Commissioner Lester Spell, Jr., D.V.M., Mississippi Department of Agriculture and Commerce, Melissa J. Mixon, Interim Director, Mississippi Cooperative Extension Service, and the USDA Field Enumerators in Mississippi were critical to the success of this project. Also, thank you to Rick Mueller, Claire Boryan, Dave Johnson, and other members of USDA-NASS, Spatial Analysis Research Section, Fairfax, VA for training and assistance.
Cotton is grown mainly beside ancient and existing creek beds in the Delta region of Mississippi.
Mississippi Cotton and Corn Fields in 2007

Many of the cotton fields in 2006 were planted to corn in 2007, particularly in the lower Delta near Vicksburg.

Construction started in October, 2006 on the Mississippi’s first corn to ethanol plant in Vicksburg.
Cotton acreage in 2008 was only 360,000 acres, the lowest acreage since official records started in 1866. Corn acreage was also down from 2007. Soybeans made up over half of the total cultivated crop acres.
Mississippi Cotton Rotation from 2006
(82.9% of all land planted to cotton 2006-2008)

Crop Rotation Pattern and Frequency

<table>
<thead>
<tr>
<th>Pattern</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>cotton-cotton-cotton</td>
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<tr>
<td>cotton-cotton-corn</td>
<td>11.2</td>
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<tr>
<td>cotton-cotton-other</td>
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</tr>
<tr>
<td>cotton-other-other</td>
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</tbody>
</table>

The Delta
Cotton production is cyclical. Harvested acres are at the lowest point on record, and cotton yield is at an all time high.
Both yield and production have increased at a faster rate than the harvested acreage, making the new ethanol production goals easier to obtain.
Cotton Yield and Acres, 1995-2008

Planted Acres (x1,000)

Yield (Pounds per Acre)

Year

Planted All Purposes Yield Linear (Planted All Purposes) Linear (Yield)
Cotton Yield vs. Acres, 1995-2008

Yield (Pounds per Acre) vs. Planted Acres (x1,000)
Corn Yield vs. Acres, 1995-2008

Plotted data shows a positive correlation between planted acres and corn yield from 1995 to 2008.
Mississippi Cotton and Corn Statistics

Results and Conclusions

• Recent legislation, higher prices and the corn to ethanol plant in Vicksburg have favored corn over cotton in Mississippi.

• For land that was planted to cotton in 2006, 38.4% was planted to cotton in 2007, and 14% was planted to cotton in 2007 and 2008. Rotation to cotton was more common in the northern Delta.

• For land that was planted to cotton in 2006, 31.5% was planted to corn in 2007, and 10.3% was planted to corn in 2007 and 2008. Rotation to corn was more common in the southern Delta.

• The reasons for recent greater yields for cotton as the planted acres decreased and greater yields for corn as the acres increased include limiting planting to more fertile soil for each crop and crop rotations.

• Historical swings in cotton production suggest future increases are probable as demand for cotton changes.

• Recent dramatic changes in crop acreage reinforce the need for NASS annual estimates.