



Required Report: Required - Public Distribution

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Prepared By: Karla Tay

Approved By: Andrew Hochhalter

Report Highlights:

In marketing year (MY)2024/25, Guatemala is forecast to produce 2.4 million metric tons (MT) of sugar from a harvested area of 242,000 hectares (Ha). Though harvested area is increasing as positive sugar prices in the international market motivate producers to keep up renovation with improved local genetics, overall production is forecast to drop four percent for the estimated harvest of MY2023/24 (2.5 million MT), due to a late start to the rainy season and an extended El Niño year. Stocks in MY 2024/25 will drop to 131,000 MT, to secure supply for the domestic consumption, which has been revised up to 1.2 million MT, following rapid growth and expansion of the food and beverage sector; exports will drop proportionally.

Executive Summary:

In MY2022/23 Guatemala was the third most efficient country in sugar productivity, the second largest exporter in Latin America, and the fifth largest exporter in the world. The sector experiences ups and downs during each harvest season, mostly corresponding to weather conditions. In MY2024/25 the forecast is that sugar production will be 2.40 million MT, four percent below the estimate for MY2023/24 (2.50 million MT), which was negatively impacted by a late entry of the rainy season and an extended El Niño year.

Sugar exports are forecast to drop in MY2024/25 to 1.35 million MT, down from estimated exports of 1.37 million in MY2023/24, and down from MY2022/23 exports of 1.43 million MT. This is a result of reductions in sugar production due to El Niño and Guatemala's sugar national policy, which mandates meeting domestic consumption demand prior to exporting. The food and beverage industries are growing fast, 10-15 percent annually, and are significantly increasing exports.

Production:

Sugarcane

Guatemala maintains its planted area of 275,000 Ha but harvested area in MY 2024/25 is forecast to increase to 242,000 Ha as positive international prices have provided an incentive for renovation. This is a 1,000 Ha increase in harvested area compared to the estimated 241,000 Ha to be harvested in MY2023/24. Total harvested area in MY2022/23 closed with 240,000 Ha. Renovation implies that around 15-20 percent of the planted area might not be ready for harvest, which explains the difference between revised harvested area numbers and previous estimates. Renovation with improved varieties locally adapted for both tolerance to water stress and improved yield will represent above 65 percent of the total planted area. At least 2,611 varieties have been introduced in Guatemala by the Sugar Cane Improvement Center -CENGICANA- for the sugarcane breeding program, the majority of which come from the United States, followed by Mexico, Costa Rica, and others.

Figure 1 shows the sugar cane yields per harvest week comparison for MY2022/23 vs. updated results for MY2023/24 up to week 19 (March 10, 2024). Yields at the beginning of the harvest in October 2023 started below those of the same previous year until week 14, when yields finally matched, and since then have remained slightly higher, but don't seem likely to close the accumulated gap. The lower yields in sugarcane mass were negatively affected by the El Niño phenomenon, characterized by lower rainfall in May-July of 2023, when the sugarcane was growing. Weather conditions in MY2022/23 were optimum, with enough rainfall during the sugar cane growing season, but with a marked dry season starting in October of 2023.

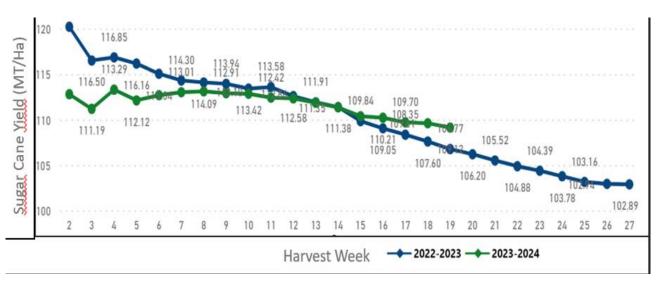


Figure 1 Sugarcane Yields Comparison for MY2022/23 vs. MY2023/24

Source: CENGICANA, March 2024

Sugar Production

Sugar production for MY2024/25 is forecast at 2.40 million MT, four percent lower than the revised estimate for MY2023/2024 (2.50 million MT), and four percent below MY2022/23, which closed at 2.61 million MT. This lowered production forecast mostly results from the El Niño delays to the onset of the rainy season. Figure 2 shows sugar yields per hectare for MY 2023/24 vs. MY2022/23. Up to week 19, out of 27 harvesting weeks, neither yields nor accumulated sugar production will close the production gap.

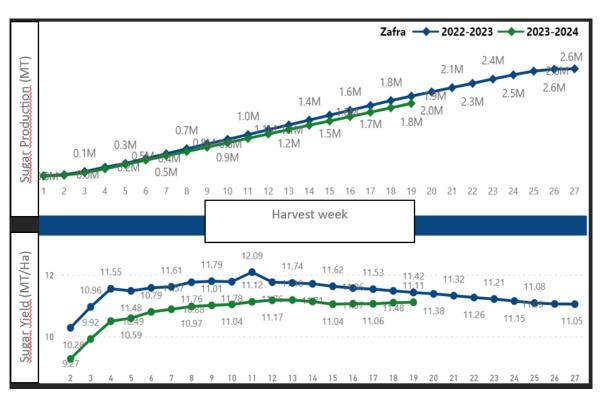


Figure 2 Comparison of sugar production per harvest week in MY2022/23 and MY2023/24

Source: CENGICANA, March 2024

Guatemalan sugarcane production continues in the pathway of environmental sustainability. According to the sugar sector, sugar production represents less than 2 percent of the country's national greenhouse gas emissions, with a carbon footprint of 0.33 kg of carbon dioxide equivalent per kg of sugar produced, which allows them to actively participate in the carbon markets. In terms of water efficiency, the sugarcane crop system only requires 100 cubic meters of water per ton, while global averages are 175 cubic meters per ton, therefore only 16 percent of the production area requires irrigation in contrast to world average of 27 percent.

Since the beginning of the 2000's, the water use has dropped from 1,120 Liters per Hectare (L/Ha) to 710 L/Ha, a 37 percent reduction. The reduction is a combination of improved genetics for water stress tolerance plus efficiencies in irrigation and extraction. The sugar sector has mad investments in climate smart agricultural options, making precision agriculture a valuable tool to provide water and fertilization as required by different field areas.

The main challenges the sugar sector faces are the lack of labor, which has dropped by 70 percent, and thus in that same proportion the planting and harvest have been mechanized; some farms have advanced more than others, depending on the land slopes and rocky soil structure. Given the lack of male labor, the sugar sector has a talent program to hire females, which proved that female harvest groups were more efficient, and now the farms are hiring more females for the mechanized harvest.

The sugarcane burning still allows for increased sugar yields compared to the green harvest; this last one implies shorter cane cuts, which experience more dehydration, resulting in lower sugar extraction. In MY2023/24, an estimated 22 percent is green harvest vs. 78 percent burning. The sugar industry expects to increase green harvest to 33 percent in the next 2-3 years.

Unfortunately, the sugar sector is also victim of criminal burning which during the harvest 2022/23 represented 5.3% of the planted sugarcane. In the present harvest 2023/24, those criminal burns have increased to 9.25% of the planted area. Not all the burns have occurred in areas to be harvested, but have certainly affected the overall output, as burned cane no longer matures.

The sugar sector in Guatemala continues to be represented by ten sugar mills, which in MY2023/24 expects the cogeneration of 2,400 giga watt hours (GWh), accounting for 29% of the country's total energy. This cogeneration is a result of the energy output resulting from the milling, of which 91 percent results from the bagasse, followed by 8 percent resulting from carbon combustion and 1 percent from other sources. The bagasse present in the sugarcane can be increased through breeding, as not necessarily higher juice content varieties have higher sugar content. Energy yields depend on the bagasse volume and the cogeneration technologies, so far led by extraction (51 percent), followed by escape (42 percent), and condensation (7 percent).

Five out of the ten sugar mills have distilleries for ethanol production from the residual molasses as a by-product of the sugar extraction, therefore not affecting the sugar production. These five distilleries are producing 65 million gallons of alcohol, of which 80 percent is exported and 20 percent stays for the domestic market. Guatemala exports dehydrated ethanol with 99.6 percent purity, considered advanced ethanol, mostly to the European Union and the United States.

Guatemala has an ethanol-gasoline blending mandate since 1985 (Legislative Decree 17-85), but just until recently the Guatemalan Ministry of Energy and Mines (MEM) approved <u>Presidential Decree 159-2023</u>, issuing the General Regulations of the Fuel Alcohol (Ethanol) in Guatemala. This regulation establishes the conditions and parameters for starting ethanol blending with gasoline in 2024/25, promoting free competition with a high environmental component, prioritizing Advanced Ethanol (GHG emissions of less than 28.6 grams of carbon dioxide per Mega Joule). Guatemala has an estimated consumption of 660 million gallons of gasoline, and an E10 blend would require approximately 66 million gallons of fuel alcohol (at least 60% Advanced Ethanol).

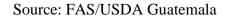
Consumption:

Consumption in MY2024/2025 is forecast at 1.2 million MT raw value (MTRV) of sugar, higher than the revised consumption of 1.19 million MTRV for the MY2023/2024 estimate, and above MY2022/23 which closed in 1.18 million MTRV. Domestic consumption of sugar is significantly increasing and its utilization in the food and beverage manufacturing processes, bakery and sugar confectionery industries is growing at an accelerated pace. As a result, domestic consumption now represents 50 percent of the Guatemalan sugar sales. The sugar sector's mandate demands filling 100 percent of the local demand, prior to exporting. Per capita consumption for MY2024/25 is forecast at 55 Kg.

Retail sugar prices in Guatemala were stable at \$0.79-0.82/Kg until 2021; since then, prices have experienced a 15 percent increase in 2022, followed by an additional 6 percent increase in 2023 (\$0.92/Kg). Table 1 shows 2024 average sugar prices in Guatemala, for different presentations, at wholesale and retail prices, and different available substitutes. Average retail prices in 2024 have experienced at least a 12 percent increase (\$1.05/Kg). Wholesale prices are, in average, 40 percent down from retail prices; the difference obeys to both additional transportation and administrative costs, including a 30 percent profit for the sales point.

Table 1
Average Wholesale and Retail Prices of Different Sugar Presentations in Guatemala
March 2024

Sugar Type or Substitute		Average Exchange Rate 7.9				
Substitute		Presentation (Kg)	Q	\$	\$/Kg	
	Wholesale	45.50	240	27.22	0.67	
		27.50	146.65	18.56	0.68	
		15.00	124.95	15.82	1.05	
White		11.50	95	12.03	1.05	
		2.50	21.75	2.75	1.10	
		2.00	17.4	2.20	1.10	
		0.50	4.35	0.55	1.10	
	-	15.00	118.45	14.99	1.00	
Brown		2.00	17.45	2.21	1.10	
1 g		1.00	159.95	20.25	20.25	
		11.50	97.95	12.40	1.08	
Refined White		6.90	67.95	8.60	1.25	
		2.30	24.75	3.13	1.36	
		2.00	17.45	2.21	1.10	
Sucralose		1.00	84.95	10.75	10.75	
Zero Calories		1.00	194.95	24.68	24.68	
Blue Agave		1.25	67.95	8.60	6.88	
Stevia		0.50	72.95	9.23	18.47	
Monk Fruit		1.13	179.95	22.78	20.16	
Maple Syrup		0.60	104.95	13.28	22.14	
Honey		1.30	54.95	6.96	5.35	



Trade:

Exports in MY2024/25 are forecast at 1.35 million MT, a 2 percent decrease compared to the revised estimate of 1.38 million MT for MY2023/24. This estimate is significantly less than the previous estimate (1.66 million MT) and four percent below MY2022/23 exports, which closed at 1.43 million MT. The reduction obeys to the four percent decrease in production forecast for MY2024/25, summed to

another four percent drop in production estimate for MY2023/24, marked by El Niño phenomenon, combined with increased domestic consumption of the food and beverage industries.

The Trade Matrix for MY2021/22 vs. MY2022/23 is shown in Table 2. Total refined exports decreased by 10 percent. Major export markets were Chile, the United States, Mexico, Peru, and Mauritania. The United States represents the second largest export market for Guatemalan refined sugar (12 percent of the market share).

Metric Tons Raw Value	MY2021/22	MY2022/ 23
Chile	174,334	178,081
United States	74,905	106,172
Mexico	15,204	59,889
Peru	43,822	58,073
Mauritania	171,532	57,965
Spain	14,505	45,845
Jamaica	50,235	45,587
Taiwan	48,115	43,372
Haiti	41,847	32,403
Tunisia	0	28,553
Trinidad and Tobago	27,838	28,329
Тодо	0	28,177
OTHERS	287,031	143,560
TOTAL	949,368	856,004

Table 2Trade Matrix for Guatemalan Exports of Refined Sugar in MY2021/22 vs. MY2022/23

Source: Trade Data Monitoring, 2024

Table 3 shows exports for raw sugar. Exports in MY2022/23 decreased 23 percent compared to the previous year. Major exports markets for raw sugar were Taiwan, United States, Canada, China, and Peru; New Zealand, Poland and Finland were new export markets. The United States was the second largest export market for Guatemalan raw sugar, representing 21 percent of the market share.

Table 3

Trade Matrix for Guatemalan Exports of Raw Sugar in MY2021/22 vs. MY2022/23

Metric Tons Raw Value	MY2021/22	MY2022/23
Taiwan	149,545	134,492
United States	177,238	122,494
Canada	87,050	85,900
China	109,207	45,856
Peru	43,666	38,215
New Zealand	0	28,000
Poland	0	25,075
Finland	0	25,000
Haiti	35,493	21,030
Belgium	6,289	20,305
United Kingdom	22,871	10,485
OTHERS	70,741	14,260
TOTAL	702,100	571,112

Source: Trade Data Monitoring, 2024

Guatemala's main export channel continues to be Port Quetzal. The sugar industry's exporter terminal – EXPOGRANEL- maintains its installed capacity to receive 800 MT of sugar per hour bulk vessel filling at a speed of 2,164 MT of sugar per hour. The terminal still holds capacity to store 58,000 MT of sugar in sacks and operates 10 trucks per hour when filling containers with sacked white or refined sugar. Refined sugar continues to be the major export product for Guatemala. In MY2022/23, refined sugar exports represented 60 percent of total exports, and it will continue increasing in comparison to raw sugar exports (40 percent) given its higher value.

Stocks:

Stocks in MY2024/25 are forecast at 131,000 MT, down from previous levels, responding to increased domestic demand, mainly following the aggressive expansion of the food and beverage industry, which grows at 10-15 percent annual rate to supply domestic and export markets. Estimated stocks for MY2023/24 are 278,000 MT, with ending stocks for MY2022/23 of 334,000 MT.

Trade (Policy):

Guatemala has in place various free trade agreements (FTA) where sugar has gained market access. Table 4 shows 2024 quotas for sugar. The United States assigned a total combined quota of 131,621 MT for Guatemala, which will be 100 percent filled. Quotas are filled first, and surplus is exported under normal tariffs. In MY2022/23, the United States WTO quota for Guatemala was 76,990 MT plus CAFTA-DR quota of 52,640 MT for a total of 129,630 MT, which were also filled at 100 percent. Additionally, Guatemala exported 97,045 MT under non-preferential tariff.

Country	Volume (MT)	Share
Taiwan	134,447	33%
United States (Sep. 23-Oct.24) WTO (total) CAFTA-DR Subtotal	78,041 53,580 131,621	32%
EU	94,700	23%
UK	28,061	7%
Ecuador	21,000	5%
TOTAL	409,829	100%

Table 4Trade Matrix for Guatemalan Sugar Quotas for 2024

Source: ASAZGUA, 2024

Policy:

The Sugar Board of Guatemala, which includes representatives from the Ministry of Economy, sugarcane producers, and sugar mills, establishes production goals, sets sugarcane prices, and allocates the U.S. sugar quota to the different sugar mills. The allocation of the quota to each mill is based on past production, previous quotas, and milling capacity. Sugar in Guatemala is protected by Presidential Decree 15-1998 and its regulation through Presidential Decree 021-2000, making fortification of sugar mandatory for its consumption in Guatemala. The fortification is approved and validated by the Institute of Nutrition of Central America and Panama (INCAP), which monitors and evaluates the impact of Vitamin A fortification; the impact of this policy has resulted in eradication of children blindness in Guatemala. After a successful pilot, some sugar in Guatemala is also now fortified with iron and folic acid.

Production, Supply, and Demand (PSD)

Sugar Cane for Centrifugal	2022/2023 Nov 2022		2023/2024 Nov 2023		2024/2025 Nov 2024	
Market Year Begins						
Guatemala	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	275	275	276	275	0	275
Area Harvested (1000 HA)	250	240	251	241	0	242
Production (1000 MT)	2558	2608	2575	2504	0	2403
Total Supply (1000 MT)	2558	2608	2575	2504	0	2403
Utilization for Sugar (1000 MT)	2558	2608	2575	2504	0	2403
Utilizatn for Alcohol (1000 MT)	0	0	0	0	0	0
Total Utilization (1000 MT)	2558	2608	2575	2504	0	2403
(1000 HA),(1000 MT)						

Sugar, Centrifugal	2022/2	2023	2023/2	2024	2024/2	025
Market Year Begins	Oct 2	t 2022 Oct 2023		Oct 2024		
Guatemala	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks (1000 MT)	333	333	274	334	0	278
Beet Sugar Production (1000 MT)	0	0	0	0	0	0
Cane Sugar Production (1000 MT)	2558	2608	2575	2504	0	2403
Total Sugar Production (1000 MT)	2558	2608	2575	2504	0	2403
Raw Imports (1000 MT)	0	0	0	0	0	0
Refined Imp.(Raw Val) (1000 MT)	0	0	0	0	0	0
Total Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	2891	2941	2849	2838	0	2681
Raw Exports (1000 MT)	707	571	710	525	0	505
Refined Exp.(Raw Val) (1000 MT)	950	856	952	850	0	845
Total Exports (1000 MT)	1657	1427	1662	1375	0	1350
Human Dom. Consumption (1000 MT)	960	1180	970	1185	0	1200
Other Disappearance (1000 MT)	0	0	0	0	0	0
Total Use (1000 MT)	960	1180	970	1185	0	1200
Ending Stocks (1000 MT)	274	334	217	278	0	131
Total Distribution (1000 MT)	2891	2941	2849	2838	0	2681
(1000 MT)						

Attachments:

No Attachments