

Foreign Agricultural Service *GAIN* Report

Global Agriculture Information Network

Required Report - public distribution

GAIN Report #TH3048

Date: 4/24/2003

Thailand

Sugar

Annual

2003

Approved by:

Rodrick McSherry, Agricultural Counselor U.S. Embassy, Bangkok, Thailand

Prepared by:

Ponnarong Prasertsri, Agricultural Specialist

Report Highlights:

In MY 2003, sugarcane production is forecast to reach 69.0 mmt, leading to the continued increase in sugar output (raw value) to 6.8 mmt. Sugar exports are expected to grow significantly for the second consecutive year.

Executive Summary	. <u>Page 1 of 19</u>
1. Sugarcane	Page 2 of 19
1.1 Production	_
1.2 Consumption	
1.3 Policy	
2. Sugar	. Page 4 of 19
2.1 Production	
2.2 Consumption	
2.3 Stocks	
2.4 Trade	
2.5 Policy	
3. Supplementary Tables	. Page 8 of 19
Table 1: Thailand's Planted Area of Sugarcane by Region and Provinces	
Table 2: Thailand's Sugarcane Production by Region and Province	_
Table 3: Thailand's Sugarcane Yield by Region and Province	
Table 4: Sugar Utilization by Domestic Industry	
Table 5: Average Prices of Domestic Plantation White Sugar and Sugarca	
Table 6: Average Final Prices of Sugarcane by Zone, First Applied in 199	
Table 7: Monthly Exports (FOB) Prices for Raw Sugar (Baht/Ton)	Page 14 of 19
Table 8: Monthly Exports (FOB) Prices for Plantation White Sugar (Baht/	
Table 9: Thailand's Annual Raw Sugar Export (MTRV)	
Table 10: Thailand's Annual White and Refined Sugar Export (MTRV).	
Table 11: Thailand's Average Quality of Cane Measured by C.C.S	
Table 12:Business Tax Rates for Cane and Sugar, 1976/77 to Present	

Executive Summary

In MY 2003 sugarcane production will likely increase to 69.0 million metric tons with continued expansion of planted areas. As a result, sugar output is forecast to reach 6.8 mmt (raw value). However, due to unexpected heavy rainfall during the harvest period, sucrose content is expected to be lower than the previous year. As a result, sugar yield could be lower than last year. Also, the proportion of burned cane remained high.

Demand for sugar is forecast to continue its upward trend in line with the expansion in domestic consumption and promising export markets. Domestic consumption of sugar will likely increase slightly to 1.89 mmt, following the growing economy. Exports of sugar are estimated to grow sharply for the second consecutive years, in particular to the Russian market. As a result, the carry-over stock is expected to be lower than the previous year.

Regarding the downward pressure of global prices, the Thai government cooperated with Australia and Brazil to file a petition with the WTO against the EU's sugar export subsidies. This could result in sugar price stabilization in the long-run, which would help to settle the huge debt burden of the state-run Cane and Sugar Fund.

1. Sugarcane

PSD Table							
Country	Thailand						
Commodity	Sugar Cane	for Centrif	ugal		(1000 HA)	(1000 MT)	
	2001 R	Revised	20	02	20	003	
	USDA Official[Old]	Post Estimate[New]	USDA Official[Old]	Post Estimate[New]	USDA Official[Old]	Post Estimate[New]	
Market Year Begin	12	/2000	12	/2001	12/2002		
Area Planted	940	940	970	970	995	995	
Area Harvested	920	920	950	950	970	970	
Production	48652	48652	59493	59400	61240	69000	
TOTAL SUPPLY	48652	48652	59493	59400	61240	69000	
Utilization for Sugar	48652	48652	59493	59400	61240	69000	
Utilizatn for Alcohol	0	0	0	0	0	0	
TOTAL UTILIZATION	48652	48652	59493	59400	61240	69000	

1.1 Production

The 2002/03 sugar cane production is forecast to increase for the second consecutive year to 69.0 mmt due mainly to the continued expansion of planted areas. Also, the overall weather conditions are better than expected, resulting in a yield improvement to 68.3 ton/hectare, compared to last year's level of 62.5 ton/hectares. However, due to unexpected heavy rainfall during the harvested period, cane's sucrose content is expected to be lower than the previous year. As a result, sugar yield could be lower than last year. Moreover, most cane growers are reported to burn their cane before cutting as labor can harvest it faster than fresh cut although the 20 baht per ton fine rule against burned cane is still in effect.

1.2 Consumption

Despite a significant increase in cane production, the capacity utilization of most mills is still low, running at approximately 60 percent of their capacity due to the insufficient supply of local sugar cane. The official estimate of annual demand by Thai mills (46 mills) is at 78 mmt of cane. In MY 2002/03, an average extraction rate is estimated to be lower than 100 kg/ton due to low quality of cane.

1.3 Policy

The production policy is still focusing on yield improvement in order to meet mill capacity. The target is to boost average yield to 88 tons/hectare during 2004-2008. As for the financial assistance in MY 2003, the Bank for Agriculture and Agricultural Cooperatives (BAAC) continued to provide a credit line of Baht 10 billion (with funding of Baht 5 billion from the

Bank of Thailand) for working capital for cane growers. As a result, cane growers could cash their cheques in advance via the BAAC at the discount rate of 6 percent. Basically, cane millers issue cheques as their advance payments for sugar cane to cane growers at the beginning of cultivation period.

As for price policy, the MY 2003 initial cane price was agreed at 500 Baht/ton (roughly \$11.60), down from last year's initial price of 530 Baht/ton (roughly \$12.30), following mainly the downward trend of global prices. However, this initial price is still lower than the estimated production cost of 586 Baht/ton. Meanwhile, the state-run Cane and Sugar Fund, which will be responsible for the cane growers' repayment to cane millers if the initial price are greater than the final price, is now facing a huge outstanding debt to BAAC in the amount of Baht 6.7 billion (Baht 6.35 billion for principal and Baht 0.35 billion for interest). Therefore, the debt burden to the government will likely rise to approximately Baht 11.5 billion in order to close the gap between the initial price and the production cost of cane growers. Recently the government has decided not to raise the retail sugar price by 2 Baht/kg as proposed by some authorities in order to settle this debt. The government has discussed with the major sugar producing countries of Australia and Brazil to press the European Union to stop sugar export subsidies. This action could result in long-term global price stabilization.

2. Sugar

PSD Table						
Country	Thailand					
Commodity	Centrifugal	Sugar			(1000 MT)	
	2001R	2001Revised		stimate	2003F	orecast
	USDA Official[Old]	Post Estimate[New]	USDA Official[Old]	Post Estimate[New]	USDA Official[Old]	Post Estimate[New]
Market Year Begin	12.	/2000	12.	/2001	12	/2002
Beginning Stocks	608	608	571	571	828	979
Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	5107	5107	6397	6397	6585	6831
TOTAL Sugar Production	5107	5107	6397	6397	6585	6831
Raw Imports	0	0	0	0	0	0
Refined Imp.(Raw Val)	0	0	0	0	0	0
TOTAL Imports	0	0	0	0	0	0
TOTAL SUPPLY	5715	5715	6968	6968	7413	7810
Raw Exports	2279	2279	2450	2180	2700	2800
Refined Exp.(Raw Val)	1115	1115	1840	1977	1870	2300
TOTAL EXPORTS	3394	3394	4290	4157	4570	5100
Human Dom. Consumption	1750	1750	1850	1832	1970	1900
Other Disappearance	0	0	0	0	0	0
Total Disappearance	1750	1750	1850	1832	1970	1900
Ending Stocks	571	571	828	979	873	810
TOTAL DISTRIBUTION	5715	5715	6968	6968	7413	7810

2.1 Production

In MY 2003, sugar output will likely increase to 6.8 mmt (raw value) in line with an increase in cane production. The sucrose content will likely be lower than the previous season's level due to a high proportion of low quality cane. As usual, sugar output is divided into three quotas: Current Quota A--1.89 mmt (compared to 1.85 mmt in 2001/02) of plantation white sugar for domestic consumption; Quota B--800,000 tons of raw sugar to cover long term export contracts; and Quota C (the balance)--for export to the international market. The government requires that mills must give priority to the production of plantation white sugar for the local market, and raw sugar for Quota B, over sugar for export under Quota C.

2.2 Consumption

In MY 2003, domestic consumption should continue its upward trend to 1.89 mmt in line with the growing economy. The official estimate of per capita consumption is about 27 kgs of which 9 kgs are direct consumption and 18 kgs are indirect consumption via food and beverages.

In CY 2002, domestic consumption of sugar increased slightly to 1.83 mmt. Household consumption accounted for about 70 percent of total domestic consumption. The balance is for industrial consumption, about 12 percent for the beverage industry, 9 percent for the food industry, 7 percent for dairy products, and the remainder for pharmaceutical and other food industries (such as confectionary). However, the beverage industry demand for sugar continues to decline, reflecting more use of high fructose syrup (HFS) due mainly to its cost advantage. Trade sources reported that domestic HFS output will continue its upward trend, reaching approximately 100,000 mt in 2003 as authorities are allowing more factories to produce HFS from cassava starch in Thailand.

2.3 Stocks

Despite a significant increase in cane production, MY 2003 carry-over stocks will likely be at 792 mmt, down slightly from the previous year's level of 961 mmt. This is mainly due to the anticipated strong export performance.

2.4 Trade

In MY 2003, sugar exports are expected to increase further. Trade sources reported that Indonesia would continued to be a major export market for Thai sugar, despite competition from cheaper Indian sugar. It is expected that the export prices of Indian sugar to Indonesia is cheaper than that of Thai sugar by \$15 /ton due mainly to Indian government export subsidies of \$17 /ton. Russia is expected to have good market potential for Thai raw sugar. It is likely that exports to Russia could increase from approximately 500,000 tons in CY 2002 to 1.0 mmt in the coming years. However, trade sources reported that exports to China and Japan could slow down due to the anticipated increase in domestic supply of sugar and lower demand for high-quality sugar from Thailand, respectively. As for export prices, trade sources reported that the prices remained low at approximately US 7 cent/lb (roughly \$154 /ton), compared with normal average prices of more than US 11 cent/lb (roughly \$243 /ton)

In CY 2002, Thai sugar exports increased significantly to 4.2 mmt, of which raw sugar accounted for about 52 percent. Indonesia remained as the largest export market for Thai sugar, taking 1.0 mmt, of which 0.6 mmt are plantation white and refined sugar. Exports to Russia increased significantly to 491,046 mt in response to the Russian government's protection policy for sugar industries which resulted in lower import prices against the high Russian domestic prices. Most of Thai sugar exports to Russia are raw sugar, amounting to 484,253 mt. In contrast, exports to Japan and China declined sharply to 383,685 mt and 182,936 mt, respectively.

As usual, Quota C (export) sales are concluded 6 months prior to the start of the crushing season in November by seven exporting companies: The Thai Sugar Trading Corp., Ltd. (TSTC), Thailand Sugar Corp., Ltd. (TSC), Siam Sugar Export Corp., Ltd. (SSEC), The Sugar Industry Trading Co., Ltd. (SITCO), K.S.L. Export Trading (KSL), Pacific Sugar Corp., Ltd. (PSC) and TISS Co., Ltd. that belongs to the Thai Identity Sugar Group of Companies which started its sugar exports in 1995.

The Thai Cane and Sugar Corporation (TCSC), an organization comprised of millers, producers and the government for handling long-term contracts, is responsible for pricing and selling the 800,000 mt of raw sugar under Quota B. One-half of this amount is allocated to three international sugar brokers. The other half is sold to local millers who export the sugar through the six exporting companies listed above.

The MY 2003 sugar imports, like MY 2002, will likely be insignificant, although the government import policy on sugar followed the WTO agreement which limited sugar imports to a 65% tariff rate under quota of 13,687 mt in CY 2003.

Export Trade Matr	Export Trade Matrix		
Country	untry Thailand		
Commodity	Centrifugal Su	ugar	
Time period	Jan-Dec	Units:	MTRV
Exports for:	2001		2002
U.S.	11822	U.S.	14614
Others		Others	
Indonesia	801,665	Indonesia	1,004,136
Japan	692,808	Japan	383,685
China	411,730	China	182,936
Malaysia	335,012	Malaysia	369,884
Korea, Rep.	256,153	Korea, Rep.	136,344
Cambodia	185,901	Cambodia	244,344
Taiwan	71,795	Taiwan	102,794
Russia	73,955	Russia	491,046
Singapore	63,573	Singapore	158,554
Sri Lanka	58,014	Sri Lanka	104,465
Total for Others	2950606		3178188
Others not Listed	348331		965633
Grand Total	3310759		4158435

2.5 Policy

Due to the GATT, Thailand has set an import quota for sugar since 1995 as follows:

Year	Import Quota	Tariff Rate (Percent)
	(M.T.)	Within Quota	Outside Quota
1995	13,105.00	65	103
1996	13,177.78	65	102
1997	13,250.56	65	101
1998	13,323.33	65	100
1999	13,396.11	65	99
2000	13,468.89	65	98
2001	13,541.67	65	97
2002	13,614.44	65	96
2003	13,687.22	65	95
2004	13,760.00	65	94

As for financial assistance to sugar exporters, the government stopped providing packing credits to the sugar industry since the beginning of 2003, following the WTO agreement on export subsidies. Official sources reported that a couple of years ago, the packing credit facilities which were provided by the EXIM bank, with funding from the Bank of Thailand, were not attractive as compared to the financial facilities of commercial banks.

Regarding the current sugar subsidies, particularly in the EU, Thai Cane and Sugar Board approved a fund of Baht 7 million from the state-run Cane and Sugar Fund to support the Thai Cane and Sugar Corporation (TCSC) in cooperating with Australia and Brazil to file a petition with the WTO against EU subsidies on sugar. Thailand has joined force with other 13 sugar producing countries under the Global Alliance for Sugar Trade Reforms and Liberalization. The members include Australia, Brazil, India, Canada, Columbia, Costa Rica, Honduras, El Salvador, Guatemala, Panama, South Africa, Chile, and Thailand.

3. Supplementary Tables

Table 1: Thailand's Planted Area of Sugarcane by Region and Provinces

Region/Province	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02			
	(Hectares)								
Northeast:	326203	328832	330930	351641	319119	400217			
Udon Thani	77757	78100	76241	75246	67355	80613			
Khon Kaen	51631	52596	54519	61725	52178	70003			
Chaiyaphum	67714	68529	72001	73863	69958	78431			
Nakhon Ratchasima	66156	66731	65448	75638	67131	77346			
Buriram	13563	12600	11669	10380	11468	18442			
Loei	15372	15709	14685	14321	13986	17317			
Kalasin	9668	10215	11506	12518	12473	22913			
Mukdahan	11432	11296	11728	12286	11759	16255			
Nakhon Phanom	1668	1546	1544	1414	1362	1563			
North:	239239	222212	211523	206863	189010	219415			
Nakhon Sawan	63913	59188	54186	55169	48879	60201			
Kampheang Phet	76404	70208	63912	64369	55014	67745			
Uttaradit	13259	12758	12182	11448	11626	14174			
Lampang	7409	7217	7252	5989	7125	7524			
Uthai Thani	23958	18348	17556	17699	16070	18428			
Sukhothai	26541	25819	26484	25734	24636	25085			
Central:	444743	392536	375078	379347	368894	391537			
Kanchanaburi	130842	118393	112966	108908	110360	115916			
Ratchaburi	53117	50788	52412	51933	51102	52195			
Chon Buri	32708	25968	24666	22048	23656	24299			
Suphan Buri	95818	82595	77207	77922	74709	83724			
Nakhon Pathom	16797	15345	14453	13637	13942	13655			
Prachuab Khiri Khan	11251	11829	11333	9963	10596	10974			
Rayong	8552	7281	6466	4743	5691	6374			
Chachoeng Sao	13530	12418	11535	11332	10730	11277			
L South:									
L Country Total	1010184	943580	917532	937852	877023	1011169			

Source: Office of Agricultural Economics, Ministry of Agricultural and Cooperatives

Table 2: Thailand's Sugarcane Production by Region and Province

Region/Province	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02		
			Met	tric Ton				
Northeast:	17782489	15353041	18859249	19439101	18153103	24020428		
Udon Thani	4139408	3555993	4739751	4456666	3801953	5092946		
Khon Kaen	2800441	2393946	2885295	3565935	3005110	4366791		
Chaiyaphum	4030402	3155356	3991115	4133436	3922888	4551210		
Nakhon Ratchasima	3615865	3043213	3604451	3803472	3807792	4375615		
Buriram	723636	636805	666633	503285	650455	1042246		
Loei	814609	785889	845652	775892	808648	1072701		
Kalasin	501501	531595	673956	686557	728772	1390837		
Mukdahan	518911	592987	694191	695011	685759	994973		
Nakhon Phanom	82924	80946	90916	71271	81185	95105		
North:	13372021	10258143	11391153	11946037	10391682	12863333		
Nakhon Sawan	3554445	2703247	2739939	3195067	2611342	3460966		
Kampheang Phet	4975791	3252559	3688798	3971814	3192862	4325242		
Uttaradit	569112	553698	608758	571142	587852	757304		
Lampang	275120	261471	311289	263856	321868	351366		
Uthai Thani	1183944	892968	943525	1017767	852400	1013917		
Sukhothai	1360970	1142643	1419120	1496149	1406263	1430158		
Central:	25239428	17854351	20081165	21427704	21018101	23129216		
Kanchanaburi	7113885	5335241	5940721	5943487	6061219	6598011		
Ratchaburi	2716465	2265186	2685970	2716859	2706931	2844275		
Chon Buri	1632467	1113262	1270167	1190200	1232607	1352321		
Suphan Buri	6414039	3671385	4303322	4981467	4979019	5661125		
Nakhon Pathom	1051185	702991	821705	870291	807196	802515		
Prachuab Khiri Khan	557388	526979	566330	482758	526473	568377		
Rayong	401365	336527	341905	222284	296331	348784		
Chachoeng Sao	658189	554664	594259	604661	582383	647729		
South:								
L Country Total	56393938		50331567	52812842	49562886	60012977		

Source: Office of Agricultural Economics, Ministry of Agricultural and Cooperatives

Table 3: Thailand's Sugarcane Yield by Region and Province

Region/Province	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
			Kilogran	ns/Hectare		

Northeast:	54514	46690	56989	55281	56885	60018
Udon Thani	53235	45531	62168	59228	56446	63177
Khon Kaen	54239	45515	52923	57771	57594	62380
Chaiyaphum	59521	46044	55432	55961	56075	58028
Nakhon Ratchasima	54656	45604	55074	50285	56722	56572
Buriram	53354	50539	57127	48488	56720	56515
Loei	52992	50029	57586	54178	57818	61946
Kalasin	51875	52040	58573	54845	58428	60700
Mukdahan	45389	52496	59192	56568	58320	61211
Nakhon Phanom	49700	52372	58883	50401	59590	60834
North:	55894	46164	53853	57749	54980	58625
Nakhon Sawan	55614	45672	50566	57914	53425	57490
Kampheang Phet	65125	46328	57716	61704	58037	63846
Uttaradit	42924	43399	49972	49890	50563	53429
Lampang	37134	36232	42924	44055	45176	46700
Uthai Thani	49417	48669	53744	57505	53042	55020
Sukhothai	51277	44256	53583	58138	57081	57013
Central:	56751	45485	53539	56486	56976	59073
Kanchanaburi	54370	45064	52588	54574	54922	56920
Ratchaburi	51141	44601	51247	52315	52971	54494
Chon Buri	49911	42870	51494	53981	52106	55654
Suphan Buri	66940	44451	55738	63929	66645	67617
Nakhon Pathom	62581	45813	56852	63816	57895	58771
Prachuab Khiri Khan	49542	44549	49971	48453	49687	51791
Rayong	46934	46222	52877	46870		
Chachoeng Sao	48648	44666	51518	53357	54277	57438
South:						
Country Total	55825	46065	54855	56313	56513	59350

Source: Office of Agricultural Economics, Ministry of Agricultural and Cooperatives

Table 4: Sugar Utilization by Domestic Industry

Unit: Metric Ton

Unit: Metric Ton								
Type of Industry	1995	1996	1997	1998	1999	2000	2001	2002
BEVERAGES								
Refined Sugar	90306	88708	98765	114100	113545	134105	145616	130704
White Sugar	47547	46774	69982	79558	74962	118520	79513	89223
Sub - Total	137853	135482	168747	193658	188507	252625	225129	219927
CAKE & BREAD								
Refined Sugar	44290	46066	57669	13600	11090	5582	4131	5273
White Sugar	1413	1006	15641	8054	9365	7599	2517	3890
Sub - Total	45703	47072	73310	21654	20455	13181	6648	9163
ALCOHOL BASE DRINK								
Refined Sugar	1917	2975	nil	nil	nil	nil	nil	nil
White Sugar	13	1467	nil	nil	nil	nil	nil	nil
Sub - Total	1930	4442	0	0	0	0	0	0
FRUIT & FOOD PRODUCTS								
Refined Sugar	23999	26634	36110	66547	82092	57831	56646	54368
White Sugar	15937	20336	32040	145579	164462	135553	84914	103057
Sub - Total	39936	46970	68150	212126	246554	193384	141560	157425
DAIRY PRODUCTS								
Refined Sugar	31462	32239	35069	34310	31330	15874	16218	16790
White Sugar	42419	47686	63134	115761	109301	149528	112715	115520
Sub - Total	73881	79925	98203	150071	140631	165402	128933	132310
CONFECTIONARY PRODUC	TS							
Refined Sugar	1001	1829	3882	4047	5593	3982	3395	4604
White Sugar	2818	5501	4731	18567	16071	16526	15294	17255
Sub - Total	3819	7330	8613	22614	21664	20508	18689	21859
PHARMACEUTICAL PRODU	CTS & MISCH	ELLANEOU	S				_	
Refined Sugar	35542	53295	77580	102944	84907	38452	30097	22254
White Sugar	1417	1044	2016	3962	3624	11933	7201	2914
Sub - Total	36959	54339	79596	106906	88531	50385	37298	25168

Table 5: Average Prices of Domestic Plantation White Sugar and Sugarcane

Calendar	Plantation White Sug	ar	Initial	Actual
Year	Wholesale	Retail	Sugarcane	Sugarcane
	(Bht/100 kg)	(BHT/KG)	(Bht/M.T.)	(Bht/M.T.)
1980	1,011	11.65	Nil	650
1981	1,019	11.51	Nil	510
1982	1,075	11.94	350	381
1983	1,091	12.00	421	421
1984	1,162	12.00	395	380
1985	1,097	12.00	330	388
1986	1,099	12.00	375	408
1987	1,097	12.00	405	462
1988	1,098	12.00	450	527
1989	1,098	12.00	460	596
1990	1,099	12.00	460	442
1991	1,099	12.00	399	480
1992	1,099	12.00	420	516
1993	1,099	12.00	490	533
1994	1,099	12.00	520	569
1995	1,099	12.00	500	538
1996	1,099	12.00	500	561
1997	1,099	12.00	600	703
1998	1,100	12.50	500	485
1999	1,100	12.50	450	478
2000	1,177	12.50	600	689
2001	1,177	13.25	530	NA
2002	1,177	13.25	500	NA

Note: The revenue sharing system of 70:30 to cane planters and millers started in 1982/83 when the initial cane price began to be quoted.

The purchasing cane based on C.C.S. system starts in 1993/94 crushing season with the standard quality of cane at 10 C.C.S.

Average final cane price has been split into different assessments for different regions since 1996/97.

The retail price of plantation white sugar has been raised to 13.25 baht/kg since Jun 2, 2000.

Source: Office of the Cane and Sugar Board, Ministry of Industry

Table 6: Average Final Prices of Sugarcane by Zone, First Applied in 1996/97

Zone	Number of						
	Sugar Mills	Su	garcane Prio	ces (Baht/To	n) at 10 C.C	1	

		1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
North 1	4	572.12	728.98	495.15	464.63	678.10	531.19
North 2	3	535.57	693.97	449.20	464.63	678.10	501.89
North 3	1	526.47	654.96	459.43	464.63	678.10	501.89
North 4	1	541.77	698.18	483.43	464.63	678.10	529.99
North 5	1	526.25	692.21	454.78	464.63	678.10	529.99
Central 1	1	514.65	650.69	478.49	464.63	678.10	529.99
Central 2	1	551.82	700.16	499.91	464.63	678.10	529.99
Central 3	2	564.93	675.04	464.70	464.63	633.00	514.64
Central 4	14	567.05	701.69	493.44	483.86	706.85	530.46
Central 5	1	538.81	640.02	478.44	486.23	680.00	548.43
East	5	556.66	683.82	488.28	490.80	697.38	541.30
Northeast	12	575.29	715.26	488.37	482.28	685.04	537.71
Note: Aver	age Final Pri	ces of Sugar	cane by Zor	ne was firstly	applied in	1996/97.	
Cane	price is divi	ded into five	e zones in 19	999/00 crush	ing season.		
Cane price is divided into five zones in 1999/00 crushing season. North 1-5 share							
the s	same price in	zone 1 of 1	0 mills plus	4 mills in Ce	entral 1-3; C	entral 4 cov	er 14
mills in zone 2; Central 5 cover only one mill in zone 3 while there has been no							
char	nges in the Ea	ast (zone 4) a	and Northea	st (zone 5).			
Ave	rage prices o	of cane are re	e-arranged a	gain in 2001	/02 for 8 zoi	nes:	
Zon	ne 1 covers 4	mills;					
Zone 2 covers 4 mills;							
Zone 3 covers 5 mills;							
Zone 4 covers 13 mills;							
Zone 5 covers 1 mill which is Suphanburi sugar mill in central plain;							
Zone 6 covers 1 mills in central plain;							
Zone 7 covers 5 mills in the East;							
Zone 8 covers 13 mills in the Northeast.							

Table 7: Monthly Exports (FOB) Prices for Raw Sugar (Baht/Ton)

Month	1995	1996	1997	1998	1999	2000	2001	2002
January	7059	6652	6700	13936	6931	4917	9934	6820
February	7363	6796	6679	11263	6923	4973	9713	6910
March	7127	6595	6580	10826	6828	4569	9102	6269
April	7235	6487	6634	10372	6128	4763	9321	6408
May	7289	6510	6598	10306	5506	5293	9546	6194
June	7746	7019	6711	10459	5173	5912	9428	6323
July	7697	7055	8081	11400	5288	5061	9542	6442
August	7661	7574	8388	10514	6146	7458	10044	6504
September	7839	7537	9254	9013	5242	7535	9617	6782
October	7738	7954	9780	7728	5636	8391	9228	6702
November	7431	7384	9676	7839	5558	9602	7514	6330
December	7221	6347	12197	10109	4873	8041	7518	5808
Average	7439	6686	7195	10361	5842	5863	9368	6415

Table 8: Monthly Exports (FOB) Prices for Plantation White Sugar (Baht/Ton)

Month	1995	1996	1997	1998	1999	2000	2001	2002
January	7528	7842	7599	15342	8698	6453	10245	8850.89
February	7674	7730	7916	13781	7038	6161	10227	8578.14
March	8100	7576	8017	12618	8731	6056	9927	8141.91
April	8443	7902	7986	11700	8084	6321	9791	8323.85
May	8065	7835	8333	11660	7701	6868	9972	7970.58
June	8583	8270	7997	11731	7135	6698	10309	7714.38
July	8619	7994	8703	11153	6894	7220	10794	8181.73
August	8673	7959	10303	11482	7497	7421	11033	7741.88
September	8490	8385	10431	11217	6928	7904	10897	8393.23
October	8304	8980	11193	10498	7673	8943	10091	8750.83
November	8301	8799	12248	7358	7300	9617	10359	9045.72
December	9308	8601	14905	9071	7497	9706	10658	8829.76
Average	8335	7882	8777	12527	7632	7283	10260	8262.41

Table 9: Thailand's Annual Raw Sugar Export (MTRV)

Destination	1995	1996	1997	1998	1999	2000	2001	2002
China	1236453	500526	233932	85609	33858	90801	346979	168982
Congo						10260		
Indonesia		54378	160005	25804	341700	447543	402189	387971
Iran		28728						30780
Japan	530636	737457	703729	697216	529302	746735	690220	383685
Korea, DPR					3386	14056		6378
Korea, Rep. of	378943	623209	710402	163560	205301	318056	235919	110044
Malaysia	291891	367924	382698	84251	127470	233107	247957	240636
Mozambique	13338	2052	23598	15185				
Philippines	113917	223843	11286	134714	117547	21546		3078
Romania		25650			12312			
Russia	42169	44118	85158	77976	469087	291589	73955	484253
Singapore	8208	83106	43092	7182	17750	8161	26081	52644
Sri Lanka	73564	57559	47093	12312	78007	73462	52839	64384
Tanzania	20520	35223	2052	18981		29959	47145	33006
Taiwan						49248	71795	102794
Ukraine	39769	14364	28728					
United States	16539	32740	28284	21082	15111	14615	11597	14614
UAE		72254	34474	6156				45785
Vietnam	44118	15390	31550		14334		16416	
Others	43495	41389	38569	73027	9537	5870	15942	20075
Total	2853560	2959910	2564650	1423055	1974702	2355008	2239034	2149107.8

Table 10: Thailand's Annual White and Refined Sugar Export (MTRV)

Destination	1995	1996	1997	1998	1999	2000	2001	2002
Bangladesh			25358		41555	115759	36484	31717
Brunei		3210		3210	4280	2140	5374	7490
Burma	1035	5175			3601	47326	362	80
Cambodia	22276	38411	55430	62873	157702	77029	178405	244344
China	225499		2070	3780		4850	64751	13954
India			25470	13973	281555	8280		
Indonesia	332064	632468	1133846	752807	493278	834949	399476	616165
Iran	112350	329560	118580		74921	6624		63368
Jordan		44380			23214		4280	55961
Korea, DPR	8073	20364		28134	52892	65114	35713	46073
Korea, Rep of	2277				65	3815	20234	26300
Kenya		22819	15525	2381		2795		1074
Laos	12295	11412	16849	14973	20445	17334	39310	27899
Malaysia				3105	11980	48738	87055	129248
Maldives		3105				2070		
Pakistan		29725	92616			148355		
Philippines	77401	126151		21444	5843	42350	6596	31168
Russia	2675	2140						6793
Saudi Arabia	42881	34890						4280
Singapore	4863	8455	15502	6111	33768	16945	37492	105910
Somalia	3726	4280			2070	59597	69138	75555
Sri Lanka	20314	34007	32245	6210	24737	115304	5175	40081
Syria		27820						119379
Tanzania		10455	29187	26703	6210	6893	5175	23039
UAE	22656	59449	25680		4165			3210
Vietnam	68116	2087	19053	8280		471	49740	
Yemen	8570	89658			60379	217073	16560	52890
Others	6229	28005	34985	9212	56309	8585	10405	283349
								_
Total	973300	1568026	1642396	963196	1358969	1852396	1071725	2009327

Table 11: Thailand's Average Quality of Cane Measured by C.C.S.

Year	North	Central	East	Northeast	Average
101-0	2.22		10.00		
1977/78	9.99	9.65	10.09	11.6	9.85
1978/79	10.2	10.47	10.23	11.22	10.38
1979/80	10.3	9.43	10.82	10.63	9.74
1980/81	9.58	9.49	9.72	10.91	9.63
1981/82	9.85	9.94	9.97	10.58	9.97
1982/83	10.01	10.31	10.01	11.33	10.32
1983/84	9.95	10.45	10.12	11.88	10.47
1984/85	10.57	10.26	10.77	11.87	10.59
1985/86	10.27	10.8	10.59	11.79	10.82
1986/87	10.65	10.53	10.49	11.6	10.66
1987/88	9.97	9.67	9.58	11.43	9.98
1988/89	10.66	10.63	10.67	11.67	10.8
1989/90	10.46	10.18	10.44	11.23	10.46
1990/91	10.8	9.79	9.92	10.95	10.18
1991/92	11.22	10.54	10.65	11.63	10.91
1992/93 1/	11.66	11.05	11.9	12.58	11.6
1992/93	11.74	11.1	11.79	12.4	11.58
1993/94	11.35	10.98	11.09	11.95	11.3
1994/95	11.87	11.45	11.45	12.15	11.76
1995/96	11.37	11.61	11.69	12.47	11.84
1996/97	11.36	11.54	11.39	12.52	11.79
1997/98	10.98	10.2	10.73	11.89	11.11
1998/99	11.32	10.97	11.15	12.56	11.66
1999/00	11.41	11.07	11.29	12.16	11.7
2000/01	11.61	11.26	11.25	12.01	11.62
2001/02	11.61	11.33	11.32	11.15	11.78

^{1/} The first year that Office of the Cane & Sugar Board did the research and reported C.C.S. of cane which was previously done by the sugar mills.

Table 12:Business Tax Rates for Cane and Sugar, 1976/77 to Present

	Sugarcane	Business tax applied for	Export of Raw and White Sugar	Local Trade of White Sugar				
	Exp & Local Trd		(Actual Collected Taxe	s)				
1976/77		7.7	1.65	7.7				
1977/78		7.7	1.65	7.7				
1978/79		7.7		7.7				
1979/80	0.75	7.7		7.7				
1980/81	0.75	7.7	3.3	7.7				
1981/82	0.75	7.7	1.65	7.7				
1982/83	0.75	7.7	1.65	7.7				
1983/84	0.75	9.9	1.65	3.3				
1984/85	0.75	9.9	1.65	3.3				
1985/86		9.9						
1986/87		9.9						
1987/88	0.75	9.9		1.65				
1988/89	0.75	9.9		1.65				
1989/90	0.75	9.9		1.65				
1990/91	0.75	9.9	4.4	9.9				
1991/92	0.75	7.0 1/		7.0 1/				
1992/93	0.75	0.0 1/		7.0 1/				
1993/94	0.75	0.0 1/		7.0 1/				
1994/95	0.75	0.0 1/		7.0 1/				
1995/96	0.75	0.0 1/		7.0 1/				
1996/97	0.75	0.0 1/		7.0 1/				
1997/98	0.75	0.0 1/		10.0 2/				
1998/99	0.75	0.0 1/		7.0 3/				
1999/00	0.75	0.0 1/		7.0 3/				
2000/01	0.75	0.0 1/		7.0 3/				
2001/02	0.75	0.0 1/		7.0 3/				
1/ The value added to	ax of 7 percent became e	effective on January 1, 1992 a	nd applied only to domestic sales	; it does not apply to exports.				
2/ The government re	evised the value added to	ax from 7 to 10 percent on Au	igust 10, 1997.					
3/ The value added to	ax has brought back to 7	percent since Apr 1, 1999.						