

Agriculture and Food Security in the Caribbean SIDS

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March 2008

Environmental Characteristics of the Agricultural Sector in the Caribbean

- Limited or No Soil Or Water Conservation Practices
- Adverse Effects on Biodiversity
- Degradation of Coastal Environmental Quality

Socio-economic Characteristics of the Regions Agricultural Sector

- Commodity Production
- Low income for agricultural workers and high rates of poverty among Agricultural Households
- Experiencing negative fallout from EU policies and WTO ruling – specifically related to the export of sugar and bananas.
- Changing climatic conditions are an additional source of negative impacts on the sector.

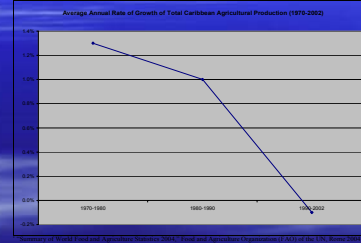
Crop Production

ISLAND STATE	Sugarcane (Mt / yr)	Coccoloba (Mt / yr)	Cereals (Mt / yr)	Rubbers & Tubers (Mt / yr)	Groundnuts (Mt / yr)	Pulses (Mt / yr)	Vegetables & melons (Mt / yr)	Fruits excl. melons (Mt / yr)
Antigua & Barbuda	—	—	58	372	—	—	3,082	9,973
Bahamas	55,500	—	350	1,018	—	123	25,024	28,667
Barbados	385,260	1,800	258	3,780	47	1,104	13,873	3,388
Belize	1,124,060	980	81,558	3,610	70	7,191	9,444	388,262
Cuba	19,800,533	115,953	1,004,647	1,790,192	10,000	131,633	3,099,834	2,823,911
Dominica	4,450	11,500	180	26,730	—	80	6,630	63,490
Dominican Republic	5,177,807	170,720	627,840	280,000	2,037	80,148	380,637	1,248,360
Grenada	7,200	6,500	300	4,060	—	500	2,640	16,830
Guatemala	3,000,000	45,000	500,500	40,300	1,900	1,300	41,800	68,370
Haiti	1,070,000	24,000	377,333	753,000	21,333	64,000	201,130	994,000
Jamaica	2,133,333	170,000	900	214,475	3,400	5,000	190,531	808,211
Saint Kitts & Nevis	162,000	1,000	—	1,010	—	210	600	1,300
Saint Lucia	—	14,000	631	11,180	—	40	1,000	157,920
St. Vincent & The Grenadines	15,310	2,550	2,660	13,810	310	340	4,300	57,380
Suriname	120,000	9,000	194,600	5,350	260	160	22,040	72,480
Trinidad & Tobago	706,000	17,500	5,900	8,500	80	3,500	23,500	66,000
TOTAL	33,789,424	690,028	2,772,928	3,117,304	40,381	266,496	3,032,288	6,460,370

Agricultural Commodity Prices – 1961-2002



Rate of Growth in Agriculture



Canada's Top 5 Agri-food Imports from CARICOM, 2004

Rum	\$16.8 million
Rock lobster and other sea crawfish	\$12.0 million
Papayas, fresh	\$6.2 million
Liqueurs and cordials	\$3.1 million
Fish	\$1.8 million

Crop Production in the Caribbean

ISLAND STATE	Sugarcane (MT/yr)	Coconuts (MT/yr)	Cereals (MT/yr)	Roots & Tubers (MT/yr)	Groundnuts (MT/yr)	Pulses (MT/yr)	Vegetables & melons (MT/yr)	Fruits excl. melons (MT/yr)
Antigua & Barbuda			58	372			3,082	9,974
Barbados	25,800		350	1,013		12	25,025	28,265
Bahamas	385,200	1,300	258	3,700	4	1,100	13,825	3,385
Belize	1,124,000	500	31,550	3,610	20	7,100	9,440	388,260
Cuba	19,800,533	11,520,5	1,004,647	1,790,352	10,000	131,633	4,099,834	2,823,911
Dominica	4,400	11,400	180	26,700		80	6,610	63,490
Dominican Republic	5,177,807	179,720	627,840	250,000	2,917	50,144	380,637	1,245,368
Grenada	7,200	6,300	300	4,000		600	2,640	16,830
Guyana	3,000,000	45,000	505,000	40,300	1,000	1,300	41,800	68,371
Haiti	1,070,000	24,500	377,331	753,800	21,333	64,967	204,140	904,050
Jamaica	2,133,333	170,000	993	214,218	3,402	5,040	196,831	468,237
Saint Kitts & Nevis	162,000	1,000		1,013	31	210	682	1,300
Saint Lucia		14,000	631	11,100		40	1,000	157,924
St. Vincent & the Grenadines	13,318	2,550	2,667	13,810	312	347	4,301	57,382
Suriname	120,000	9,000	194,630	2,330	260	160	22,048	72,482
Trinidad & Tobago	708,000	17,500	5,000	3,800	80	3,560	23,500	66,697
TOTAL	13,759,420	600,020	2,772,020	3,137,300	40,381	166,496	3,032,200	6,469,320

Country	Total Population (millions)	Agricultural Population Relative to Total (%)	Rural Population Relative to Total (%)
Antigua and Barbuda	0.1	24	62
Barbados	0.3	4	48
Belize	0.3	30.3	52
Cuba	11.2	13.5	25
Dominican Republic	8.6	15.4	34
Guyana	0.7	16.9	62
Haiti	2.9	6.2	63
Jamaica	2.6	20	43
Saint Kitts & Nevis	0.1	21.1	66
St. Lucia	0.2	22.4	70
St. Vincent and The Grenadines	0.1	23.1	42
Suriname	0.4	19	24
Trinidad & Tobago	1.3	8.3	24

1. Human Development Report 2005 (data for 2003)
2. FAO/STAT
3. Food and Agriculture Indicators 2003 - Prepared by Socio-Economic Statistics and Analysis Service (ESSA), Food and Agriculture Organization (FAO), October 2005. <http://www.fao.org/ess/>

Current Status of Food Security

Current Status of Food Security

http://www.agr.state.il.us/marketing/news/April_2007/caribbeanUScos.pdf

Trade Statistics

• In 2006 U.S. agricultural exports to the Caribbean posted a **12 percent gain**, reaching a record high \$2.4 billion. **2007 was in excess of \$3 billion** -Caricom Sec.

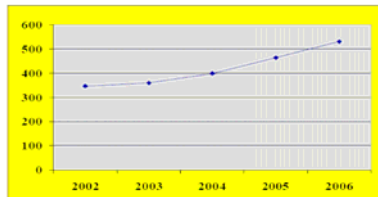
The Caribbean is the **seventh largest regional market** in the world for U.S. agricultural exports. The U.S. exports more agricultural products to the Caribbean than it does to Central and South America

• Regions dependency has increased significantly –cost of food imports have increased significantly up to more than **\$3 billion per year** ...% of estimated **regional GDP**

- Major imports are cereals and protein and dairy products
- Malnutrition --- PAHO

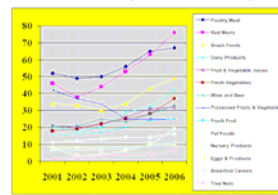
US Food Exports to The Region

CHART A. TOTAL U.S. EXPORT OF CONSUMER ORIENTED PRODUCTS TO THE CARIBBEAN BASIN 2001-2006 (IN MILLIONS OF U.S. DOLLARS)



US Food Exports to the Region

CHART C. U.S. EXPORT OF CONSUMER ORIENTED PRODUCTS TO THE CARIBBEAN BASIN, BY PRODUCT TYPE 2001-2006 (IN MILLIONS OF U.S. DOLLARS)



Information Sources and Initiatives

Sources, Availability of Socio-economic data, and ongoing Initiatives generating tools and data.

MI – FAO, etc.

IICA

Caricom Secretariat – Food Security Project – should be able to provide current data ..fishing info from Regional Fisheries Programme

Caribbean Climate Centre the Cuban Met office with the Hadley Centre is doing downscaling of GCM to provide usable information for the region to help assess and plan adaptation options for the sector

Concluding Remarks

Adaptation of Regional
Agriculture to Changing Climate