FLUE-CURED TOBACCO BUDGET INFORMATION

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Introduction

The flue-cured tobacco budget is an estimate of the costs to produce 2500 pounds of marketable tobacco. Expense values used in the budget are based upon projected input prices and recommended production practices. Every producer is encouraged to adjust this budget using the right hand column to reflect production practices and prices that are relevant to their own farming operation. This column is your estimated cost of production.

Budget Assumptions

- 1. The average price received is not being calculated or estimated. However, break-even prices to cover cost variable and fixed costs are calculated based on 2500 pounds of cured leaf contracted per acre.
- The short term energy outlook published monthly by the Energy Information Administration http://www.eia.doe.gov/emeu/steo/pub/contents.html has estimated average prices of fuels for 2014. The price of fuels used in the budget reflects this estimation.
- 3. Hired labor cost is estimated to be \$12.42 per hour. It includes an unpublished adverse wage of \$9.87 and indirect labor cost of \$2.55 per hour. The indirect labor cost per hour is calculated by dividing total indirect labor costs of \$ 16,925 (association fees, visas, transportation, housing, insurance, etc.) by 6650 hours of labor (70 acres x 95 hours).
- 4. Crop insurance cost of \$151.61 per acre was calculated by dividing the total unsubsidized premiums payable by total Virginia acreage insured in 2013.
- The quantity of curing fuel is estimated based on pounds of cured leaf per gallon of fuel used. Farm cooperators have achieved higher curing efficiency in new barn installations.

Budget Interpretation

Income and expense items for the 2014 budget are broken down into four separate sections: Gross Receipts, Pre-harvest Variable Costs, Harvest Variable Costs, and Fixed Costs. Explanations of the items that fall into each section and the economic returns that can be calculated are detailed below

 Gross Receipts represents per acre cash income to the tobacco operation. Gross receipts are calculated by multiplying the average yield per acre by the average gross contract price per pound. Four different leaf separations with a contract price can be entered into an Excel spreadsheet referenced at the end of this section.

- Pre-harvest costs are typically cash expenses that must be paid annually to produce a crop of tobacco prior to harvest. Examples of pre-harvest variable costs include plants, fertilizer, chemicals, machinery fuel and repairs and hired labor.
- Harvest costs are cash expenses getting the tobacco from the field to the buying station. Examples of harvest costs include harvest labor, curing fuel and electricity.
- Total Variable Costs is the sum of pre-harvest and harvest variable costs. Variable costs are often called "cash costs" or "out-of-pocket expenses".
- Return over variable costs is simply the gross receipts of the crop minus the total variable costs. This value can essentially be viewed as the return over "cash costs" or the return over "out-of-pocket expenses".
- Fixed Costs are the expenses that result from the ownership of a fixed input. Examples of fixed costs include depreciation, property taxes, and insurance on the barns and machinery. A land charge has been excluded from this calculation.
- The return to land, risk, and management is calculated by subtracting
 the total variable costs and the fixed expenses from Gross Receipts.
 This represents the return to the operator's land (the equivalent of an
 annual land charge or rental value), time (unpaid operator/family
 labor), and management skills employed in producing a crop.

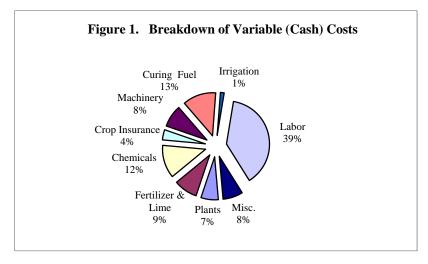
FLUE-CURED TOBACCO –Contract, Irrigated ESTIMATED COSTS AND REURNS PER ACRE

Acres 2500 POUND YIELD 1 Price or Quantity Cost/ Total Your Unit Unit /Acre Acre Farm 1. GROSS RECEIPTS Stalk Position Lbs Stalk Position Lbs Stalk Position Lbs Stalk Position Lbs TOTAL RECEIPTS: Lbs 2. PRE-HARVEST VARIABLE COSTS TOBACCO PLANTS -\$217.00 Flue-cured 1M 6.20 \$35.00 40.00 Cover Crop: Rye BU. 2.00 \$20.00 \$25.20 Lime (Prorated) TON 0.56 \$45.00 \$237.25 FRow: Fertilizer (6-12-18) CWT 6.50 \$36.50 Sidedress: (13-0-14) **CWT** 2.50 \$35.25 \$88.13 \$32.53 Herbicides **ACRE** 1.00 \$32.53 \$46.62 Insecticides **ACRE** 1.00 \$46.62 \$83.12 Fungicides 1.00 \$83.12 ACRE \$220.00 Nematicides ACRE 1.00 \$220.00 \$105.36 Sucker Control **ACRE** 1.00 \$105.36 Federal Crop & Hail \$151.61 Insurance APH **ACRE** 1.00 \$151.61 \$0.00 Land Rent **ACRE** 1.00 \$0.00 \$178.25 Tractor Equip: Fuel & Oil Eq Gal 53.85 \$3.31 \$64.00 ACRE Tractor & Equip.: Repairs 1.00 \$64.00 \$230.41 Tractor & Equip.: Labor HRS 15.89 \$14.50 \$420.00 Hand Production Labor HRS 35.00 \$12.42 \$62.39 Production Interest Months \$1039.76 5.5% \$2,<u>192.71</u> TOTAL PRE-HARVEST COSTS \$0.88 Per Pound 3. HARVEST VARIABLE COSTS \$55.45 16.75 Tractor Equip: Fuel & Oil Eq Gal \$3.31 ACRE 1.00 \$30.78 Tractor & Equip.: Repairs \$30.78 \$123.83 Tractor & Equip.: Labor HRS 8.54 \$14.50 \$745.20 Hand Harvest Labor HRS 60.00 \$12.42 \$493.75 Curing Fuel (LP) 312.50 gal/cwt \$1.58 \$181.00 ACRE Building Ins. & Electricity 1.00 \$181.00 **ACRE** 1.00 \$16.10 Supplies \$16.10 \$<u>1,646.11</u> TOTAL HARVEST COSTS: \$0.66 Per Pound **Breakeven Price** Breakeven Yield 4. TOTAL VARIABLE \$3,838.82 \$1.54 Per Pound COSTS Pounds \$0.00 5. RETURN OVER TOTAL VARIABLE COST 6. MACHINERY FIXED COSTS (BASED ON NEW EQUIPMENT COST) ACRE 1.00 \$793.35 \$793.35 7. OTHER FIXED COSTS DOL \$3,838.82 8.0% \$307.11 8. TOTAL FIXED COSTS \$0.44 Per Pound \$1,100.46 9. TOTAL VARIABLE & FIXED \$1.98 Per Pound \$4,939.28 COSTS 10. PROJECTED NET RETURNS TO LAND, RISK AND MANAGEMENT: \$0.00

^{*} PLEASE NOTE: THIS BUDGET IS FOR PLANNING PURPOSES ONLY.

Profit Analysis

Based upon budget projections, the "Total Variable Costs or Cash Costs" of production for the 2014 crop are estimated at \$3,838.82 per acre or \$1.54 a pound. The breakdown of variable costs is displayed in Figure 1. Fixed Costs were estimated at \$1,100.46 an acre or \$0.44 a pound. Farmers must be able to cover fixed costs in the long run for the farm business to be sustainable.



The price needed to cover total cost with varying yields is in the following table. It also calculates additional prices needed to generate varying profit levels that can pay for family living expenses.

Since yield and average sale price will vary from farm to farm each year, calculated returns over variable costs with varying yield and price levels are displayed in the following table.

are displayed in the following table.							
AVERAGE PRICE (\$/lb.) NEEDED TO COVER TOTAL COSTS (VARIABLE AND FIXED) ¹							
FARM YIELD			Desir	ed Net Inco	me per Acre	Above To	tal Costs
Lbs.	TOTAL COST/ ACRE	Fixed Cost /Lb	\$0.00	\$250.00	\$500.00	\$750.00	\$1,000.00
			Average Price Needed to Cover Total Cost (\$/Lb)				
2000	\$4,840.53	0.55	\$2.42	\$2.55	\$2.67	\$2.80	\$2.92
2250	\$4,889.91	0.49	\$2.17	\$2.28	\$2.40	\$2.51	\$2.62
2500	\$4,939.28	0.44	\$1.98	\$2.08	\$2.18	\$2.28	\$2.38
2750	\$4,988.66	0.40	\$1.81	\$1.90	\$2.00	\$2.09	\$2.18
3000	\$5,038,03	0.37	\$1.68	\$1.76	\$1.85	\$1.93	\$2.01

¹ Fixed Cost does not include a land charge. Subtract \$.55, \$.49, \$.44, \$.40, \$.37 per Lb respectively in the table above to remove Fixed Costs at each yield level.

This budget was developed in Microsoft Excel and is available from your county Extension Office or online at:

 $\frac{http://www.arec.vaes.vt.edu/southern-piedmont/farm-management/index.html}{management/index.html}\;.$