Comparison of the Cotton Costs of Production in the Americas

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Outline

- Background
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Background

- South America (SA) cotton production increased over the past 20 years
- WTO rulings regarding the impacts of U.S. cotton farm programs
- Cotton cost in U.S. varies by region
 - USDA and AFPC
- Cotton cost in SA appeared to vary as well
- Comparable methodology for comparing cost

Objectives

- Compare the costs of production US vs SA
 - Major countries in SA
 - Argentina
 - Bolivia
 - Brazil
 - Colombia
 - Paraguay
- Consider Risk in Production and Prices
 - Compare CVs to analyze relative risk

Methodology

- 18 AFPC representative cotton farms
 - Variable costs and fixed costs
 - Historical yields and prices
- 16 SA representative cotton farms
 - Variable costs and fixed costs
 - Historical yields and prices
 - Observation of technology use

Methodology

- Dr. Juan Landivar, D&PL technical support's director for cotton in SA
- Panel of four to eight farmers in each location
- Focus group interviews
 - Collected cost of production and price data for the 2004 crop season

Methodology

- The July 1, 2004 exchange rate for each country was used for conversion to US dollars
- Assumed all land was rented
- Machinery depreciation with same formula

U.S. Cotton Representative Farms





SA Representative Farms



SA Representative Farms



Results – US Farms

Farm Name &		Lint Yield	Coefficient of	Cost of Prod	Cost/unit	Price
Acreage		(Lbs/acre)	Variation	(\$/acre)	(\$/lb)	(\$/lb)
ARC6000	Irrigated	1,310.00	12.08	780.32	0.60	0.55
TNC4050	Dry	900.00	47.84	550.65	0.61	0.43
TXSP2239	Dry	254.10	68.50	157.06	0.62	0.40
TXRP2500	Dry	254.10	66.03	161.61	0.64	0.43
TXVC4500	Irrigated	889.35	42.83	575.28	0.65	0.46
TXMC3500	Dry	762.30	42.82	522.51	0.69	0.43
TXEC5000	Dry	254.10	50.64	178.51	0.70	0.43
ALC3000	Dry	666.00	29.68	483.68	0.73	0.43
NCC1100	Dry	718.75	21.93	527.32	0.73	0.48
TXCB5500	Dry	594.59	37.34	440.90	0.74	0.38
TXVC4500	Dry	508.20	83.43	381.33	0.75	0.46
LAC2640	Dry	950.00	10.23	733.14	0.77	0.52
GAC1700	Irrigated	1,010.20	4.69	779.45	0.77	0.43
LAC2640	Irrigated	950.00	13.71	745.78	0.79	0.52
TXPC2500	Irrigated	762.30	33.44	603.72	0.79	0.37
TXEC5000	Irrigated	508.20	15.23	405.89	0.80	0.43
TXSP2239	Irrigated	772.46	19.20	632.65	0.82	0.40
GAC1700	Dry	656.63	4.70	540.63	0.82	0.43
CAC2400	Irrigated	1,304.29	14.85	1,134.79	0.87	0.59

Results – SA Farms

Farm Name &		Lint Yield	Coefficient of	Cost of Prod	Cost/unit	Price
Acreage		(Lbs/acre)	Variation	(\$/acre)	(\$/lb)	(\$/lb)
ARG5125	Irrigated	1,253.58	36.03	504.71	0.40	0.62
BRM247	Dry	1,131.16	11.22	460.67	0.41	0.43
BRB4942	Dry	1,513.56	34.50	629.28	0.42	0.44
BRS2792	Irrigated	1,495.75	5.36	655.63	0.44	0.55
BRS163	Dry	1,116.47	2.87	520.48	0.47	0.55
ARG185	Dry	534.00	27.55	253.09	0.47	0.62
BRG5436	Dry	1,469.04	6.09	706.26	0.48	0.44
PAR5	Dry	288.79	14.17	141.54	0.49	0.45
PAR37	Dry	605.42	16.43	301.28	0.50	0.49
ARG1977	Dry	504.00	23.06	253.38	0.50	0.62
BOL494	Dry	607.20	16.97	334.42	0.50	0.55
BRT4942	Dry	1,290.98	8.71	712.47	0.55	0.56
COH12	Dry	685.55	9.13	393.74	0.57	0.55
COE74	Irrigated	1,224.20	7.83	786.37	0.64	0.55
COC25	Dry	631.31	16.95	466.71	0.74	0.57
COC247	Dry	845.81	17.97	675.91	0.80	0.57

Summary and Conclusion

- Slightly lower COP in SA than in US
 - US and SA have regions that are more competitive than others
- In most cases lower variability on yield in SA than in US
- Problems observed in SA
 - Transportation
 - Infrastructure
 - Land title
 - Export tariff (Argentina)
- Exchange rates matter
 - Purchases of US produced inputs
 - Relative competitiveness of exports

Questions?

Thank you for your attention!