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**Country:** Nicaragua

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**Report Highlights:**

FAS/Managua projects Nicaraguan sugar production and exports recovering in marketing year 2023/24, despite deteriorating political and economic conditions in Nicaragua, with the anticipated arrival of an El Niño weather system and drier weather in the latter half of 2023. Record-setting precipitation in 2022 helped drive agronomic and processing yields lower, with marketing year 2022/23 sugar exports the lowest since marketing year 2018/19, on lower sugar production and exportable volumes.

## **Sugarcane Production**

### MY 2023/24

FAS/Managua projects marketing year (MY) 2023/24 sugarcane production at 7.3 million metric tons (MT), up 4 percent from MY 2022/23, with 2023 precipitation levels expected to be closer to the historical range. Sugar producers expect the return of an El Niño weather system, typically associated with less precipitation and drier conditions in the Pacific growing areas of Nicaragua, could significantly improve sugarcane agronomic and processing yields in MY 2023/24, especially on irrigated sugarcane plantations. FAS/Managua expects less precipitation to improve cultural management and fertilizer application conditions, while additional sunlight and higher average temperatures would benefit plant growth and sugar concentration in MY 2023/24.

FAS/Managua estimates sugarcane area harvested in MY 2023/24 at 73,000 hectares (ha), a 1 percent increase above MY 2023/23. One sugar mill is planning to increase area planted by 500 ha in MY 2023/24 to improve utilization of its biomass electrical power plant capacity. FAS Managua does not anticipate any significant rotation of area planted out of sugarcane (typically into peanut) in MY 2023/24, given relatively high world sugar price offers (above \$0.20/pound as of March 24, 2023). FAS/Managua expects financing will be readily available at relatively low rates in MY 2023/24, as sugar exports continue to be among the most reliable export revenue generating activities.

FAS/Managua anticipates MY 2023/24 agronomic yields recovering to 99 MT/ha, mostly due to drier weather conditions. Preliminary forecasts from the U.S. National Oceanic and Atmospheric Administration (NOAA), indicate up to a 60 percent probability of an El Niño weather system developing in the second half of 2023. Additional forecasts suggest the anticipated El Niño would be weak to moderate in strength, which could mitigate the intensity or probability of drought-like conditions emerging during MY 2023/24.

Roughly half of Nicaraguan sugarcane farms have integrated irrigation – drip or sprinkler-based systems – into their operations, making efficient use of limited water resources and improving sugarcane yields in drier years. Widespread planting of drought-tolerant sugarcane varieties, like the Guatemala-developed CG02-163 variety, further raises the expected floor for sugarcane yields in drier production cycles, like those associated with an El Niño system.

### MY 2022/23

Preliminary data from the Nicaraguan Sugar Commission (CNPA) estimate total MY 2022/23 sugarcane production falling to 7 million MT, down 4 percent from the previous year. Industry sources reported a 1 percent decline (approximately 1,000 ha) in sugarcane area planted in MY 2022/23, as several farmers in the department of Chinandega transitioned land to peanuts and bananas.

Although MY 2022/23 production conditions were relatively free from pest and disease pressures, CNPA reported agronomic yields at 97.74 MT/ha, down 2 percent from the previous year, primarily due to excess precipitation. One sugar mill recorded over 4,200 millimeters of water during the 2022 rainy season (typically May – October), shattering the region’s previous record high of 1,300 millimeters

several times over. Although most sugarcane producing regions have soils with good drainage, excess precipitation resulted in a late start to and subsequent pauses during the MY 2022/23 harvest, as muddy conditions prevented harvesting equipment from accessing plantations or from operating effectively.

In addition to excessive precipitation, sugar mills reported additional factors that dragged down production in MY 2022/23. Producers faced short supplies of desiccants, which help concentrate sugar content before the harvest, as well as a lack of helicopters to apply desiccants and other applications throughout the season. High staffing turnover at mills and on-farm (especially experienced truck drivers that haul sugarcane from the fields to the mills) reached up to 30 percent in some companies as a result of record-setting outbound migration – more than 200,000 Nicaraguans fled the country in 2022 – amidst the ongoing political crisis. Industry sources noted this turnover in spite of competitive salaries and benefits designed to maintain the labor force from year-to-year.

The high rate of sugar harvest mechanization – more than 95 percent of the harvest is mechanized in some of the most productive areas – has largely insulated the sector from the negative effects of migration on the labor supply (except as noted previously). Harvest mechanization provides further benefits in the form of environmental services: farmers generally do not need to burn sugarcane stubble after harvest, reducing soil degradation and erosion and preventing the release of large amounts of carbon dioxide and harmful pollutants into the air.

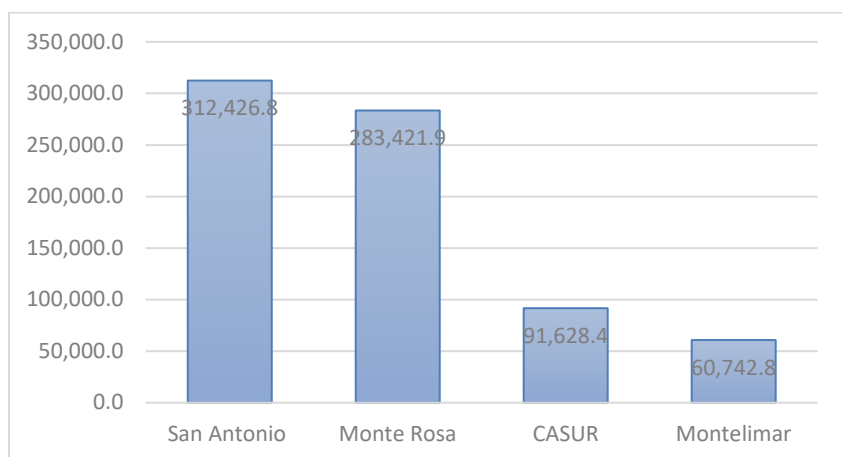
FAS/Managua estimates Nicaragua will remain the third-largest sugarcane producer in Central America, after Guatemala and El Salvador in MY 2022/23. Sugarcane is produced along the Pacific Coast and harvested from November through May. Four sugar mills produce approximately 60 percent of total sugarcane on company-owned plantations, with roughly 600 independent farmers producing the remainder. Up to 40 percent of sugarcane is still harvested by hand, where smaller-sized plots have prevented the introduction of mechanized harvesting.

### **Sugar Production**

FAS/Managua projects MY 2023/24 sugar production rebounding to 800,000 MT, up 7 percent from MY 2022/23, assuming a weak to moderate El Niño developing in the latter half of 2023. FAS/Managua projects processing yields in MY 2023/24 returning to 241 pounds of raw sugar per MT of sugarcane on improved sugar concentration associated with drier growing conditions.

Preliminary CNPA data estimate MY 2022/23 sugar production falling to 748,220 MT, down 7 percent from MY 2021/22 on a 4 percent decline in sugarcane production and a 3 percent drop in processing yields. Based on estimated sugar and sugarcane production, FAS/Managua estimates MY 2022/23 sugar processing yields at approximately 233 pounds of raw sugar per metric ton of sugarcane, down 3 percent from the previous year.

**Figure 1. MY 2022/23 Centrifugal Sugar Production by Sugar Mill (MT)**



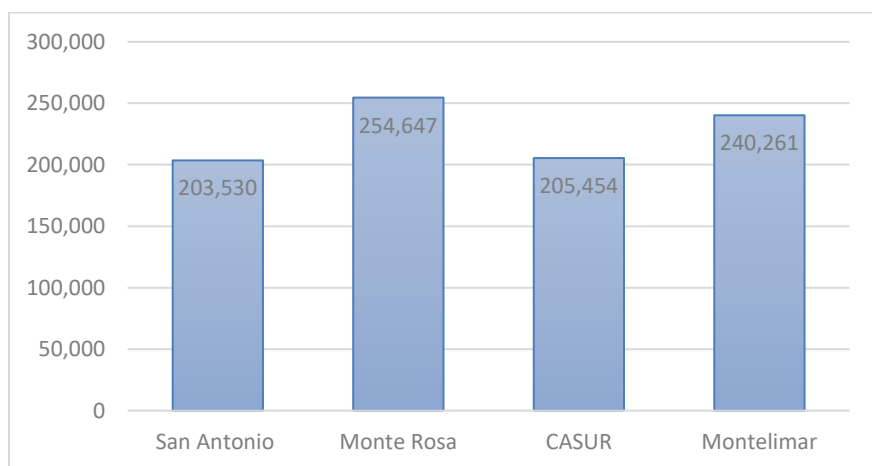
Source: Nicaraguan Sugar Producers' Association (CNPA)

Sugar prices in Nicaragua have been relatively stable in the last five years, with a slight increase in the white plantation sugar price and a more marked increase in the refined sugar price dating back to 2019, when the Nicaraguan government began applying the 15 percent value added tax to sugar sales. Refined sugar prices at wholesale and retail were estimated at \$0.40 and \$0.47 per pound in March 2023, while white plantation sugar for wholesale and retail were estimated at \$0.35 and \$0.39 per pound. CNPA anticipates modest price increases in 2023, due to increasing production costs and broader inflation.

### Co-Production

Besides sugar production, the four sugar mills operate biomass power plants capable of generating over 120 megawatts of electricity per hour for approximately 9 months each year, using bagasse and other crop residue for feedstock. Power generation has become an indispensable revenue stream, vital to the industry's economic stability and profitability. According to industry sources, additional energy co-production investments are currently on hold, due to the continuing political crisis in Nicaragua.

**Figure 2. MY 2022/23 Energy Production by Sugar Mill (megawatts/hour)**



Source: Nicaraguan Sugar Producers' Association (CNPA)

Nicaraguan sugar mills did not produce ethanol in MY 2022/23 despite relatively high gasoline prices. Only one of Nicaragua's four sugar mills has ethanol production capacity, but that equipment was not operational in MY 2022/23 due to the lack of a national policy to promote fuel ethanol.

### **Consumption**

FAS/Managua projects MY 2023/24 sugar consumption at 274,000 MT, down 2 percent from MY 2022/23, due in part to the significant level of emigration in 2022, when more than 3 percent of the population left the country. CNPA estimates MY 2022/23 sugar consumption at 278,000 MT and per capita sugar consumption at 41 kg.

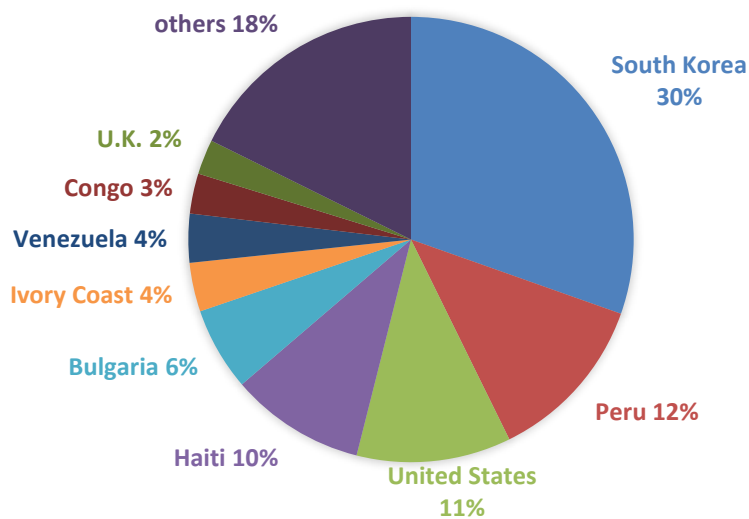
In recent years, sugar mills reported increases in sugar demand from local softdrink manufacturers expanding production to avoid paying the 15 percent Consumer's Selective Tax (ISC) on imported beverages. [Note: In 2019, the Government of Nicaragua revised taxes on several imported goods, including carbonated beverages, driving ISC up from 9 to 15 percent. End note.] However, from September 2022 through January 2023, sugar sales to softdrink manufacturers were reportedly lower, as more Nicaraguans continued to leave the country, which could suppress calendar year (CY) 2023 consumption.

Generally, about 40 percent of total sugar production is consumed domestically in the Nicaraguan market, with the remaining 60 percent exported. White plantation sugar accounts for 75 percent of all sales in the domestic market, while the rest is refined sugar. All sugar in Nicaragua is enriched with vitamin A to combat nutrient deficiency.

### **Trade**

FAS/Managua projects total sugar export volumes at 526,000 MT in MY 2023/24, up 12 percent from MY 2022/23, largely on additional exportable supplies as production recovers. According to the Nicaraguan Central Bank, total CY 2022 sugar exports were 423,966 MT, with South Korea, Peru, and the United States as the top three destinations totaling more than 50 percent of export shipments.

**Figure 3. CY 2022 Centrifugal Sugar Export Destinations (by volume)**



Source: Nicaraguan Central Bank

**Table 1: Centrifugal Sugar Export Volume in MT (Oct/Sep Marketing Year)**

Destination	2019/2020	2020/2021	2021/2022
United States	86,100	101,632	98,600
South Korea	195,325	93,169	128,920
Peru	11,873	0	39,619
Haiti	35,315	31,412	38,537
Bulgaria	3,855	0	25,657
Cote d'Ivoire	0	0	15,000
Ghana	4,625	5,943	11,881
United Kingdom	0	7,960	10,742
Other Asia, nes	0	52,000	8,600
Chile	3,484	2,386	6,439
Colombia	2,259	11,644	5,962
Canada	19,000	0	0
Portugal	0	24,222	0
Mauritania	46,073	12,000	0
Taiwan	57,895	8,159	0
Mexico	6,726	375	0
Other Markets	25,901	17,297	3,040
<b>Total</b>	<b>498,431</b>	<b>368,199</b>	<b>392,997</b>

Source: Trade Data Monitor, LLC.

## Sugar Quotas

Nicaragua continues to benefit from preferential market access arrangements under several free trade agreements, including for refined sugar under the Dominican Republic-Central American Free Trade Agreement (29,480 MT in 2023), the Association Agreement with the European Union (26,879 MT), the Association Agreement with the United Kingdom (8,665 MT), and with South Korea (preferential access without quota allocations).

When Nicaragua diplomatically recognized the People's Republic of China in December 2021, Taiwan ended a preferential sugar quota of 70,000 MT previously set aside for Nicaraguan exporters. The U.S. Government has not included Nicaragua in its World Trade Organization (WTO) sugar tariff-rate quota allocations or re-allocations since April 2022.

## **Stocks**

FAS/Managua expects stocks to remain unchanged in MY 2023/24 at approximately 40,000 MT. The Nicaraguan sugar industry typically maintains ending stocks to guarantee domestic and exportable supplies ahead of the out-year harvest. These stocks mitigate risks associated with possible supply shortfalls from the Atlantic hurricane season (September through December).

## **Policy**

The Government of Nicaragua does not set sugar prices, nor does it provide subsidies nor special credit programs for sugar production or export. However, the sugar industry does benefit from relatively high domestic prices compared to world sugar prices as a result of high tariffs on imported sugar. Sales at higher than world prices in Nicaragua, stable exports to the United States, and revenue from biomass energy production have helped insulate Nicaragua's sugar industry from fluctuations in international sugar pricing. Nicaragua does not have a law to promote production and/or use of fuel ethanol.

**Table 2: Sugarcane for Centrifugal Sugar: Supply and Utilization**

Sugarcane for Centrifugal Market Year Begins Nicaragua	2021/2022		2022/2023		2023/2024	
	Oct 2021		Oct 2022		Oct 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
<b>Area Planted</b> (1,000 HA)	73	73	74	72	0	73
<b>Area Harvested</b> (1,000 HA)	73	73	74	72	0	73
<b>Production</b> (1,000 MT)	7239	7,351	7250	7053	0	7,300
<b>Total Supply</b> (1,000 MT)	7239	7,351	7250	7053	0	7,300
<b>Utilization for Sugar</b> (1,000 MT)	7239	7,351	7250	7053	0	7,300
<b>Utilization for Alcohol</b> (1,000 MT)	0	0	0	0	0	0
<b>Total Utilization</b> (1,000 MT)	7239	7,351	7250	7053	0	7,300
(1,000 HA), (1,000 MT)						

**Table 3. Centrifugal Sugar: Production, Supply and Distribution**

Sugar, Centrifugal Market Year Begins Nicaragua	2021/2022		2022/2023		2023/2024	
	Oct 2021		Oct 2022		Oct 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
<b>Beginning Stocks</b> (1,000 MT)	40	40	40	40	0	40
<b>Beet Sugar Production</b> (1,000 MT)	0	0	0	0	0	0
<b>Cane Sugar Production</b> (1,000 MT)	780	804	780	748	0	800
<b>Total Sugar Production</b> (1,000 MT)	780	804	780	748	0	800
<b>Raw Imports</b> (1,000 MT)	0	0	0	0	0	0
<b>Refined Imp. (Raw Val)</b> (1,000 MT)	0	0	0	0	0	0
<b>Total Imports</b> (1,000 MT)	0	0	0	0	0	0
<b>Total Supply</b> (1,000 MT)	820	844	820	788	0	840
<b>Raw Exports</b> (1,000 MT)	300	342	325	306	0	340
<b>Refined Exp. (Raw Val)</b> (1,000 MT)	200	184	170	164	0	186
<b>Total Exports</b> (1,000 MT)	500	526	495	470	0	526
<b>Human Dom. Consumption</b> (1,000 MT)	280	278	285	278	0	274
<b>Other Disappearance</b> (1,000 MT)	0	0	0	0	0	0
<b>Total Use</b> (1,000 MT)	280	278	285	278	0	274
<b>Ending Stocks</b> (1,000 MT)	40	40	40	40	0	40
<b>Total Distribution</b> (1,000 MT)	820	844	820	788	0	840
(1,000 MT)						

**Attachments:**

No Attachments