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NATIONAL PEANUT BOARD/SOUTHEAST PEANUT  
RESEARCH INITIATIVE  
FINAL REPORT FOR WORK  
DONE UNDER RESEARCH AGREEMENT

Final Report

June 30, 2007

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INSTITUTION: University of Georgia

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PROJECT TITLE: Economic Analysis of the Competitive Position of United States  
Peanut Producers

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RES. AGR. NO.: 25-21-RD314-145 PROJECT LEADER: Dr. Stanley Fletcher  
GACCP Budget No.: 4-844-653-0

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EXPIRATION DATE: June 30, 2007 NPB CONTACT: Maria Mehok  
NPB Budget No.: 111

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**FINAL REPORT:** The NCPC is working diligently to achieve the goal of assembling an updated representative peanut farm database that represents all peanut growing regions of the United States as well as all types of peanuts grown in the United States. With the expansion of the Representative Peanut Farm Database outside the original Southeastern Representative Peanut Farms(SERPF), established and updated in 2002 and 2003 respectively, the database now includes additional production areas of Texas, New Mexico, Virginia, North Carolina, and South Carolina. With this expansion, the NCPC has 19 representative peanut farms, spanning from Virginia to New Mexico. The database represents farms that produce runner type cultivars, Virginia type cultivars, Valencia type cultivars, and Spanish type cultivars. The NCPC feels it has a better understanding of the many diversified issues facing not only U.S peanut farms but southern agriculture as a whole.

Even though crop prices have increased, the overall economic viability of the 19 representative farms did not change with the January 2007 baseline data. The overall economic health of the peanut farming sector is in serious condition. Below is an executive summary report on the economic viability of the representative peanut farms based on the January 2007 FAPRI baseline data.

# United States Representative Peanut Farms

## JANUARY 2007 BASELINE EXECUTIVE SUMMARY

*University of Georgia*  
National Center for Peanut Competitiveness  
May 1, 2007

The National Center for Peanut Competitiveness (NCPC) develops and maintains data to simulate 19 representative peanut farming operations in the Southern United States peanut production belt, spanning from Virginia to New Mexico (APPENDIX A). The purpose of the database is to forecast the economic viability of peanut farms in the US. The database is also a valid tool to analyze a significant portion of Southern US agriculture given that the diversity of crop mix on a typical US peanut farm is highly correlated to the diversity of Southern agriculture. Analyses of impacts on the economic viability of peanut farms, and much of Southern agriculture, considering proposed policy changes, forecasted market prices, potential crop mix changes and various production constraints are all key applications of this database.

The success of this project is due to the continued cooperation of 19 producer panels, with approximately 100 active producers directly involved in the project development and data collection. The project is facilitated, in part, by local industry leaders, but more significantly through Cooperative Extension with the support of local county and state agents. National and regional grower organizations and commodity boards, along with the Ag and Food Policy Center (AFPC) at Texas A&M University, play vital roles in the success of the US Representative Peanut Farms project. The Food and Agricultural Policy Research Institute (FAPRI) provide forecasted prices, policy variables, and input inflation rates in their January 2007 Baseline and prior baselines referenced in this document.

### **FAPRI January 2007 Baseline:**

With the exceptions of wheat and rice, crop price projections are higher than they were in the August 2006 Baseline. Assumed loan rates and direct payment rates reflect the rates authorized in the 2002 Farm Bill. All payment rates, or how they are derived, are assumed to remain constant at 2006 levels for 2007 through 2012, unless otherwise noted.

Individual crop prices are projected to move as follows:

- Peanut prices start at \$424.87/ton in 2007, reach a high of \$454.68/ton in 2008, and decline to \$444.75/ton by 2012.
- Cotton prices steadily increase from \$0.5181/lb in 2007 to \$0.5819/lb by 2012.
- Corn prices start at \$3.24/bu in 2007, reach a high of \$3.25/bu in 2009, and decline to \$3.15/bu by 2012.
- Wheat prices stay above \$4.00/bu throughout the planning horizon, ranging between \$4.07/bu and \$4.19/bu.
- Soybeans are expected to range between \$6.68/bu and \$7.02/bu during the planning horizon.
- Sorghum prices are expected to remain relatively stable, ranging between \$2.97/bu and \$3.02/bu between 2007 and 2012.
- The U.S. all hay prices are expected to peak at \$109.77/ton in 2007, and stay above \$108.00/ton

through 2012.

The FLIPSIM stochastic policy simulation model used for this analysis incorporates the historical risk faced by farmers for prices and yields. This report presents the results of the January 2007 Baseline in a risk context using probabilities and ranges for annual net cash farm income values. The probability of a farm experiencing negative ending cash reserves and the probability of a farm losing real net worth are included as indicators of the cash flow and equity risks facing farms through the year 2012. Results are summarized and displayed in Tables 1 and 2 and Charts 1 and 2 on the following pages.

Under the January 2007 Baseline, 2 of the 19 farms are forecast to have good economic viability for 2007 through 2012. Eight farms are forecast to have marginal economic viability, and 9 farms are forecast to have poor economic viability for 2007 through 2012. Two of the 19 farms have less than a 25% probability of negative ending cash, 4 farms are between 25% and 50% probability, and 13 farms have greater than 50% probability of negative ending cash. Ten of the 19 farms are forecast to have less than a 25% probability of declining net worth. Two farms are forecast to have between 25% and 50% probability of declining net worth, while 7 farms are forecast to have greater than 50% probability of declining net worth.

The January 2007 Baseline analysis is a slight improvement over the August 2006 Baseline, where 12 of 19 farms were forecast to have poor economic viability, 5 farms marginal, and 2 farms good through 2012. The bottom line is that the economic viability of the US Representative Peanut Farms is no where near as promising as it was with the August 2004 baseline, where 7 of the then 11 Southeastern Representative Peanuts Farms were forecast as good, 3 farms as marginal, and only 1 farm was forecast to have a poor economic viability through 2010. At the time of the August 2004 Baseline analysis, only the Southeastern Representative Peanut Farms were established. Since that time, 8 additional farms have been developed, forming the 19 US Representative Peanut Farms. Given this expansion, a comparison of total number of farms is not possible; therefore, the results are compared in terms of percentages of the total number of representative farms in the database at the time of each baseline analysis. Table 2 displays the percentages of the total number of farms simulated that were economically viable, of negative ending cash, and of declining net worth.

The decrease in the probability of economically viable peanut farms is largely due to the increases in fuel and fertilizer costs along with rising interest rates since the August 2004 Baseline was released. It should be stressed that this decline in viability is due to diminished returns in all crops across a whole farm basis. The peanut enterprises alone are not the sole reason for declines in economic viability. Analyses of current baseline projections are not promising for the United States peanut farming industry. Unless overall profitability of all crops produced on a peanut farm in the Southern United States increases, the economic viability is in jeopardy for this sector of the country.

**Table 1. Number of Total Representative Farms in Each Category**

US REPRESENTATIVE PEANUT FARMS	Probability of OVERALL VIABILITY			Probability of Negative Ending Cash			Probability of Net Worth Decline		
	Good	Marg.	Poor	<25%	25-50	>50%	<25%	25-50	>50
<b>August 2006 Baseline (19 US Farms)</b>	2	5	12	2	4	13	6	4	9

January 2007 Baseline (19 US Farms)	2	8	9	2	4	13	10	2	7
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Table 2. Percentage of Farms in Each Category.

US REPRESENTATIVE PEANUT FARMS	Probability of OVERALL VIABILITY			Probability of Negative Ending Cash			Probability of Net Worth Decline		
	Good	Marg.	Poor	<25%	25-50	>50%	<25%	25-50	>50
August 2004 Baseline (11SE Farms Only)	64%	27%	9%	64%	18%	18%	82%	9%	9%
January 2005 Baseline (11SE Farms Only)	18%	27%	55%	27%	0%	73%	36%	18%	46%
August 2006 Baseline (19 US Farms)	11%	26%	63%	11%	21%	68%	32%	21%	47%
January 2007 Baseline (19 US Farms)	11%	42%	47%	11%	21%	68%	53%	11%	37%

Chart 1.

Economic Viability of SE Representative Peanut Farms over the Period 2005-2010 based on August 2004 Baseline

Overall Economic Viability <sup>1</sup>	P(Negative Ending Cash) <sup>2</sup>	P(Real Net Worth Decline) <sup>3</sup>
Farm A	1-1	1-1
Farm B	3-99	1-86
Farm C	1-35	1-1
Farm D	1-1	1-1
Farm E	1-1	1-1
Farm F	1-43	1-48
Farm G	1-1	1-1
Farm H	99-66	1-11
Farm I	1-1	1-1
Farm J	1-3	1-1
Farm K	1-1	1-1

1 Viability is classified as good (green), moderate (yellow), and poor (red) based on the probabilities of having negative ending cash reserves and losing real net worth: <25 26-50 >50

2 P(Negative Ending Cash) is the probability that the farm will have a negative ending cash reserve. Reported values represent the probabilities for 2005 and 2010.

3 P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2002 to 2005 and 2002 to 2010.



Chart 2.

**Economic Viability of US Representative Peanut Farms over the  
Period 2007-2012 based on January 2007 Baseline**

Overall Economic Viability <sup>1</sup>	P(Negative Ending Cash) <sup>2</sup>	P(Real Net Worth Decline) <sup>3</sup>
Farm A	2-27	1-8
Farm B	25-98	1-64
Farm C	99-99	1-80
Farm D	1-49	1-9
Farm E	99-99	1-1
Farm F	36-99	1-91
Farm G	18-29	1-1
Farm H	99-97	1-66
Farm I	83-98	1-33
Farm J	68-94	1-60
Farm K	6-8	1-1
Farm L	8-73	1-1
Farm M	54-94	1-81
Farm N	1-1	1-1
Farm O	4-65	1-9
Farm P	53-97	1-82
Farm Q	14-52	1-11
Farm R	31-70	1-41
Farm S	13-45	1-23

1) Viability is classified as good (green), moderate (yellow) and poor (red) based on the probabilities of having negative ending cash reserves and losing real net worth.

2) P(Negative Ending Cash) is the probability that the farm will have a negative ending cash reserve. Reported values represent the probabilities for 2007 and 2012.

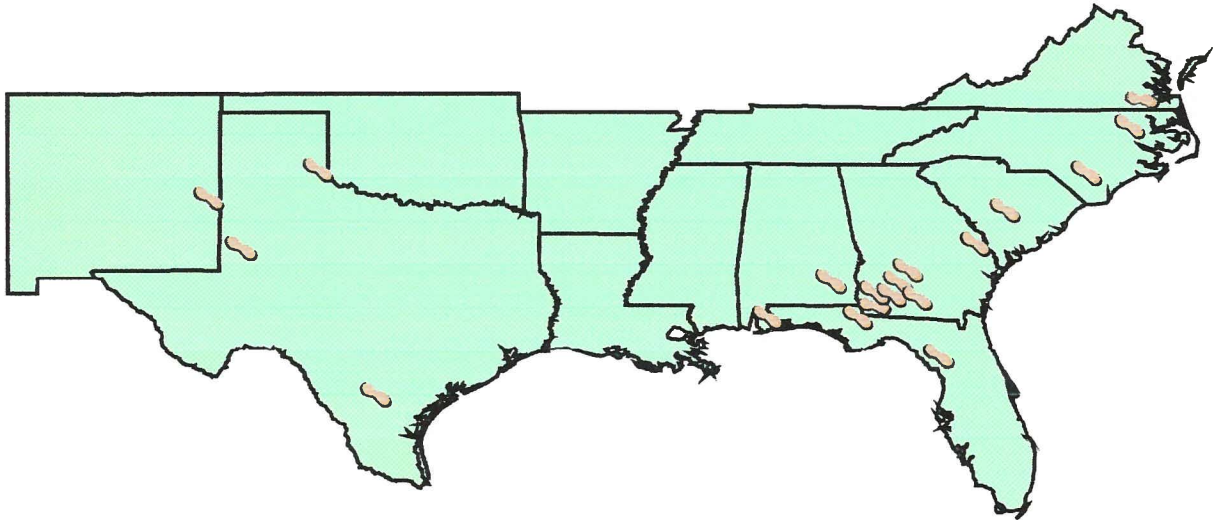
3) P(Real Net Worth Decline) is the probability that the farm will have a loss in real net worth relative to the beginning net worth. Reported values represent the probabilities for losing real net worth from 2005 to 2007 and 2009 to 2012.

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APPENDIX A:

## Areas Represented by the 19 United States Representative Peanut Farms

Established and Maintained by the National Center for Peanut Competitiveness



**Georgia**—7 farms  
**Florida**—2 farms  
**Alabama**—2 farms  
**South Carolina**—1 farm

**Texas**—3 farms  
**New Mexico**—1 farm  
**Virginia**—1 farm  
**North Carolina**—2 farms