

## 2008 Estimated Costs and Returns for Non-Irrigated Peanuts

Todd D. Davis  
Extension Economist

The commodity markets have been bidding for acreage due to increased demand for corn and soybeans for biofuels. This bidding for acreage has also benefited peanut producers through higher prices. Currently, the major decision for producers is to evaluate the crop enterprise mix for 2008. This memo discusses the estimated costs and returns for producing non-irrigated peanuts, how production costs have increased since 2002, and how price and yield variability affects profitability.

### Costs and Returns for 2008

Table 1. 2008 Non-Irrigated Peanuts Estimated Costs and Returns (\$/Acre) <sup>1/</sup>.

	Unit	Quantity	Price or Cost/Unit	Total Per Acre
<b>Gross Receipts</b>				
Peanuts <sup>2/</sup>	lbs	3000	\$0.2850	<u>\$855.00</u>
<b>Total Receipts</b>				<u>\$855.00</u>
<b>Variable Costs</b>				
Seed (certified)	lbs.	120	\$0.70	\$84.00
Innoculant	oz	14	\$0.60	\$8.40
Fertilizer				
Phosphate	lbs.	40	\$0.52	\$20.80
Potash	lbs.	40	\$0.26	\$10.40
Boron	lbs.	2.5	\$0.75	\$1.88
Lime (prorated)	ton	0.5	\$52.50	\$26.25
Land Plaster (spread)	ton	0.75	\$32.00	\$24.00
Herbicides	acre	1	\$49.97	\$49.97
Insecticides	acre	1	\$13.55	\$13.55
Fungicides	acre	1	\$75.30	\$75.30
Growth Reg	acre	1	\$14.04	\$14.04
Consultant Fee	acre	1	\$15.00	\$15.00
Hauling	ton	1.5	\$20.00	\$30.00
Drying and cleaning	ton	1.5	\$40.00	\$60.00
State Check-off Fee	ton	1.5	\$2.00	\$3.00
National Assessment	acre	1	\$8.10	\$8.10
Crop Insurance	acre	1	\$15.00	\$15.00
Tractor/Machinery	acre	1	\$67.82	\$67.82
Labor	hrs	5.11	\$6.50	\$33.22
Interest on Operating Capital	dol.	\$199.45	9.00%	<u>\$8.98</u>
<b>Total Variable Costs</b>				<u>\$569.70</u>
<b>Return over Variable Costs</b>				<u>\$285.30</u>

<sup>1/</sup> Detailed enterprise budgets for agronomic crops are available at: <http://cherokee.agecon.clemson.edu/budgets.htm> or from your local Clemson University Cooperative Extension office.

<sup>2/</sup> Peanut price is based on Economist's Forecast on January 4, 2008. Contract prices may differ from this estimate.

The estimated Return over Variable (production) costs for non-irrigated peanuts for 2008, based on Clemson University Enterprise budgets, is described in Table 1. Total production costs are estimated to be \$570/acre with pesticides/growth regulator costs accounting for 24% of the total cost per acre (Table 1). In addition, fertilizer/lime/land plaster, seed/inoculants, and machinery costs account for 15%, 16%, and 12%, respectively, of the total cost per acre (Table 1). The harvest cash price, based on economist's forecast, is \$0.2850/lb. (Table 1). Given the revenue and cost estimates, the Return over variable costs for non-irrigated peanuts is estimated to be \$285 per acre (Table 1).

### Understanding the Increase in Production Costs

For long-term profitability, producers must continue to control costs. The production costs for non-irrigated peanuts from 2002 to 2008, based on Clemson University Extension enterprise budgets, are reported in Table 2.

Table 2. Budgeted Production Costs from 2002 – 2008 for Non-Irrigated Peanuts with an Estimated Yield of 3000 Pounds/Acre.

<b>Variable Costs</b>	<u>2008</u>	<u>2006-2007</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
Seed (certified)	\$84.00	\$72.00	\$72.00	\$78.00	\$84.00	\$96.00
Innoculant	\$8.40	\$8.40	\$7.70	\$7.00	\$7.00	\$7.00
Fertilizer						
Phosphate	\$20.80	\$14.00	\$13.24	\$11.91	\$10.98	\$10.22
Potash	\$10.40	\$11.60	\$8.85	\$6.62	\$5.90	\$6.10
Boron	\$1.88	\$1.88	\$1.88	\$1.45	\$1.73	\$1.75
Lime (prorated)	\$26.25	\$26.25	\$15.85	\$14.40	\$13.70	\$13.55
Land Plaster (spread)	\$24.00	\$24.00	\$24.00	\$28.50	\$28.50	\$28.50
Herbicides	\$49.97	\$56.35	\$51.14	\$50.51	\$42.79	\$29.83
Insecticides	\$13.55	\$18.13	\$15.99	\$15.56	\$14.79	\$12.84
Fungicides	\$75.30	\$102.84	\$96.83	\$80.54	\$87.65	\$86.47
Growth Reg	\$14.04	\$14.16	\$13.92	\$0.00	\$0.00	\$0.00
Consultant Fee	\$15.00	\$15.00	\$15.00	\$15.00	\$10.00	\$7.00
Hauling	\$30.00	\$24.00	\$19.80	\$18.00	\$18.00	\$18.00
Drying and cleaning	\$60.00	\$60.00	\$45.00	\$37.50	\$30.00	\$30.00
State Check-off Fee	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00	\$3.00
National Assessment	\$8.10	\$6.90	\$6.90	\$11.03	\$11.03	\$15.10
Crop Insurance	\$15.00	\$13.00	\$13.00	\$13.00	\$10.00	\$10.00
Tractor/Machinery	\$67.82	\$59.22	\$34.29	\$49.73	\$45.44	\$53.05
Labor	\$33.22	\$33.22	\$30.66	\$30.66	\$30.66	\$44.16
Interest on Operating Capital	<u>\$8.98</u>	<u>\$8.47</u>	<u>\$17.60</u>	<u>\$16.06</u>	<u>\$15.46</u>	<u>\$14.39</u>
<b>Total Variable Costs</b>	\$569.70	\$572.42	\$506.65	\$488.47	\$470.62	\$486.96
<b>Increase from Previous Year (\$/acre)</b>	-\$2.72	\$65.77	\$18.18	\$17.85	-\$16.34	

The elimination of the peanut marketing quota in 2002 caused production costs to decrease by \$16/acre from 2002 to 2003 (Table 2). However, variable costs have increased \$82/acre since 2002 with 76% of the increase occurring since 2005 (Table 2). Pesticides/growth regulator costs have increased by \$23/acre since 2002 (Table 2). Drying/cleaning costs have increased \$30/acre while the cost of fertilizer/lime/land plaster increased \$23/acre since 2002 (Table 2). The cost of operating machinery and equipment increased \$14/acre reflecting the higher cost of fuel and oil. However, the elimination of the marketing quota has caused some expenses to decrease. For example, the cost of certified seed has decreased \$11/acre and the National Assessment fees charged decreased \$7/acre since 2002 (Table 2).

This cost information will help managers understand which cost items have increased the most and, in turn, which items to focus on when monitoring costs. It is important to remember that it is important to cut the non-necessary expenses and to use inputs in a way to get the biggest return for the cost of the input. Therefore, sound management practices should be

used when managing costs. For example, soil tests can be used to determine fertilization rates and increased scouting for weeds and insects can be used to monitor pesticide costs.

### How Risky is Non-Irrigated Peanuts in 2008?

Another question managers should consider when evaluating a crop enterprise is the risk of not covering variable costs. The Total Variable Costs for non-irrigated peanuts are estimated to be \$570/acre (Table 1). At an expected yield of 3000 lbs./acre, the break-even price for non-irrigated peanuts is \$0.1899 per pound. At this break-even price, there will be just enough revenue to pay for the variable costs listed in Table 1. However, the break-even price does not pay for the cost of rented land or provide a return to fixed costs and management.

Table 3 describes the Return over Variable Cost for alternative prices and yields. Managers can use Table 3 to evaluate the risk of not covering variable costs of producing non-irrigated peanuts based on their own price and yield expectations. For example, at the price of \$0.23/lb., there would be revenue available to pay for all production expenses with yields of 2500 lbs./acre or greater (Table 3). Similarly, at a yield of 2250 lbs./acre, all variable costs will be covered with prices of \$0.26/lb. or greater (Table 3).

Table 3. Return over Variable Cost for Various Prices and Yields for Non-Irrigated Peanuts (3000 lb/acre Expected Yield)

Harvest Yield	Harvest Cash Price						
	\$0.23	\$0.24	\$0.25	\$0.26	\$0.27	\$0.28	\$0.29
1750	(\$168)	(\$150)	(\$133)	(\$115)	(\$97)	(\$80)	(\$62)
2000	(\$110)	(\$90)	(\$70)	(\$50)	(\$30)	(\$10)	\$10
2250	(\$53)	(\$30)	(\$8)	\$15	\$38	\$60	\$83
2500	\$5	\$30	\$55	\$80	\$105	\$130	\$155
2750	\$63	\$90	\$118	\$145	\$173	\$200	\$228
3000	\$120	\$150	\$180	\$210	\$240	\$270	\$300
3250	\$178	\$210	\$243	\$275	\$308	\$340	\$373

<sup>1/</sup>Total Variable Costs are estimated to be \$570 per acre.

### Where do I go for Help in Making this Decision?

Clemson University Extension has developed budgets for the major agronomic crops to help you evaluate their profitability for your farm business. The budgets are to be used as a guide and it is very important that you adjust these budgets to reflect your own costs, management practices, and productivity. You can download the enterprise budgets from the internet at <http://cherokee.agecon.clemson.edu/budgets.htm>. Your local extension office will be able to help you download these budgets and can help you understand how to use these budgets to make decisions for your farm business.