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Report Highlights:

Private sugar mill expansion and higher rainfall as a result of La Nina weather patterns are expected to increase sugarcane yields, leading to increased sugar production in 2022/23. Despite the expected increase in production, imports of raw sugar are also forecast to increase, mainly due to higher sugar demand from the growing food and beverage industry. In an effort to stabilize retail sugar prices, the Government of Indonesia (GOI) has authorized the importation of almost 892,000 metric tons of raw sugar for processing into plantation white sugar, up 31 percent from 2021.

Glossary:

BMKG	: The Indonesian Meteorology, Climatology, and Geophysics Agency
GOI	: Government of Indonesia
HET	: Maximum Retail Price
HFCS-55	: High Fructose Corn Syrup with 55 percent fructose content (HS Code 170260)
ID	: Import Duty
IU	: International Unit
MOA	: Ministry of Agriculture
MOI	: Ministry of Industry
MOT	: Ministry of Trade
OECD	: The Organization for Economic Cooperation and Development
Sembako	: Nine staple foods
TCD	: Tons of Cane per Day
TPD	: Tons Per Day
VAT	: Value Added Tax

General Summary

In 2017, Ministry of Trade (MOT) Regulation No. 27/2017 declared sugar as a “*Sembako*” which translates into “the Nine Food Staples,” along with rice, corn, soybean, cooking oil, beef, poultry meat, shallot, and eggs. These nine staples are considered essential and are subject to stricter governmental scrutiny and control. The Government of Indonesia’s (GOI) sugar policy classifies domestic sugar into three categories: plantation white sugar for home consumption, raw sugar for domestic sugar refineries, and refined sugar for the local food and beverage industry. On February 11, 2021, the Ministry of Industry (MOI) issued Regulation No. 3/2021 on the Guarantee of Availability of Raw Materials to Fulfill the Needs of the National Sugar Industry, which states that sugar mills can only produce white sugar (plantation white sugar) and refineries can only produce refined sugar.

The GOI tightly controls the timing and total volume of sugar imports, as well as which companies are granted import quota allocations. Sugar mills are obligated to use domestically produced sugarcane for their raw material, while refineries use imported raw sugar. However, since domestic demand far outpaces local production, sugar mills also require significant volumes of raw sugar imports to fill idle capacity. Additionally, if food and beverage companies need a certain refined sugar product with necessary technical specifications is unavailable locally, food and beverage companies may be permitted to import that specialized product.

La Nina weather patterns led to a relatively wet dry season in 2021, providing producers the opportunity to expand harvested area and increasing sugarcane yield per hectare due to a prolonged vegetative stage. Additionally, producers applied ripening agent to their sugarcane crops to minimize the negative effect of high moisture on sucrose content. Therefore, plantation white sugar production in 2021/22 is estimated to increase to 2.3 MMT, compared to 2.13 MMT in 2020/21. In line with higher plantation white sugar production, 2021/22 raw sugar imports are estimated to decrease to 5.2 MMT. The La Nina weather pattern is forecast to last until July 2022 and is expected to further increase harvested area and yield. As a result, sugarcane production in 2022/23 is forecast to increase to 32.4 MMT. Consistent with the forecasted increase of sugarcane production, plantation white sugar production is forecast to increase to 2.4 MMT in 2022/23. However, 2022/23 ending stocks are expected to decline, reaching 2.274 MMT due higher consumption.

Despite the arrival of the Omicron variant of COVID-19 in Indonesia in early 2022, the GOI did not implement measures as strict as those in place during the Delta variant outbreak in mid-2021, and so had a less severe impact on the economy. The Indonesian Statistics Agency (BPS) reported that Indonesia's economy grew by 3.69 percent from 2020 to 2021. Visits to tourist destinations as well as to malls and restaurants have started to revitalize the economy and increase demand for refined sugar in the food and beverage industry, increasing pressure on the GOI to maintain stable prices. As a result, the GOI increased the allocation of raw sugar imports for refineries to 3.48 MMT in 2022/23 compared to 3.349 MMT authorized in 2020/21. In addition, the GOI has authorized sugar mills to import a total of 891,627 metric tons (MT) of raw sugar to fill idle capacity, a 31 percent increase from 2021.

Higher demand during the lean season and increased production costs have raised retail prices for plantation white sugar well above the government's price cap. In an attempt to stabilize prices, the GOI issued MOT Circular Letter No. 6/2022 increasing the maximum retail price for plantation white sugar to 13,500 IDR per kg (\$940 per MT) from 12,500 IDR per kg (\$870 per MT). Despite this attempt to align the maximum price more closely with market prices, the current average retail price is still much higher at 14,600 IDR per kg (\$1,016 per MT).

Table 1. Production Supply and Distribution: Sugarcane for Centrifugal

Sugar Cane for Centrifugal Market Begin Year Indonesia	2020/2021		2021/2022		2022/2023	
	May 2020		May 2021		May 2022	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	420	420	423	448	0	450
Area Harvested	415	415	420	445	0	447
Production	29300	29300	29800	32200	0	32400
Total Supply	29300	29300	29800	32200	0	32400
Utilization for Sugar	29300	29300	29800	32200	0	32400
Utilization for Alcohol	0	0	0	0	0	0
Total Utilization	29300	29300	29800	32200	0	32400

(1000 HA), (1000 MT)

Note: The last column of each Marketing Year is not official USDA data.

Table 2. Production Supply and Distribution: Centrifugal Sugar

Sugar, Centrifugal Market Begin Year Indonesia	2020/2021		2021/2022		2022/2023	
	May 2020		May 2021		May 2022	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	1952	1952	1787	2664	0	2474
Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	2130	2130	2200	2300	0	2400
Total Sugar Production	2130	2130	2200	2300	0	2400
Raw Imports	4900	5674	4500	5200	0	5400
Refined Imp.(Raw Val)	300	450	300	330	0	300
Total Imports	5200	6124	4800	5530	0	5700
Total Supply	9282	10206	8787	10494	0	10574
Raw Exports	0	0	0	0	0	0
Refined Exp.(Raw Val)	50	97	0	420	0	400
Total Exports	50	97	0	420	0	400
Human Dom. Consumption	7445	7445	7500	7600	0	7900
Other Disappearance	0	0	0	0	0	0
Total Use	7445	7445	7500	7600	0	7900
Ending Stocks	1787	2664	1287	2474	0	2274
Total Distribution	9282	10206	8787	10494	0	10574

(1000 MT)

Note: The last column of each Marketing Year is not official USDA data.

Production

White sugar is produced from sugarcane and is primarily for direct human consumption. Refined sugar is made from imported raw sugar and is generally used by the food and beverage industry. Refined sugar produced from imported raw sugar is prohibited from being distributed to retail markets for direct human consumption.

During the period of 2015 to 2020, seven sugar mills came online with installed capacity ranging from 8,000 to 12,000 tons of cane per day (TCD). During the same period, due to aging machinery and low efficiency, 12 state-owned sugar mills on Java Island shuttered operations. Currently, a total of 62 sugar mills are operating in Indonesia, with a national installed capacity of 316,950 TCD. Of these mills, 43 mills are administered by state-owned companies and nine are privately-owned. Approximately 56 percent of sugarcane harvested area is located on Java Island, with Lampung Province in Sumatera accounting for an additional 30 percent.

In 2021, the Indonesian Statistics Agency (BPS) reported that smallholder farmers account for approximately 56 percent of total sugarcane area, while the rest is managed by state-owned and private companies. Smallholder farmers' area is on the decline due to rapid infrastructure development on Java Island as well as competition from other food crops that can provide farmers higher margins, such as corn and paddy rice. Private companies' area expansion, which reached 4.6 percent outside of Java and 4.4 percent on Java Island, offset the decline in smallholders' area. As a result, harvested area overall in 2021/22 is estimated to increase to 445,000 hectares compared to 415,000 hectares in 2020/21. Harvested area in 2022/23 is forecast to continue to increase to 447,000 hectares on area expansion in Sulawesi and Sumatera where new mills have been constructed.

The Indonesian Meteorology, Climatology, and Geophysics Agency (BMKG) stated in March 2022 that observations from Indonesia's 342 season zones show that most areas (76.3 percent) are predicted to experience the onset of the dry season sometime between April and June 2022. Compared to the 30-year average (1991-2020), the start of the 2022 dry season in most regions (47.7 percent) is predicted to occur late. Rainfall during the 2022 dry season in most areas is predicted to be normal. The peak of the 2022 dry season in most areas is predicted to occur in August 2022. BMKG also forecast that a weak to moderate La Nina weather pattern will continue until July 2022.

In 2021/22, a La Nina-influenced wetter-than-average dry season led to longer sugarcane stalks, increasing yields 2 percent to 72.3 MT per hectare from 70.6 MT per hectare in 2020/21. According to several sugar mills, sufficient rainfall is expected to increase per hectare sugarcane yields in 2022/23 as crops will have the opportunity to grow longer segments during the vegetative period. Yields are forecast to increase to 72.48 MT per hectare in 2022/23. Considering the larger harvested area and higher yields, 2022/23 sugarcane production is estimated to increase to 32.4 MMT.

Table 3. Profile and Characteristics of Indonesia's Sugar Industry in 2021

No.	Description	Sugarcane Based	Raw Sugar Based
1.	Number of companies	18	11
2.	Number of plants	62	11
3.	Processing capacity	316,950 TCD Avg. 5,100 TCD per mill	5.016 million metric tons of installed capacity 4.228 million metric tons of running capacity
4.	Raw material	Sugarcane from mills' own plantation and farmers	Imported raw sugar
5.	Number of processing day	Avg. 160 days per year	Avg. 320 days per annum
6.	Annual production potential	2.5-3.0 million metric tons	3-4 million metric tons
7.	Number of workers: - On farm - Off farm	28,350 27,427	None 4,833
8.	Number of farmers involved	1,328,250 farming families	None
9.	Age of existing mills	1-184 years old	3-12 years old
10.	Influence of climate on production	Strong	Almost none
11.	Overseeing agency	Ministry of Agriculture (GOI Reg. No. 17/1986)	Ministry of Industry (Law No. 5/1984)

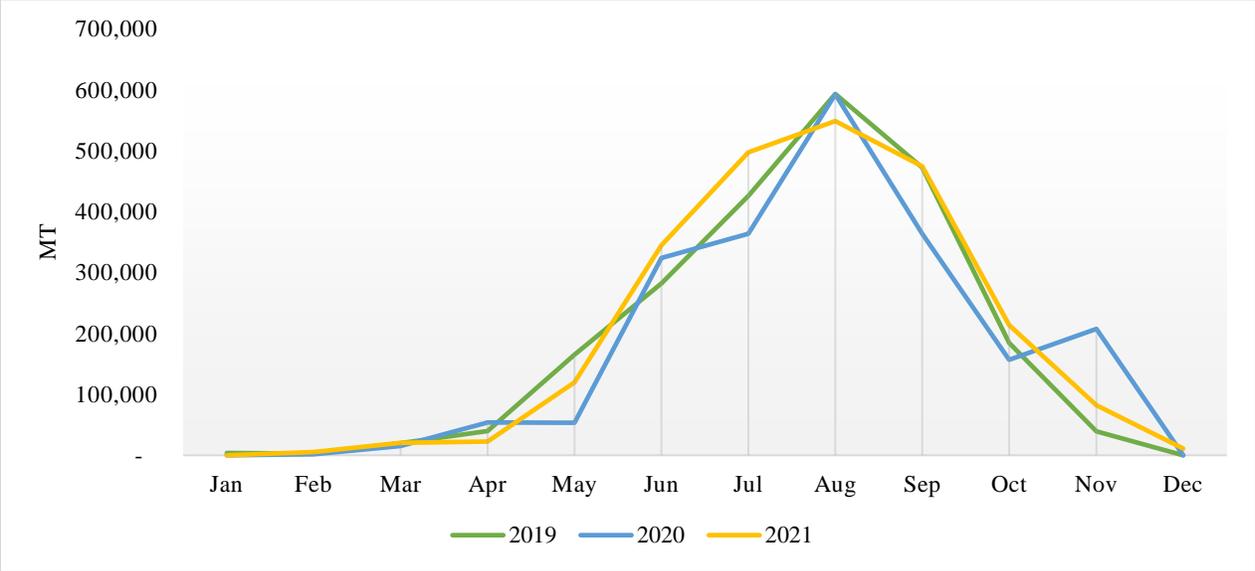
Source: MOA, MOI, MOT, compiled by FAS/Jakarta

Smallholder farmers supply sugarcane to both state-owned and private sugar mills. Indonesia's state-owned sugar mills are aging, with approximately 37 out of 43 over 100 years old. Only six sugar mills operating in 2019 were less than 25 years old. The contribution of state-owned sugar mills to total sugar production is on the decline as private companies with more efficient machinery and technology ramp up production. In 2021, state-owned sugar mills accounted for 46 percent of total national plantation white sugar production, compared to 49 percent in 2019. Due to aging machinery, the average 5-year recovery rate across the entire industry is only 7.4 percent.

As COVID-19 social distancing measures become more lax, the number of workers in the sugar sector has been gradually returning to full staffing, which is expected to reduce lead time from field to mill. Shorter lead times combined with the application of ripening agents to sugarcane crops in order to increase sucrose content is expected to result in an improved recovery rate of 7.41 percent in 2022/23, compared to 7.14 percent in 2021/22. With the Muslim fasting month

of Ramadan starting in early April 2022, most mills are expected to postpone the beginning of the milling season until May to avoid holiday-related labor disruptions. Considering the abovementioned factors, 2022/23 plantation white sugar production is forecast to increase to 2.4 MMT from 2.3 MMT produced in 2021/22.

Chart 1. Indonesia: Monthly Plantation White Sugar Production (MT)



Source: Sugar Industry Contacts

There are 11 sugar refineries processing imported raw sugar into refined sugar, with a total installed capacity of 5.016 MMT. The running capacity of these refineries varies depending on the raw sugar import allocation amount permitted by the GOI each year. The gradual reopening of the economy after steady declines in COVID-19 cases globally and domestically is expected to increase demand for sugar in food and beverages. Increased raw sugar import allocations along with higher demand for refined sugar from the food and beverage industry will likely increase refinery running capacity. In 2021/22, running capacity increased to 66 percent, compared to 65 percent in 2020/21. Food and beverage industry demand for refined sugar in 2022/23 is expected to increase by 5 percent to 3.4 MMT (3.64 MMT of raw sugar equivalent) compared to 3.23 MMT (3.47 MMT of raw sugar equivalent) in 2021/22. Accordingly, 2022/23 refinery running capacity is forecast to reach approximately 73 percent.

Consumption

The OECD forecasts Indonesia 2022 per capita sugar consumption at around 28.08 kg, up about 2 percent from 27.54 kg per capita in 2021. As Indonesia expands its vaccination program (launched in January 2021) and social distancing and travel restrictions are relaxed, home consumption of sugar is expected to decline while sugar consumption in the food and beverage industry is expected to increase. As a result, total sugar consumption in 2021/22 is expected to increase to 7.6 MMT of raw sugar equivalent, consisting of 3.9 MMT of sugar for direct consumption and 3.7 MMT for food and beverage industry consumption. In line with population

growth, sugar consumption in 2022/23 is forecast to further increase to 7.9 MMT of raw sugar equivalent.

In 2017, there were two corn wet mills operational in the country producing corn starch, HFCS-55, glucose syrup, and maltodextrin from imported corn. As the industry is growing, currently a total of three wet mills are operational with installed capacity of 4,000 MT per day compared to 1,700 MT per day in 2017. In 2022/23, the industry is forecast to produce a total of 120,000 MT of HFCS-55 (equal to 98,400 MT of raw sugar equivalent) an increase of 114 percent compared to 56,000 MT of HFCS-55 (45,920 MT of raw sugar equivalent) produced in 2021/22. As local production increases, imports of HFCS-55 have declined to 34,543 MT of raw sugar equivalent in 2020/21 from 53,356 MT of raw sugar equivalent imported in 2019/20. However, during the period of May 2021 to February 2022, imports of HFCS-55 reached a total of 29,776 MT of raw sugar equivalent, an increase of 9 percent compared to the same period of 2020/21. During the period of May 2021 to February 2022, Indonesia imported HFCS-55 from Turkey (88.3 percent), the People’s Republic of China (6.17 percent), and South Korea (3.7 percent).

Prices

Retail plantation white sugar prices surged following higher demand during the end of year festivities of 2021 and upcoming 2022 Eid’l Fitr celebration while the 2022/23 milling season has not yet begun. In line with increasing white sugar production costs, MOT recently issued a circular letter increasing the maximum retail price (*HET, Harga Eceran Tertinggi*) for sugar to 13,500 IDR per kg (\$940 per MT) from 12,500 IDR per kg (\$870 per MT). However, plantation white sugar retail prices have remained well above the new maximum retail price (see Table 4).

Table 4. Indonesia: Jakarta Monthly Average Retail White Sugar Prices (IDR/Kg)

Month	2019	2020	2021	2022
January	11,491	13,305	13,057	13,200
February	11,612	13,827	12,967	14,000
March	11,853	16,402	12,995	14,100
April	11,902	17,448	13,081	14,600
May	12,432	16,152	13,065	
June	12,226	14,661	13,078	
July	12,627	13,352	12,997	
August	12,509	13,264	12,978	
September	12,632	13,099	12,947	
October	12,759	12,921	12,944	
November	12,657	12,933	12,995	
December	12,820	12,832	13,172	
Average	12,293	14,183	13,023	13,975

Source: Market Information Center (PIP), Ministry of Trade and Jakarta Provincial Food Prices Information

Stocks

Despite increased imports and higher production of plantation white sugar, higher exports and higher demand for home consumption is expected to reduce 2021/22 ending stocks to 2.474 MMT of raw sugar equivalent compared to 2.664 MMT of raw sugar equivalent in 2020/21. Stocks are forecast to decline further to 2.274 MMT of raw sugar equivalent in 2022/23 on growing consumption from population growth.

Trade

The GOI expects the food and beverage industry to consume domestically produced refined sugar, although industries that require refined sugar with certain specifications that is unavailable in the local market may import a limited amount of refined sugar to meet demand. The GOI normally issues import allocations for raw sugar at the beginning of the calendar year; however, for 2022/23, the GOI issued import allocations in late 2021. These allocations are subject to change when certain sugar products cannot be sourced domestically.

In 2021, sugar refineries imported a total of 3.303 MMT of raw sugar out of a total allocation of 3.349 MMT. This raw sugar must be refined locally and may only be distributed to the domestic food and beverage industry, not directly to retail consumers. The 2021 raw sugar import realization by sugar refineries is higher than the 3.007 MMT materialized in 2020. The increase is in line with higher demand for refined sugar from the food and beverage industry as malls and restaurants open back up and food manufacturing ramps up. During an inter-ministerial meeting on October 2021, the GOI forecast total 2022 sugar demand from the food and beverage industry at 3.6 MMT. In line with this forecast, the GOI allocated an import quota of 3.48 MMT of raw sugar for refineries for 2022. Import permits for this allocation were all issued in early 2022.

In an effort to prevent soaring prices of plantation white sugar and to fill sugar mills' idle capacity, the GOI also authorized sugar mills to import a total of 891,627 MT of raw sugar to be processed into plantation white sugar for direct household consumption, an increase of 31 percent from the allocation of 680,000 MT in 2021. In addition, the GOI has also authorized the importation of 150,000 MT of plantation white sugar in 2022 by state-owned companies, the same volume as in 2021. The imported raw sugar for sugar mills is expected to arrive before the beginning of milling season in May 2022. Consequently, 2022/23, raw sugar imports are forecast to increase to 5.4 MMT, consisting mainly of raw sugar imports for refineries.

As mandated by [Law No. 7/2021](#) concerning the Harmonization of Tax Regulations, the GOI increased the value-added tax for imported sugar to 11 percent. The new tax came into effect on April 1, 2022. With these new adjustments, the GOI set sugar import duties and taxes as follows:

Table 5. Indonesia: Sugar Import Duty (ID) and Value Added Tax (VAT), 2022

No.	Commodity	ID		VAT (%)
		(IDR/Kg)	(US\$/ton)	
1.	Raw cane sugar	550	38	11
2.	White sugar	790	55	11
3.	Refined sugar	790	55	11

Source: Indonesian National Single Window

Thailand remains the main supplier of raw and refined sugar to Indonesia. For the period of May 2021 to January 2022, Indonesia's raw sugar imports originated from Thailand (36 percent), India (29 percent), Australia (21 percent) and Brazil (14 percent). Refined sugar imports were supplied mostly by Thailand (64 percent), India (32 percent), and the rest from South Korea (3 percent).

Post revised 2020/21 raw sugar imports up to 5.674 million metric tons (MMT) from the previous 2020/21 estimate of 4.9 MMT on updated trade data. The decline in plantation white sugar production in 2020/21 increased the demand for imported raw sugar to fill sugar mills' idle capacity as well as the demand for refined sugar from the growing food and beverage industry.

Policy

Indonesia's policies on sugar imports are laid out in MOT Regulation No. 14/2020 (please see [ID2020-0008](#)) and MOI Regulation No. 3/2021 on Assurance of Raw Material Availability for the Sugar Industry to Meet National Sugar Needs (please see [ID2021-0018](#)).

TRADE MATRICES

Table 6. Import Trade Matrix, Raw Sugar (2020-2022)

Import Trade Matrix			
Country	Indonesia		
Commodity	Sugar, Raw		
Time Period	May-Apr	Units:	1,000 MT
Exports for:	2020/21		2021/22*
U.S.	0		0
Others		Others	
Brazil	1,980	Thailand	1,447
India	1,298	India	1,157
Australia	1,233	Australia	826
Thailand	1,038	Brazil	550
South Africa	80		
Guatemala	45		
Total for Others	5,674		3,980
Others not Listed	0		0
Grand Total	5,674		3,980

Source: Trade Data Monitor

Note: *Only for the period of May 2021 – February 2022

Table 7. Import Trade Matrix, Refined Sugar (2020-2022)

Import Trade Matrix			
Country	Indonesia		
Commodity	Sugar, Refined		
Time Period	May-Apr	Units:	1,000 MT
Exports for:	2020/21		2021/22*
U.S.	0		0
Others		Others	
India	381	Thailand	97
Thailand	33	India	49
South Korea	4	South Korea	4
People's Republic of China	1		
Total for Others	419		150
Others not Listed	1		3
Grand Total	420		153

Source: Trade Data Monitor

Note: * Only for the period of May 2021 – February 2022

Note: Exchange rate is 14,364 IDR/US \$1 as of April 6, 2022.

Attachments:

No Attachments