Cotton on the High Plains

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The High Plains production region is ranked as the largest production region (in terms of sales) in the state and accounts for approximately 30% of the total value of agricultural production in Texas.
The High Plains region accounts for approximately 80% of Texas cotton production which is approximately 50% of U.S. production.
• Region sits on the largest underground aquifer in North America.

• Underground water is used for supplemental irrigation (water is used to supplement rainfall).

• The aquifer is exhaustible and depletion of the aquifer could have substantial impacts on regional agriculture in the future.
INDUSTRY ORGANIZATION
Supply Chain and Impacts

Cotton Farms/Gins

Induced Community Effects

Seed and Chemicals

Energy

Equipment

Employment: ~16,000

Economic Impact: ~$2.2B

Cotton Farms/Gins

Export/Shipping

Fiber Processing

Oilseed Processing

Employment: ~6,000

Economic Impact: ~$1.5B

Note: Source is IMPLAN for 2008; we have observed estimates as high as $5B total when cotton prices are high like last year.
Parallel Systems Bring Competition

- Cooperative structure highly used
  - Marketing cooperatives like PCCA, including processing
  - Storage cooperatives like FCC
  - Processing cooperatives like PYCO
  - Many cooperative gins
- “Independent” structure viable and competitive
  - Independent gins
  - Marketing pools provided by many merchants
  - Processors and shippers from all major companies
• Research and development heavily concentrated in the area
  • Texas Tech, Texas A&M, USDA-ARS, and private companies like Smartfield, Bayer, Monsanto

Innovation is the Key
• Supply Side
  • Boll weevil eradication
  • LEPA and then drip irrigation
  • GPS and variable rate application systems
  • Water management technology
  • Varietal and genetically modified seed development

• Demand Side
  • High volume instrument grading (reliability)
  • Varietal development for fiber traits
  • Textile developments
• Very responsive to market demand
  • Moved from a lower-quality product for lower-valued end goods to a premium quality product on par with California cotton
• Worked diligently to develop export market outlets
• Innovators in information technology
• Leaders in promoting grading technology to improve reliability of U.S. cotton to domestic and foreign users
• Environment

Key Regional Success Factors
Key Challenges

• Water availability/irrigation
  • Need continued development on drought tolerant varieties
• Finding innovative policy solutions that provide maximum risk protection with less cost to the government
• Keeping cotton competitive with synthetic fibers in a world with shorter stocks and higher prices
  • Continued R&D at the seed and textile levels to improve fiber properties and enhance consumer value
• Operating in a hostile environment for trade policy
Conclusions

• Cotton forms a critical economic and social backbone for the High Plains economy
  • Major contributor to regional employment and income
• The cotton industry has been innovative in terms of productivity and consumer responsiveness
• The U.S. is not the low-cost producer, but provides extreme value in quality, reliability, and timeliness