the meat goat budget, use the following steps to check your macro settings so that you will be able to view and edit the meat goat budget while ensuring your computer remains safe.

Macro Security

Step 1: Open Excel and click on the Microsoft Office Button (labeled 1 in **Figure 3**).

Step 2: Click the Excel Options button (labeled 2 in **Figure 3**).

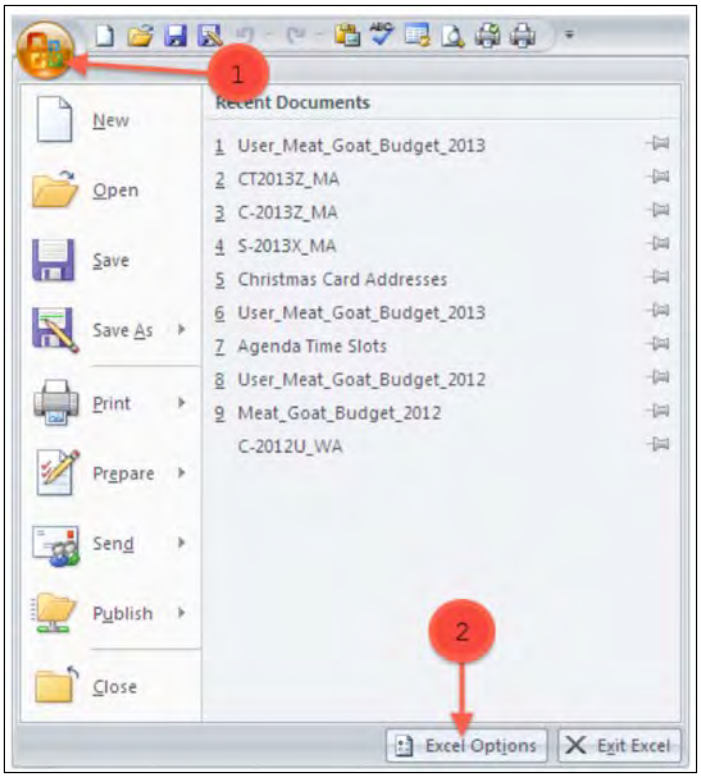

Figure 3. Accessing Microsoft Excel options.

Step 3: A new box will appear; click Trust Center in the left side of the box (labeled 1 in **Figure 4**).

Step 4: Click Trust Center Settings (labeled 2 in **Figure 4**)

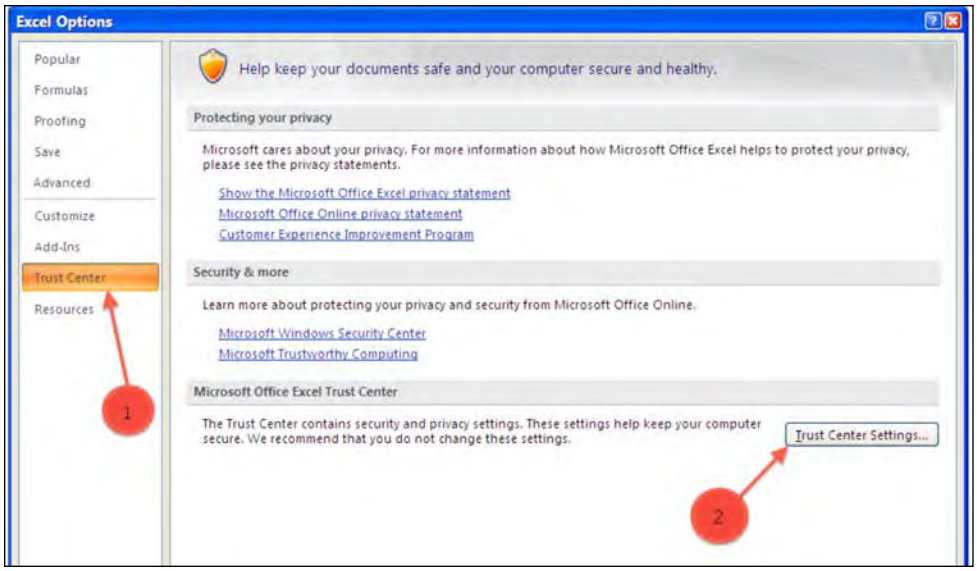

Figure 4. Accessing Microsoft Trust Center.

Step 5: Click Macro Settings in the left side of the box (labeled 1 in **Figure 5**).

Step 6: Click the round button next to "Disable all macros with notification" (labeled 2 in **Figure 5**).
Note: This will provide a notification when an Excel file contains a macro without opening the macro. To allow the macro to run, see the following steps.

Step 7: Click OK on any remaining open dialog boxes (for the current box, labeled 3 in **Figure 5**).

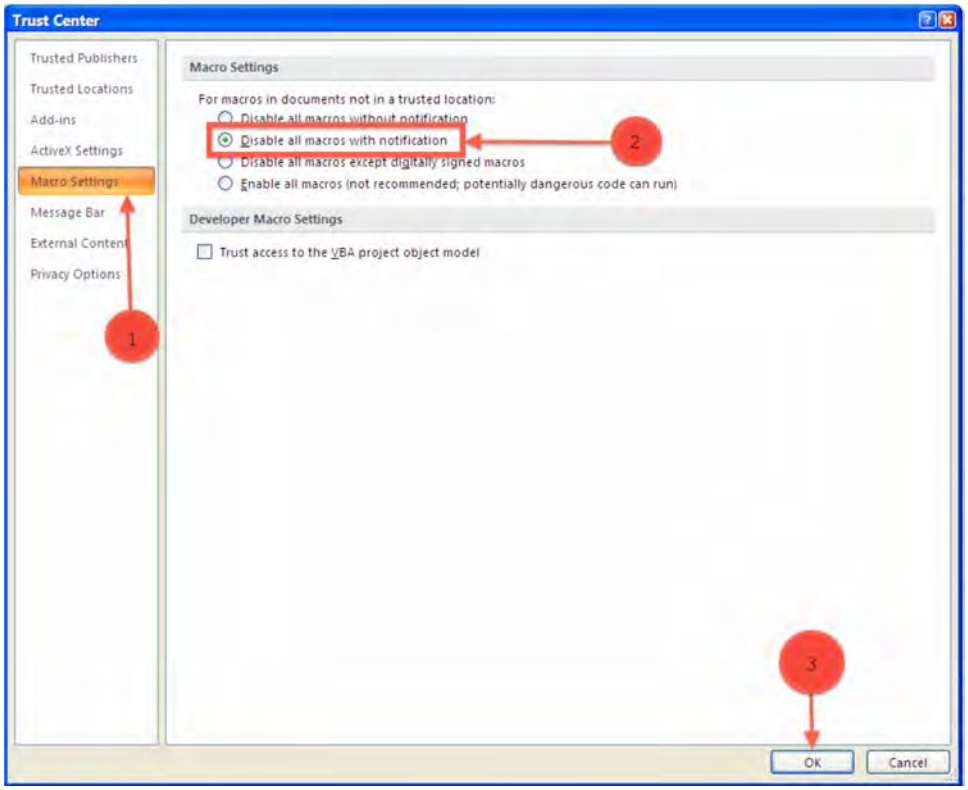

Figure 5. Setting macro security.

Enable Macros

Once the proper settings have been adjusted, macros can be enabled.

Step 1: Open the **Mississippi Meat Goat Production Budget** file. Once opened, a notification will appear between the "ribbon" (the row of various commands/options that appears near the top of the Excel screen) and the Excel worksheet. This notification appears as a result of the settings from the previous section.

Step 2: Click the Options button (labeled 1 in **Figure 6**).

Figure 6. Enabling Mississippi Meat Goat Budget macros (part 1).

Step 3: For the **Mississippi Meat Goat Production Budget** Excel file, click the round button next to "Enable this content" (labeled 1 in **Figure 7**). *Note: For future reference, if other Excel files that are opened contain macros, this same process will appear. ONLY ENABLE MACROS FROM TRUSTED SOURCES. When in doubt, click the round button next to "Help protect me from unknown content."*

Once these steps are completed, the **Mississippi Meat Goat Production Budget** is ready to use!

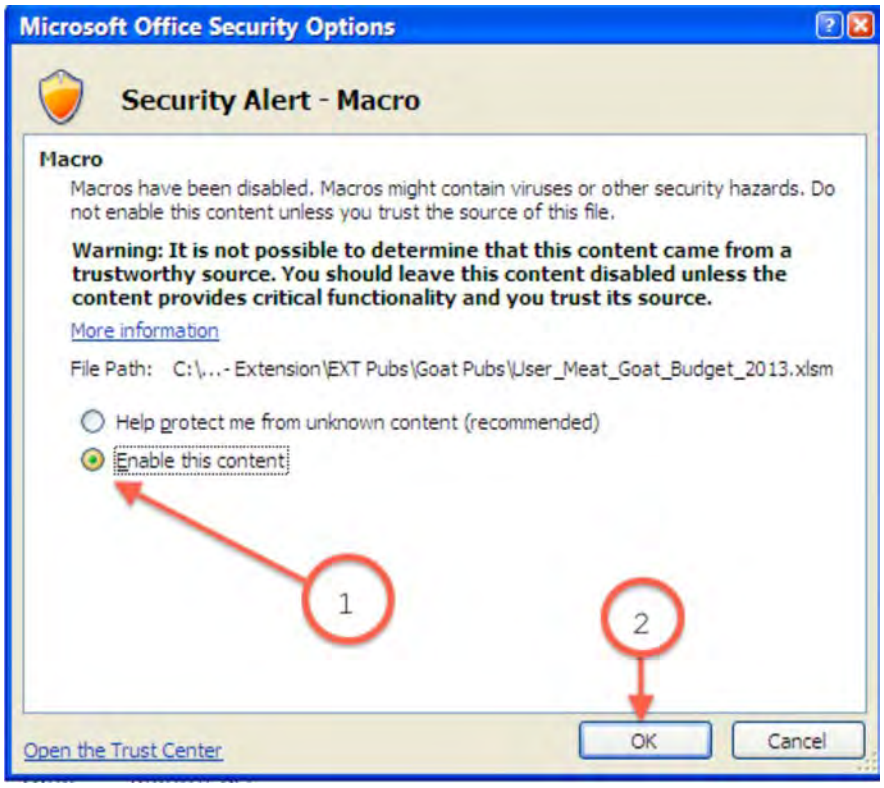

Figure 7. Enabling Mississippi Meat Goat Budget macros (part 2).

Mississippi Meat Goat Production Budget User Input Instructions

The budget allows individuals to enter information specific to their operation, thus allowing the budget to more accurately define individual production costs and revenues. Begin by reviewing the information in the green section in the Excel file. Refer to **Table 4** below for a description of what value to enter in each cell. Insert your own specific values in the dark green cells.

Table 4. Mississippi Meat Goat Budget user-defined budget assumptions.

Assumption Descriptor	Definition
Number of Does	Total number of does currently in your operation
Does per Acre	Carrying capacity of your operation (total number of does divided by total number of pasture acres)
Culling Rate (does)	Total number of does culled each year as a percent of total number of does (number of does culled each year divided by total number of does in your operation)
Death Loss (does and kids)	Total number of does and kids that die from birth through marketing
Labor (hours/doe)	Number of hours for paid labor per doe owned per year
Average Doe Weight (lb)	The average body weight of does owned (pounds)
Number of Bucks	Total number of bucks in the operation (recommended: 1 buck per 25 does)
Avg. Amount of Feed Fed/Head/Day (bucks)	The average pounds of feed fed to bucks per day (breeding and confinement)
Avg. Amount of Hay Fed/Head/Day (bucks)	The average pounds of hay fed to bucks per day (breeding and confinement)
Number of Days Feed & Hay Are Fed (bucks)	Total number of days bucks are fed feed and hay during the year (breeding and confinement)
Does Kept for Replacement	Number of does kept from the kid crop for replacement in the operation
Amount Financed	Total amount of money borrowed to fund the operation
Annual Interest Rate	Annualized interest rate of money borrowed
Avg. Amount of Hay Fed/Head/Day (does)	The average pounds of hay fed to does each day while hay is provided
Number of Days Hay Is Fed (does)	The number of days hay is fed to does during the year
Avg. Amount of Feed Fed/Head/Day (does)	The average pounds of feed fed to does each day while feed is provided
Number of Days Feed Is Fed (does)	The number of days feed is fed to does during the year
Kids Weaned/Doe	Average number of kids weaned per doe each year (total number of kids born divided by the total number of does)
Days of Creep Feeding (kids)	Total number of days kids are provided creep feed during the year
Lb Creep Feed Fed/Head/Day (kids)	Average pounds of feed provided to kids each day by way of creep feeding
Avg. Kid Sale Weight (lb)	Average weight of kids sold at market
Doe Value ($/head)	Average value of each doe in the operation
Buck Value ($/head)	Average value of each buck in the operation
Market Kid Price ($/lb)	Average price per pound for all market kids sold
Cull Doe Price ($/lb)	Average price per pound for all does sold as culls

The **Mississippi Meat Goat Production Budget** also allows users to provide up-to-date prices as an option. Review the prices in the orange cells in the Direct Expenses section. To change specific prices, enter your own values in these cells. **Table 5** provides descriptions of each cost.

Table 5. Mississippi Meat Goat Production Budget description of costs.

Expense Descriptor	Definition
Supplemental Feed (does)	Cost per pound for the feed that is provided to does
Creep Feed (kids)	Cost per pound for the feed provided to kids (as a creep feed)
Hay	Cost per round bale for hay [Note: If feeding square bales, one round bale equals approximately 17 square bales. To calculate hay cost, multiply individual square bale cost times 17.]
Salt & Mineral	Cost per pound of salt and/or mineral provided during the year
Vet & Medicine	Cost per head of all vet and medical supplies provided to does and bucks during the year
Deworming (breeding stock)	Cost per single dose to deworm breeding stock
Deworming (kids)	Cost per single dose to deworm kids
Vaccinations (breeding stock)	Cost per single dose to vaccinate breeding stock
Vaccinations (kids)	Cost per single dose to vaccinate kids
Hired Labor	Cost per hour for hired help
Marketing Expenses	Cost per head to market all goats sold from the operation each year (include yardage and commission)

Final Notes

To print the worksheet, click the Print button at the top of the page.

The **Mississippi Meat Goat Production Budget** can revert back to its original values/prices by clicking Reset Values.

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