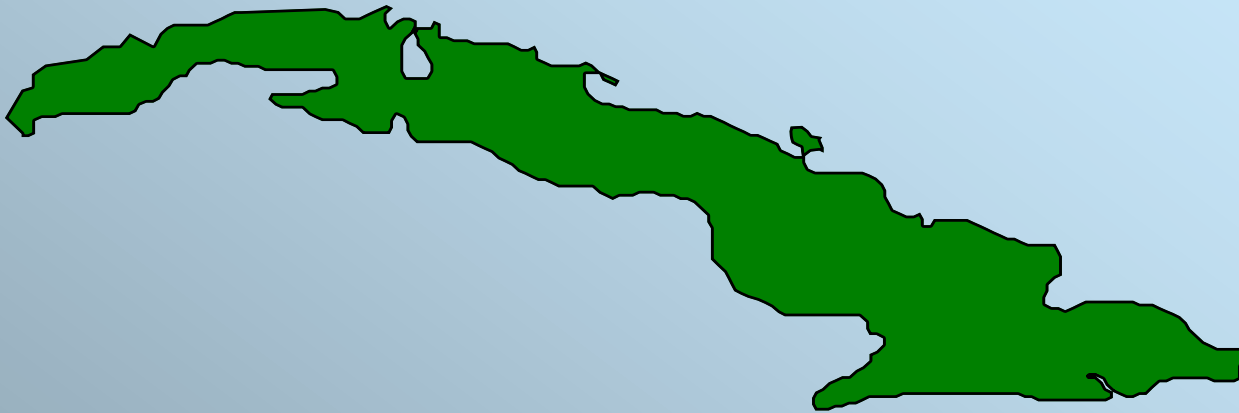


Economic Impacts of Agricultural Exports to Cuba



Presented at

***“Free Trade of the Americas, the WTO and New Farm Legislation:
Responding to Challenges and Opportunities”***

San Antonio, Texas, May 24, 2002

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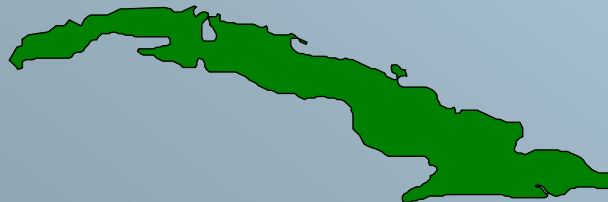
Introduction

- **Passage of TSREEA October 2000
Stimulated Interest in Food Sales to Cuba**
- **Economic Impacts of Expanded U.S.
Agricultural Exports to Cuba Estimated
Using Input-Output Model of the United
States-IMPLAN**
- **Output, Income, Value Added, and
Employment Estimated for All 50 States
and 22 Commodity Sectors**



Definitions

- ***Output***: Increase in Business Sales Required to Support \$1 of Additional Exports
- ***Income***: Increase in Household Income Due to \$1 Increase in Exports
- ***Value Added***: Additional Gross State Product due to \$1 Increase in Exports
- ***Employment***: Additional Employees Required for \$1 Million Increase in Exports



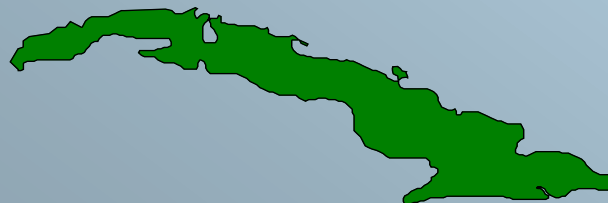
Methodology

- **Assumption Based Forecasts of Total U.S. Agricultural Exports to Cuba under Alternative Export Growth Scenarios**
- **Estimation of Agricultural Exports to Cuba by Each Commodity Sector**
- **Allocation of Exports by State Based on Share of Production**



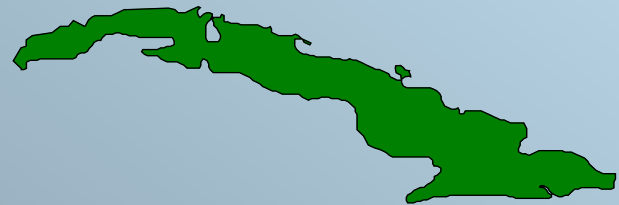
Three Options Analyzed for U.S Exports to Cuba

- **Option 1: Low Export Growth**
 - \$37.5 Million-USDA
- **Option 2: Moderate Export Growth**
 - \$411 Million-ITC & CNAS
- **Option 3: High Export Growth**
 - \$1.23 Billion-USDA, ITC, Industry, CNAS



Share of Production Example

- **U.S. Forecast to Export \$300 Million in Rice to Cuba**
- **Arkansas Produces 45.8% of U.S. Rice**
- **Arkansas Rice Exports to Cuba Would be \$137.5 Million**



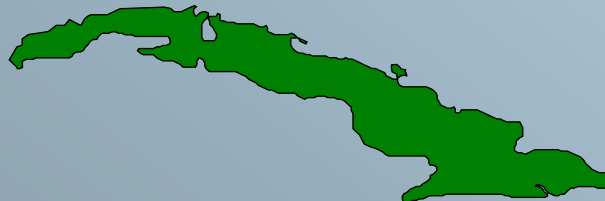
Multiplier Analysis Example

- **Rice Output Multiplier is 2.296**
- **Income Multiplier is .662**
- **Value Added Multiplier is 1.199**
- **Employment Multiplier is 21.236**



Multiplier Analysis Example

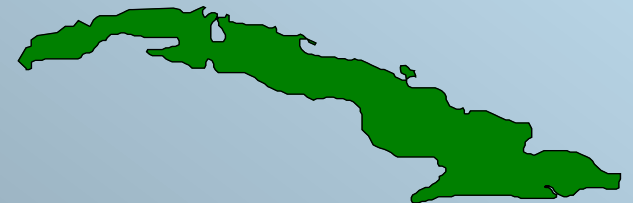
- ***Output:*** $1.860 \times \$137.5 \text{ Mil.} = \315.62
Million
- ***Income:*** $0.662 \times \$137.5 \text{ Mil.} = \90.97
Million
- ***Value Added:*** $1.219 \times \$137.5 \text{ Mil.} = \164.9
Million
- ***Jobs:*** $21.236 \text{ Jobs}/\$1\text{Mil.} \times \$137.5 \text{ Mil.} =$
2,906 Jobs



Estimated Impacts

Low Export Growth

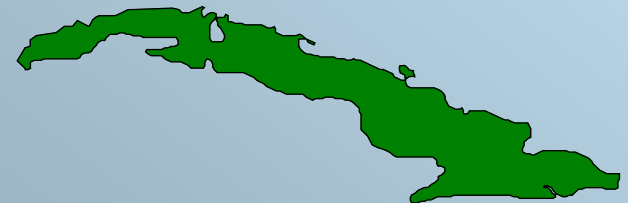
- **\$37.5 Million in Agricultural Exports to Cuba Result in:**
 - **\$84 Million in Additional Economic Output**
 - **\$25 Million in Additional Household Income**
 - **\$47 Million in Additional Gross State Product**
 - **1,000 New Jobs**



Moderate Export Growth

Estimated Impacts

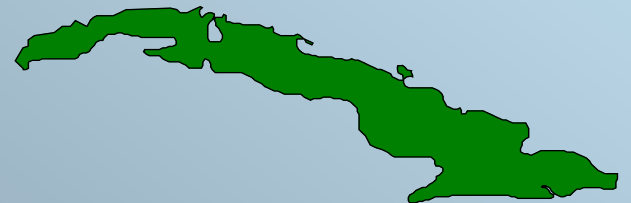
- **\$411 Million in Agricultural Exports to Cuba Result in:**
 - **\$919 Million in Additional Economic Output**
 - **\$273 Million in Additional Household Income**
 - **\$517 Million in Additional GSP**
 - **10,656 New Jobs**



High Export Growth

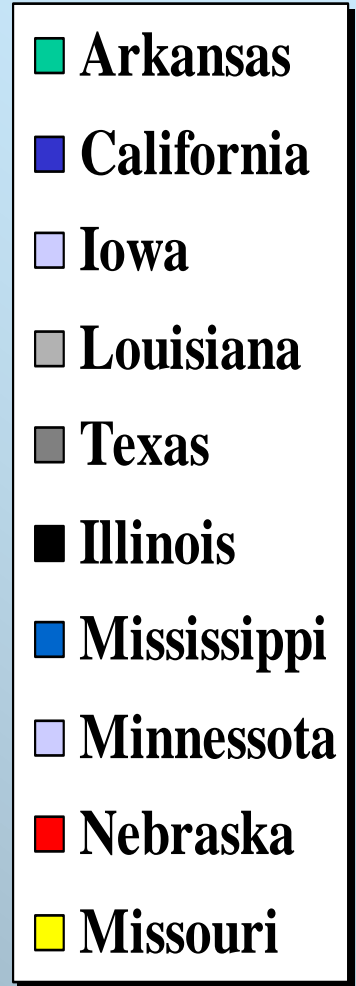
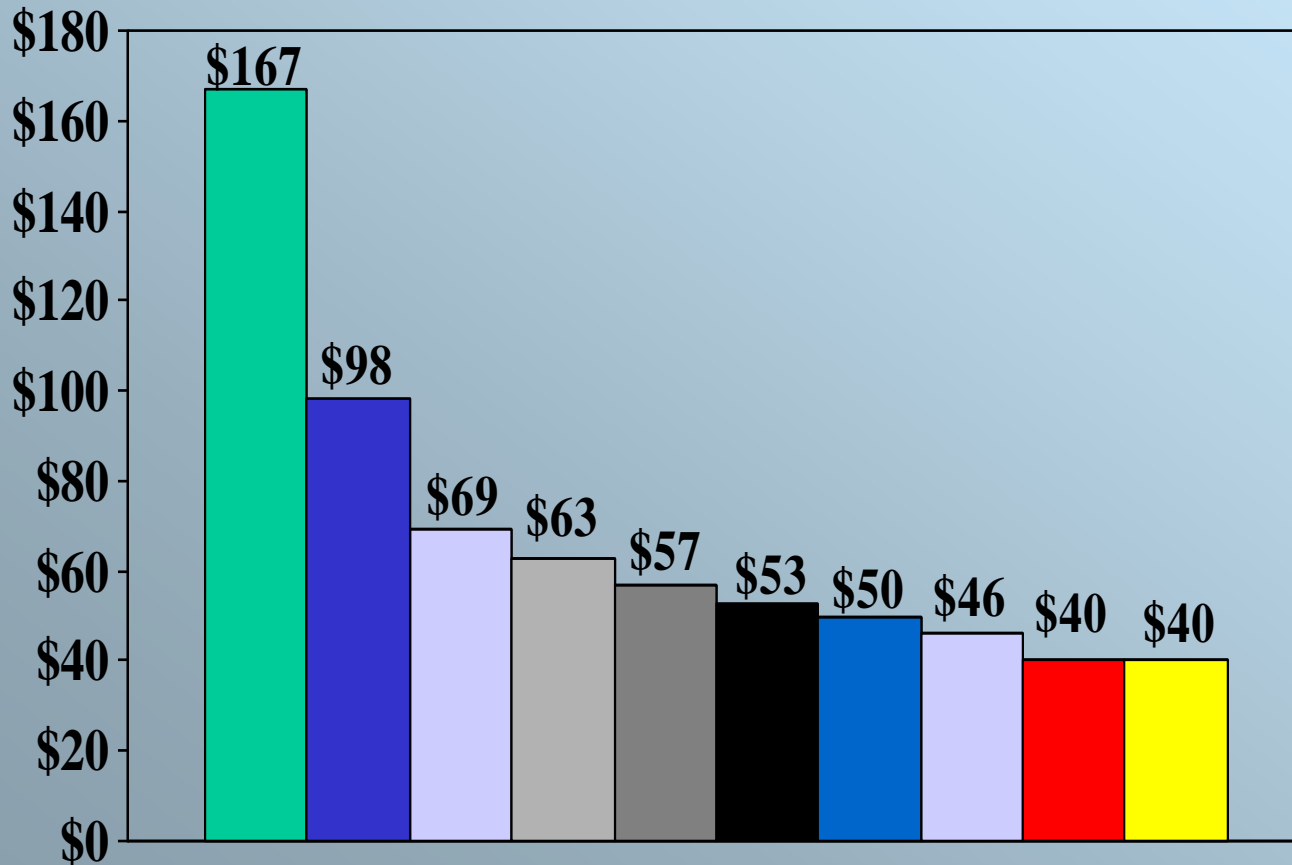
Estimated Impacts

- **\$1.23 Billion in Agricultural Exports to Cuba Result in:**
 - **\$2.76 Billion in Additional Economic Output**
 - **\$812 Million in Additional Household Income**
 - **\$1.54 Billion in Additional GSP**
 - **31,114 New Jobs**



High Growth Top 10 Export States

Million Dollars



Estimated Impacts on Texas

<u>Sector</u>	<u>Exports</u>	<u>Output</u>	<u>Income</u>	<u>Value Added</u>	<u>Empl.</u>
	(\$1,000)		(\$1,000)		(Jobs)
Beef	\$8,671	\$23,492	\$6,500	\$11,584	329
Pork	\$339	\$938	\$237	\$436	11
Chicken Mea	\$5,846	\$17,096	\$4,959	\$8,119	201
Wheat Comp	\$4,824	\$8,813	\$2,555	\$5,949	132
Rice	\$22,405	\$51,438	\$14,826	\$26,870	474
Corn	\$1,891	\$3,518	\$1,087	\$2,305	49
Soybeans Co	\$452	\$1,021	\$289	\$569	12
Sunflower Oi	\$67	\$163	\$48	\$85	2
Dry Beans	\$251	\$435	\$179	\$333	7
Cotton	\$2,774	\$5,127	\$1,887	\$3,600	69
Seafood	\$161	\$185	\$85	\$203	3
Softwood Sa	\$3,819	\$8,238	\$2,678	\$4,882	95
Softwood Ply	\$2,295	\$4,952	\$1,609	\$2,935	57
Fertilizer	\$3,252	\$6,898	\$1,951	\$3,688	54
TOTAL	\$57,109	\$132,418	\$38,933	\$71,640	1,496

Regional Comparison of Estimated Impacts of Exports to Cuba - *Moderate Export Growth Forecast*

<u>State</u>	<u>Exports</u> (\$1,000)	<u>Estimated Economic Impacts</u>			
		<u>Output</u>	<u>Income</u>	<u>Value Added</u>	<u>Employment</u> (Jobs)
		(\$1,000)			
Southern¹	\$144,939	\$339,533	\$100,558	\$183,310	3,784
Midwestern²	\$173,092	\$379,892	\$110,964	\$217,329	4,667
Western³	\$64,539	\$136,158	\$42,350	\$81,103	1,637
Northeastern⁴	\$10,670	\$24,041	\$7,162	\$13,757	293
Unallocated	\$17,561	\$39,541	\$11,264	\$21,425	316
Total	\$410,801	\$919,164	\$272,298	\$516,925	10,698
¹ Southern consists of AL, AR, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV					
² Midwestern consists of IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI					
³ Western consists of AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY					
⁴ Northeastern consists of CT, DE, MA, ME, NH, NJ, NY, PA, RI, VT					

Regional Comparison of Estimated Impacts of Exports to Cuba - *High Export Growth Forecast*

<u>State</u>	<u>Exports</u> (\$1,000)	<u>Estimated Economic Impacts</u>			
		<u>Output</u>	<u>Income</u>	<u>Value Added</u>	<u>Employment</u> (Jobs)
		(\$1,000)			
Southern¹	\$510,360	\$1,192,919	\$349,315	\$635,929	12,651
Midwestern²	\$435,021	\$943,813	\$276,227	\$546,954	11,905
Western³	\$197,245	\$427,116	\$129,270	\$246,337	4,826
Northeastern⁴	\$29,563	\$66,311	\$19,713	\$38,326	819
Unallocated	\$59,049	\$124,866	\$37,921	\$74,018	913
Total	\$1,231,239	\$2,755,026	\$812,447	\$1,541,565	31,114

¹ Southern consists of AL, AR, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV

² Midwestern consists of IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI

³ Western consists of AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY

⁴ Northeastern consists of CT, DE, MA, ME, NH, NJ, NY, PA, RI, VT

Estimated Impacts of Exports to Cuba on the South- *Moderate Export Growth Forecast*

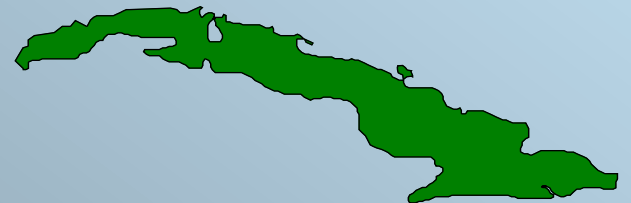
<u>State</u>	<u>Exports</u> (\$1,000)	<u>Estimated Economic Impacts</u>			
		<u>Output</u>	<u>Income</u>	<u>Value Added</u>	<u>Employment</u> (Jobs)
			(\$1,000)		
Arkansas	\$34,558	\$81,108	\$23,671	\$42,769	829
Texas	\$21,541	\$50,207	\$14,713	\$27,047	562
Mississippi	\$13,938	\$32,642	\$9,848	\$17,725	360
Louisiana	\$13,133	\$28,528	\$8,532	\$15,926	285
North Carolina	\$11,559	\$28,186	\$8,245	\$15,016	336
Georgia	\$11,189	\$27,880	\$8,492	\$14,858	331
Alabama	\$8,624	\$21,700	\$6,607	\$11,460	256
Florida	\$7,241	\$15,577	\$4,658	\$8,709	151
Oklahoma	\$6,150	\$13,554	\$3,900	\$7,729	180
Virginia	\$3,964	\$9,435	\$2,792	\$5,155	115
Kentucky	\$3,631	\$8,510	\$2,445	\$4,664	107
South Carolina	\$3,558	\$8,182	\$2,548	\$4,618	98
Tennessee	\$3,151	\$7,096	\$2,087	\$4,045	90
Maryland	\$2,316	\$5,859	\$1,706	\$3,063	72
West Virginia	\$386	\$1,069	\$313	\$528	13
Total South	\$144,939	\$339,533	\$100,558	\$183,310	3,784

Estimated Impacts of Exports to Cuba on the South- *High Export Growth Forecast*

<u>State</u>	<u>Exports</u> (\$1,000)	<u>Estimated Economic Impacts</u>			
		<u>Output</u>	<u>Income</u>	<u>Value Added</u>	<u>Employment</u>
		(\$1,000)			(Jobs)
Arkansas	\$166,812	\$389,354	\$112,770	\$203,587	3,790
Louisiana	\$62,925	\$138,856	\$40,808	\$75,595	1,325
Texas	\$57,109	\$132,418	\$38,933	\$71,640	1,496
Mississippi	\$50,480	\$118,449	\$35,051	\$63,072	1,234
North Carolina	\$31,097	\$76,662	\$22,156	\$40,284	902
Georgia	\$28,292	\$72,252	\$21,727	\$37,740	856
Florida	\$28,102	\$60,433	\$17,558	\$33,004	539
Alabama	\$21,930	\$56,473	\$16,997	\$29,260	662
Oklahoma	\$16,699	\$37,306	\$10,685	\$20,965	482
Kentucky	\$11,564	\$26,412	\$7,650	\$14,758	336
Virginia	\$10,978	\$26,034	\$7,684	\$14,247	316
Tennessee	\$8,600	\$19,510	\$5,683	\$11,010	244
South Carolina	\$8,143	\$19,127	\$5,890	\$10,616	229
Maryland	\$6,515	\$16,542	\$4,819	\$8,628	202
West Virginia	\$1,114	\$3,091	\$904	\$1,523	38
Total South	\$510,360	\$1,192,919	\$349,315	\$635,929	12,651

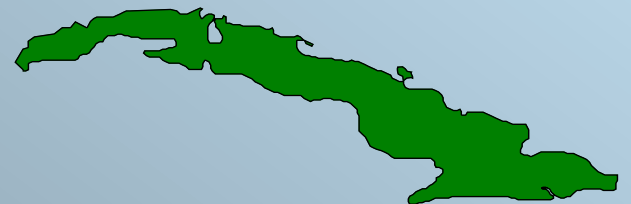
Implications

- **Cuba Has Some Potential as Market for U.S. Agricultural Products**
- **U.S. & Cuban Policy Will Determine If That Potential is Realized**
- **Liberalization of Trade, Investment, Travel & Tourism Will Lead to More Rapid Market Growth**



Implications

- **Access to U.S. Market Critical for Cuba's Economic Development**
- **Fine Tuning TSREEA to Include Farm Machinery Would Have Positive Impacts**
- **Analysis Did Not Examine Impacts of U.S. Imports from Cuba**



Implications

- **Southern U.S. a Leading Beneficiary of Estimated Economic Benefits**
- **The South Surpasses the Midwest in the High Growth Export Scenario Due to Higher Rice and Chicken Meat Exports**
- **Arkansas*, Louisiana and Mississippi Receive Disproportionate Benefits (>3X)**
- **Recent Political Statements**

