



Cotton, Corn and Soybean Net Return Comparison Decision Aid

A Farm Planning/Decision Tool for Louisiana Growers

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The Cotton, Corn and Soybean Net Return Comparison Decision Aid is a spreadsheet-based decision tool developed to assist row crop producers in Louisiana in making production decisions based on expected net return comparisons between production of cotton, corn and soybeans, using alternative expectations related to variable production costs, expected crop yields and expected crop market prices. The decision tool contains five Excel worksheets which compares net returns above variable production costs for three alternative sets of crop production choices: (1) cotton versus corn, (2) cotton versus soybeans, and (3) corn versus soybeans.

Net returns above variable production costs are the appropriate values to use in making production decision comparisons among crops in the short run period of one crop year. For a given crop production year, fixed production expenses, including primarily equipment depreciation and interest, would not change as a result of which crops are produced in that year. Variable production costs are defined as those production expenses which would change based upon which crops are planted for production in that year. Land rent, if applicable, would also be included as a production cost in the net return calculation, due to the fact the many of the cropland leases are on a crop share basis and would change in value based upon the level of crop yield and market price. Therefore, net returns above variable production costs and land rent charges are calculated and the differences between these values gives an estimate of the net return advantage of one crop over the other at assumed levels of cost, yield and price.

Information required to be entered by the user for each crop includes: (a) variable production cost per acre, (b) expected crop yield per acre, and (c) crop share rent percentage or cash rent payment per acre. Data values which can be entered/changed by the user are in blue text. In addition, the user can change the range of cotton prices, cotton yields, corn prices and soybean prices evaluated by changing the first value (highlighted in blue) listed for each crop in the worksheet. The worksheet calculates net returns above variable costs and land rent for each crop and shows the difference between the two net returns in the table. Therefore, the values shown in the table can be interpreted as the advantage in net returns per acre for one crop (whose market prices are listed along the left side of the table) compared to the other crop (whose market prices are listed along the top of the table. For the range of market price combinations for which the crop on the left has a net return advantage over the other crop, those cell values with positive net return differences will be shaded in yellow. As values for variable cost, yield and rent are changed, the corresponding net return differences and highlighted cells with a net return advantage will change accordingly.

This spreadsheet decision tool can be downloaded from the LSU AgCenter web page, under Cotton Publications, and saved on any desktop or laptop personal computer for use. The web address for the LSU AgCenter is: www.lsuagcenter.com. A copy of this user's guide along with the spreadsheet decision aid file can also be obtained by contacting the authors by email at msalassi@agcenter.lsu.edu or mdeliberto@agcenter.lsu.edu.

Worksheet 1 – Cotton versus Corn Net Return Comparison - 1

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
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Data to be Entered:

Cell F8	Cotton variable cost, in dollars per acre
Cell F10	Cotton share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell F11	Cotton cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell L7	Corn price, in dollars per bushel
Cell L8	Corn variable cost, in dollars per acre
Cell L9	Corn expected yield, in bushels per acre
Cell L10	Corn share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell L11	Corn cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell D18	Minimum range of cotton price, in dollars per pound of lint
Cell E17	Minimum range of cotton yield, in pounds of lint per acre

Worksheet 2 – Cotton versus Corn Net Return Comparison - 2

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Data to be Entered:

Cell F8	Cotton variable cost, in dollars per acre
Cell F9	Cotton expected yield, in pounds of lint per acre
Cell F10	Cotton share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell F11	Cotton cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell L8	Corn variable cost, in dollars per acre
Cell L9	Corn expected yield, in bushels per acre
Cell L10	Corn share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell L11	Corn cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell D18	Minimum range of cotton price, in dollars per pound of lint
Cell E17	Minimum range of corn price, in dollars per bushel

Worksheet 4 – Cotton versus Soybean Net Return Comparison - 1

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
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Data to be Entered:

Cell F8	Cotton variable cost, in dollars per acre
Cell F10	Cotton share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell F11	Cotton cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell L7	Soybean price, in dollars per bushel
Cell L8	Soybean variable cost, in dollars per acre
Cell L9	Soybean expected yield, in bushels per acre
Cell L10	Soybean share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell L11	Soybean cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell D18	Minimum range of cotton price, in dollars per pound of lint
Cell E17	Minimum range of cotton yield, in pounds of lint per acre

Worksheet 4 – Cotton versus Soybean Net Return Comparison - 2

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Data to be Entered:

Cell F8	Cotton variable cost, in dollars per acre
Cell F9	Cotton expected yield, in pounds of lints per acre
Cell F10	Cotton share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell F11	Cotton cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell L8	Soybean variable cost, in dollars per acre
Cell L9	Soybean expected yield, in bushels per acre
Cell L10	Soybean share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell L11	Soybean cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell D18	Minimum range of cotton price, in dollars per pound of lint
Cell E17	Minimum range of soybean price, in dollars per bushel

Worksheet 5 – Corn versus Soybean Net Return Comparison

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Data to be Entered:

Cell F8	Corn variable cost, in dollars per acre
Cell F9	Corn expected yield, in pounds of lints per acre
Cell F10	Corn share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell F11	Corn cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell L8	Soybean variable cost, in dollars per acre
Cell L9	Soybean expected yield, in bushels per acre
Cell L10	Soybean share rent, in percent of crop share (if owned or cash rented, enter zero)
Cell L11	Soybean cash rent, in dollars per acre (if owned or share rented, enter zero)
Cell D18	Minimum range of corn price, in dollars per bushel
Cell E17	Minimum range of soybean price, in dollars per bushel



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