

28191

REVISADO CENDOC

TRENDS IN CIAT COMMODITIES

INTERNAL DOCUMENT ECONOMICS 1.10

MAY 1985

CIAT

CENTRO INTERNACIONAL DE AGRICULTURA TROPICAL

CALI, COLOMBIA

28191

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DATA APPENDICES

BY

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AND LIBARDO RIVAS

CCCCCC	AAA	SSSSSSS	SSSSSSS	AAA	VV	VV	AAA						
CCCCCCCC	AAAAA	SSSSSSSSS	SSSSSSSSS	AAAAA	VV	VV	AAAAA						
CC	CC	AA	AA	SS	SS	SS	SS	AA	AA	VV	VV	AA	AA
CC		AA	AA	SS	SS	SS	SS	AA	AA	VV	VV	AA	AA
CC		AA	AA	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	AA	AA	VV	VV	AA	AA
CC		AAAAAAAAA	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	AAAAAAAAA	VV	VV	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
CC		AAAAAAAAA	SS	SS	SS	SS	SS	AAAAAAAAA	VV	VV	AAAAAAAAA	AAAAAAAAA	AAAAAAAAA
CC	CC	AA	AA	SS	SS	SS	SS	AA	AA	VV	VV	AA	AA
CCCCCCCC	AA	AA	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	SSSSSSSSS	AA	AA	VVV		AA	AA
CCCCCC	AA	AA	SSSSSSS	SSSSSSS	SSSSSSS	SSSSSSS	SSSSSSS	AA	AA	V		AA	AA

CASSAVA PRODUCTION, RELATIVE IMPORTANCE IN THE REGION AND PER CAPITA PRODUCTION LEVELS (CIAT)

COUNTRY	P R O D U C T I O N -----1000 MT-----			PERCENTAGE OF TOTAL	PER CAPITA PRODUCTION
	1960/62	1970/72	1981/83	%	KG
BRAZIL	18505	29841	23540	78.512	184
MEXICO	0	46	39	0.129	1
	18505	29887	23579	78.641	117
BOLIVIA	114	232	214	0.713	36
COLOMBIA	758	1734	2168	7.231	80
CUBA	162	217	332	1.106	34
DOMINICAN RP	147	183	85	0.283	14
ECUADOR	225	377	220	0.735	26
PARAGUAY	990	1328	2100	7.004	623
PERU	368	475	323	1.077	17
VENEZUELA	321	319	345	1.150	21
TROPICAL SOUTH AMERICA	3085	4866	5786	19.299	60
COSTA RICA	9	10	21	0.071	9
EL SALVADOR	9	13	24	0.080	5
GUATEMALA	5	7	9	0.029	1
HONDURAS	17	27	7	0.023	2
NICARAGUA	12	18	27	0.089	9
PANAMA	12	37	35	0.116	17
CENTRAL AMERICA, PANAMA	64	112	122	0.408	5
BARBADOS	1	1	1	0.003	4
GUYANA	10	0	0	0.000	0
HAITI	110	215	260	0.867	43
JAMAICA	11	20	19	0.063	8
TRINIDAD TOB	4	4	3	0.011	3
CARIBBEAN	136	239	283	0.945	26
TROPICAL LATIN AMERICA	21789	35103	29771	99.293	89
ARGENTINA	248	277	212	0.707	8
TEMPERATE SOUTH AMERICA	248	277	212	0.707	5
LATIN AMERICA	22037	35380	29983	100.000	80

COLUMNS MAY NOT ADD EXACTLY DUE TO ROUNDING

CASSAVA

ANNUAL GROWTH RATES

COUNTRY	PRODUCTION			AREA			YIELD		
	1960/69	1969/78	1978/83	1960/69	1969/78	1978/83	1960/69	1969/78	1978/83
BRASIL	6.1***	-2.3***	-2.2**	4.8***	0.6**	-0.6	1.3***	-2.9***	-1.7**
MEXICO	0.0	3.1	5.0	0.0	5.9**	-4.8**	0.0	-2.8***	9.8
	6.1***	-2.2***	-2.2**	4.8***	0.6**	-0.6	1.3***	-2.9***	-1.6**
BOLIVIA	9.2***	2.3	-0.2	6.8***	1.3	2.7	-1.1	1.0**	-2.9
COLOMBIA	2.5***	6.1**	2.0*	1.9**	3.3	-1.0	1.1***	2.8**	3.0
CUBA	4.6***	3.4***	1.3***	4.4***	2.7***	2.1***	0.2	0.7***	-0.8***
DOMINICAN RP	1.0**	0.7	-14.2*	-1.6*	2.6***	0.6	2.8***	-1.9***	-14.8*
ECUADOR	4.8**	-7.1**	5.3	2.2*	-3.2	1.9	2.6*	-3.9**	3.4
PARAGUAY	6.1***	2.6	3.4***	5.5***	1.8	3.5***	0.6**	0.7	-0.1
PERU	2.7*	-2.0***	-5.6*	4.1	-0.5*	-4.4*	-1.4	-1.5**	-1.2
VENEZUELA	-0.2	0.6	0.1	-0.7	-0.5	2.4	0.5	1.1	-2.3
TROPICAL SOUTH AMERICA	4.5***	2.4***	1.6**	9.4***	1.7*	0.8	-5.0*	0.7	0.8
COSTA RICA	3.8***	2.6	11.5**	3.2	-5.2***	17.7**	0.6	7.9***	-6.1**
SALVADOR	4.1***	2.1	8.3**	6.6***	0.9	5.6**	-2.5*	1.2	2.7
GUATEMALA	3.6***	2.7***	3.1**	0.2	3.8***	7.1**	3.4***	-1.2***	-4.0**
HONDURAS	8.0***	-17.6***	-3.0	1.5**	-4.3***	-8.9**	6.5***	-13.2***	5.9**
NICARAGUA	5.3***	5.0***	1.8*	5.0***	5.2***	2.8*	0.3	-0.2	-1.1
PANAMA	11.6***	3.5**	-2.8	3.0***	3.8*	1.4**	1.7***	-0.3	-4.2*
CENTRAL AMERICA, PANAMA	17.7***	0.1	2.8**	14.8***	1.1***	4.4***	2.9**	-1.0**	-1.6*
BARBADOS	-4.7**	1.6***	1.7**	-2.6*	2.5***	2.3***	-2.1***	-0.8***	-0.6*
HAITI	8.6***	2.7***	0.5	7.7***	1.6***	1.8**	0.8***	1.1***	-1.3
JAMAICA	0.3	8.8**	-12.9**	-15.2***	5.5**	-8.0*	15.5***	3.3***	-4.9*
TRINIDAD ETC	-2.3*	4.5***	-10.5***	-2.3*	-0.1	-10.5***	0.0	4.6***	0.0
CARIBBEAN	16.0*	3.3***	-0.8	14.6*	1.8***	1.3**	1.4***	1.5***	-2.1
TROPICAL LATIN AMERICA	6.0***	-1.5***	-1.5*	5.6***	0.8***	-0.2	0.4	-2.3***	-1.2**
ARGENTINA	2.1*	-4.8**	3.8*	3.3***	-2.4**	1.8*	-1.3**	-2.4	2.0
TEMPERATE SOUTH AMERICA	2.1*	-4.8**	3.8*	3.3***	-2.4**	1.8*	-1.3**	-2.4	2.0
LATIN AMERICA	5.9***	-1.5***	-1.4*	5.5***	0.8***	-0.2	0.4	-2.3***	-1.2**

LEVEL OF SIGNIFICANCE IS REPRESENTED AS FOLLOWS

*** P<0.005 ** P<0.01 * P<0.05

CASSAVA TRENDS IN AREA LEVEL BY COUNTRY 1960/83

COUNTRY	ANNUAL GROWTH RATE IN AREA 1960/83 %	AVERAGE AREA 1960/62	AVERAGE AREA 1970/72 -1000 HA	AVERAGE AREA 1981/83
BRASIL	1.6477 ***	1399.7	2049.5	2080.3
MEXICO	-0.7202	0.0	2.3	2.0
	1.6547 ***	1399.7	2051.8	2082.3
BOLIVIA	2.3275 ***	10.5	18.0	18.0
COLOMBIA	2.7980 ***	138.0	216.7	208.7
CUBA	3.4613 ***	24.0	33.0	49.0
DOMINICAN RP	0.5324	15.0	16.0	16.0
ECUADOR	0.0467	25.0	37.5	24.3
PARAGUAY	2.6158 ***	69.7	97.0	140.0
PERU	-0.4778	29.3	36.9	30.0
VENEZUELA	1.0858	40.0	39.9	41.0
TROPICAL SOUTH AMERICA	3.4914 ***	351.5	495.0	527.0
COSTA RICA	0.4335	2.0	2.9	4.0
EL SALVADOR	3.0805 ***	1.0	1.2	2.0
GUATEMALA	3.2508 ***	2.0	2.2	3.7
HONDURAS	-3.2138 ***	4.0	3.7	2.0
NICARAGUA	4.6361 ***	3.0	4.4	7.0
PANAMA	5.3766 ***	2.0	4.4	5.0
CENTRAL AMERICA	4.7474 ***	14.0	18.8	23.7
BARBADOS	1.6574 ***	0.0	0.0	0.0
GUYANA	-0.0	1.0	0.0	0.0
HAITI	3.5437 ***	30.0	51.7	64.0
JAMAICA	-1.7741 *	4.0	2.3	2.0
TRINIDAD ETC	-1.7106 ***	0.4	0.4	0.3
CARIBBEAN	5.0195 ***	35.4	54.4	66.3
TROPICAL LATIN AMERICA	2.0124 ***	1800.6	2620.0	2699.3
ARGENTINA	0.3887	19.7	25.2	23.0
TEMPERATE SOUTH AMERICA	0.3887	19.7	25.2	23.0
LATIN AMERICA	1.9967 ***	1820.3	2645.2	2722.3

LEVEL OF SIGNIFICANCE IS REPRESENTED AS FOLLOWS

*** P<0.005 ** P<0.01 * P<0.05

CASSAVA TRENDS IN YIELD LEVEL BY COUNTRY 1960/83

COUNTRY	ANNUAL GROWTH RATE IN YIELD 1960/83 %	AVERAGE YIELD 1960/62	AVERAGE YIELD 1970/72 KG/HA	AVERAGE YIELD 1981/83
BRASIL	-1.0146 ***	13214.7	14559.9	11314.2
MEXICO	-1.8323	0.0	20000.0	19333.3
	-1.0115 ***	13214.7	14566.0	11321.9
BOLIVIA	0.1549	.	12936.8	11816.4
COLOMBIA	3.3826 ***	.	8000.0	10389.8
CUBA	-0.0249	6750.0	6565.7	6769.9
DOMINICAN RP	-2.8246 ***	.	11434.6	5307.9
ECUADOR	-0.2370	9006.8	10093.1	9068.1
PARAGUAY	0.2887 **	14213.1	13633.3	14995.7
PERU	-0.2986	13061.1	12876.5	10779.4
VENEZUELA	-0.8598	9029.3	8011.6	8768.2
TROPICAL SOUTH AMERICA	-0.3555	14352.0	9877.1	10984.6
COSTA RICA	3.1003 ***	4500.0	3641.3	5555.6
SALVADOR	1.6149 ***	9000.0	10739.2	12000.0
GUATEMALA	-0.3986	2500.0	2986.9	2388.9
HONDURAS	-2.8759 ***	4166.7	7215.2	3500.0
NICARAGUA	-0.4896 ***	4000.0	4071.1	3809.5
PANAMA	-1.5111 ***	.	8380.0	6933.3
CENTRAL AMERICA, PANAMA	0.2581	4678.6	5927.3	5179.8
BARBADOS	-1.2802 ***	32258.1	26597.2	24390.2
GUYANA	0.0	10000.0	0.0	0.0
HAITI	0.6609 ***	3666.7	4160.4	4062.3
JAMAICA	6.2212 ***	2750.0	8639.6	9500.0
TRINIDAD ETC	2.1409 ***	8948.5	9308.3	12474.1
CARIBBEAN	0.9039 ***	3655.9	4397.0	4273.2
TROPICAL LATIN AMERICA	-0.9345 ***	13047.7	13401.6	11028.9
ARGENTINA	-1.5179 ***	12613.5	10949.5	9218.7
TEMPERATE SOUTH AMERICA	-1.5179 ***	12613.5	10949.5	9218.7
LATIN AMERICA	-0.9375 ***	13042.7	13378.3	11013.6

LEVEL OF SIGNIFICANCE IS REPRESENTED AS FOLLOWS
 *** P<0.005 ** P<0.01 *P<0.05

CASSAVA

PRODUCTION, RELATIVE IMPORTANCE IN THE REGION
AND PER CAPITA PRODUCTION LEVELS

COUNTRY	P R O D U C T I O N -----1000 MT-----			PERCENTAGE OF TOTAL	PER CAPITA PRODUCTION
	1960/62	1970/72	1981/83	% 1981/83	KG 1981/83
BRUNEI	2	3	3	0.006	12
BURMA	4	11	50	0.105	1
CHINA	203	2074	3926	8.269	4
INDIA	1937	5457	5423	11.424	8
INDONESIA	11317	10518	13372	28.168	87
KAMPUCHEA DM	13	22	94	0.197	13
LAO	11	17	72	0.152	18
MALAYSIA	0	278	370	0.779	25
PHILIPPINES	500	437	2181	4.594	42
EAST TIMOR	16	14	0	0.000	0
SINGAPORE	3	3	1	0.002	0
SRI LANKA	298	348	556	1.172	36
THAILAND	1675	3506	18581	39.142	378
VIET NAM	939	981	2843	5.989	51
ASIA	16917	23670	47472	100.000	22

CASSAVA

ANNUAL GROWTH RATES

COUNTRY	PRODUCTION			AREA			YIELD		
	1960/69	1969/78	1978/83	1960/69	1969/78	1978/83	1960/69	1969/78	1978/83
BRUNEI	1.1	3.7*	0.0	-2.0	0.5	24.0*	3.1***	3.2	-24.0**
BURMA	19.8***	9.0*	17.1**	17.2**	11.2**	17.4*	2.6	-2.2**	-0.3
CHINA	31.1***	3.6***	9.2**	31.6***	3.7***	3.5*	-0.5	-0.1	5.8*
INDIA	11.8***	2.8**	-2.7*	2.9**	0.9**	-3.1*	8.8***	1.9*	0.4
INDONESIA	-0.4	2.5***	0.2	0.4	-0.6	-0.7	-0.8*	3.1***	0.9**
KAMPUCHEA DM	13.7**	21.3***	-15.6*	17.8***	25.7***	-15.9	-4.1	-4.4***	0.3
LAO	2.4*	14.6***	5.9***	-7.4	12.8***	6.6*	9.8**	1.7***	-0.7
MALAYSIA	2.8	4.0***	-0.3	3.3	2.3	-1.7	-0.5**	1.8	1.4**
PHILIPPINES	-1.3	17.3***	2.6	-1.4*	9.8***	3.5*	0.1	7.5***	-0.9
EAST TIMOR	4.9	-6.7	0.0	1.0	3.4**	0.0	4.0	-10.1	0.0
SINGAPORE	4.6***	-16.6***	0.2	5.9***	-17.1***	-15.6	-1.4*	0.5	15.9
SRI LANKA	3.5**	7.8**	0.4	7.8***	7.0	-1.5	-4.3***	0.8	1.9
THAILAND	6.5**	20.1***	4.3	7.9***	21.4***	3.8	-1.3*	-1.3	0.6
VIET NAM	0.9	13.8***	-6.0***	2.7	12.3***	2.6*	-1.8**	1.5***	-8.6***
ASIA	3.7***	8.0***	1.6	2.3***	5.3***	1.2	1.4***	2.6***	0.4

CASSAVA

TRENDS IN YIELD LEVEL BY COUNTRY 1960/83

COUNTRY	ANNUAL GROWTH	AVERAGE YIELD	AVERAGE YIELD	AVERAGE YIELD
	RATE IN YIELD			
	1960/83		KG/HA	
	%			
BRUNEI	-1.4490	5770.3	8000.3	3000.0
BURMA	-0.0952	10526.3	10279.4	9366.7
CHINA	0.4740	12656.4	12165.5	15794.5
INDIA	3.7330 ***	7163.7	15561.4	17073.6
INDONESIA	1.3936 ***	7819.0	7390.8	9804.2
KAMPUCHEA DM	-4.5087 ***	13000.0	10815.2	6466.7
LAO	3.1348 ***	7750.0	14395.9	14400.0
MALAYSIA	0.7829	0.0	9638.9	10571.4
PHILIPPINES	3.0307 ***	5505.9	5208.2	10170.0
EAST TIMOR	-2.0791	2666.7	1983.7	0.0
SINGAPORE	-4.6449	13095.2	9625.1	11071.3
SRI LANKA	0.8787	7871.1	5598.3	9432.8
THAILAND	-0.8688 ***	17223.4	13863.0	14658.7
VIET NAM	-0.6899 **	8099.9	7208.6	5927.4
ASIA	1.9839 ***	8106.4	9373.5	11802.3