



**Required Report:** Required - Public Distribution

**Date:** April 18, 2022 Report Number: RP2022-0022

# **Report Name:** Sugar Annual

**Country:** Philippines

**Post:** Manila

**Report Category:** Sugar

Prepared By: Florence Mojica-Sevilla

Approved By: Ryan Bedford

#### **Report Highlights:**

Post forecasts sugar production in Marketing Year (MY) 2023 to decline by 50,000 MT to 2 million MT, as high fertilizer prices lead to reduced yields. Production for MY 2022 is also lowered to reflect the damage to sugar farms in December 2021 by Typhoon Rai (local name Odette). Lower sugar output prompted the Philippines to allocate 100 percent of its production to the domestic market in MY 2022. Post expects MY2023 exports to also be zero and the Philippines to not participate in the U.S. sugar quota. Meanwhile, MY 2023 consumption is forecast to stay flat at 2.3 million MT, with greater imports expected to help ensure sufficient sugar supply. Philippine media have reported on a draft Sugar Order to authorize 250,000 MT of refined sugar and 100,000 MT of raw sugar imports. At the time of this GAIN report, the Sugar Regulatory Administration has not issued a fourth Sugar Order, but if approved it would contribute to greater imports and consumption.

### **Executive Summary:**

For MY 2023 (September 2022 to August 2023), Post forecasts sugar production declining to 2 million MT, nearly 5 percent lower than the current USDA official estimate for MY 2022. This is attributed to lower fertilizer usage because of rising fertilizer prices leading to lower yields. Post also lowers MY 2022 production by 50,000 MT to 2.05 million MT based on the latest data from the Sugar Regulatory Administration (SRA). The expected drop in production for MY 2022 prompted SRA to allocate 100 percent of its production for the domestic market as noted in <u>Sugar Order (SO) No. 1</u> on August 31, 2021. Typhoon Rai (local name Odette) hit the central area of the country in December 2021, affecting new plantings and damaging the standing crop in approximately 51,000 hectares. Area planted in MY 2023 is expected to remain flat at 390,000 hectares, with low productivity and high input costs constraining growth.

Post forecasts sugar imports at 275,000 MT in MY 2023, up 175,000 MT from the previous year, to supplement lower production as household demand drives consumption growth. Food and beverage manufacturers will look to increase production and sugar usage as the economy recovers from COVID-19, although rising sugar prices will constrain greater consumption. The Philippine press has reported that SRA has drafted a fourth Sugar Order that would authorize the importation of 100,000 MT of raw sugar and 250,000 MT of refined sugar. At the time of this GAIN report, however, SO No. 3 remains the latest order from SRA.

Sugar, Centrifugal	2020/2	2020/2021		2021/2022		2022/2023	
Market Year Begins	Sep 2020		Sep 2021		Sep 2022		
Philippines	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Beginning Stocks (1000 MT)	1289	1289	1196	1196	0	1040	
Beet Sugar Production (1000 MT)	0	0	0	0	0	(	
Cane Sugar Production (1000 MT)	2143	2143	2100	2050	0	2000	
Total Sugar Production (1000 MT)	2143	2143	2100	2050	0	2000	
Raw Imports (1000 MT)	0	0	0	0	0	(	
Refined Imp. (Raw Val) (1000 MT)	151	151	100	100	0	275	
Total Imports (1000 MT)	151	151	100	100	0	275	
Total Supply (1000 MT)	3583	3583	3396	3346	0	3321	
Raw Exports (1000 MT)	112	112	0	0	0	(	
Refined Exp.(Raw Val) (1000 MT)	0	0	0	0	0	(	
Total Exports (1000 MT)	112	112	0	0	0	(	
Human Dom. Consumption (1000 MT)	2275	2275	2300	2300	0	2300	
Other Disappearance (1000 MT)	0	0	0	0	0	(	
Total Use (1000 MT)	2275	2275	2300	2300	0	2300	
Ending Stocks (1000 MT)	1196	1196	1096	1046	0	1021	
Total Distribution (1000 MT)	3583	3583	3396	3346	0	3321	
(1000 MT)			I		I		

#### Table 1: Production, Supply, and Distribution Data

Sugar Cane for Centrifugal	2020/2021		2021/2022		2022/2023	
Market Year Begins	Sep 2020		Sep 2021		Sep 2022	
Philippines	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	398	398	390	390	0	390
Area Harvested (1000 HA)	398	398	390	390	0	390
Production (1000 MT)	23000	23000	23000	23000	0	23000
Total Supply (1000 MT)	23000	23000	23000	23000	0	23000
Utilization for Sugar (1000 MT)	23000	23000	23000	23000	0	23000
Utilizatn for Alcohol (1000 MT)	0	0	0	0	0	C
Total Utilization (1000 MT)	23000	23000	23000	23000	0	23000
(1000 HA), (1000 MT)						

Table 2: Production,	Supply,	and Distribution Data
----------------------	---------	-----------------------

Table 3: U.S. Dollar to Philippine Peso Exchange Rate2019202020212022US\$ - PHP51.8049.6249.2851.38

Source: Bangko Sentral ng Pilipinas (Central Bank of the Philippines)

### **Production:**

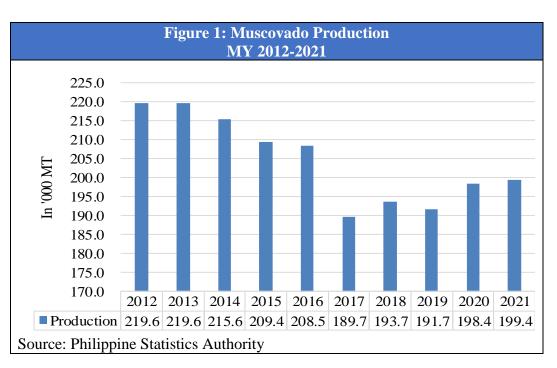
*Centrifugal Sugar (Raw Sugar)*. Post forecasts production will drop to 2.0 million MT in MY 2023 due to low productivity and rising fertilizer prices. Production in MY 2022 is revised downward by 50,000 MT to 2.05 million MT, which accounts for the effects of Typhoon Rai (local name Odette) that caused damage worth approximately 1.2 billion pesos (\$24 million) on sugar farms across 51,000 hectares. The typhoon also damaged sugar stocks at warehouses and disrupted milling facilities and refineries in the major producing province of Negros Occidental. Also of note is the Sugar Regulatory Administration's production estimate of 2.072 million MT as noted in <u>Sugar Order (SO) No. 3</u>, released on February 2, 2022, where the agency lowered its earlier projection of 2.099 million MT from <u>SO No. 1</u>. The Philippine media has reported that SRA will issue a fourth Sugar Order that revises the production estimate for MY 2022 to drop further to 1.982 million MT. At the time of this report, however, SO No. 3 remains the latest order from SRA.

Area planted for sugar in MY 2023 is forecast at 390,000 hectares, flat from the previous year. Sugar cane areas in the Philippines have declined over the years in favor of corn, bananas, and other crops. Some farmers and millers have expressed concern at the potential for trade reform in the sugar industry, which may also limit additional planting. In MY 2022, the 390,000 hectares planted to sugarcane is lower than the usual 400,000 planted annually. Of that total, sugarcane for ethanol production is only allocated four percent.

The sugar industry roadmap recommends solutions through improved farm productivity using high yielding varieties, continuous genetic improvement, and technology adoption for better farm

management practices. Growth drivers remain in the continuous implementation of the <u>Biofuels Act of</u> <u>2006</u>, <u>Renewable Energy Act of 2008</u>, and Sugarcane Industry Development Act (<u>SIDA</u>) of 2015. The economic returns from biofuels will continue to be minimal as long as the blend rate remains at 10 percent (E10).

*Non-centrifugal Sugar (Muscovado).* Muscovado is a non-centrifugal sugar from sugarcane, unrefined with strong molasses flavor conventionally cooked from sugarcane juice through open pan evaporation. The powder appears dark brown, coarser, and thicker because it does not undergo purification and centrifugation. The increasing interest in healthy and organic food in the Philippines is likely to stimulate demand for muscovado sugar, which is viewed as pure and whole. It serves as an important ingredient in local delicacies, jams, beverages, and in making chocolates. Muscovado powder has a polarization of 77-86 °Z, minimum as stated in the <u>PNS/BAFS 144:2015</u>.



#### **Prices:**

*Mill site Prices*. Mill site prices determine projected income using sugar yield or the LKG/TC (50-kilogram bag per ton of cane) and the prevailing sharing scheme implemented in the mill district. For example, the sharing could be 70:30 or 70 percent of sugar output to the farmer and 30 percent to the miller. Contributing to high sugar costs are labor, power, and fuel prices. The tax imposed by the TRAIN Law has been compounded by recently rising fuel prices, increasing the cost to produce sugar as fuel is used in sugar mechanization activities. The seasonal "unreasonable speculation" of some sugar traders drives prices upward but the main driver is the un-competitiveness of the sugar industry with high labor, power, and fuel costs. Sugar composite prices have increased over the years due to declining

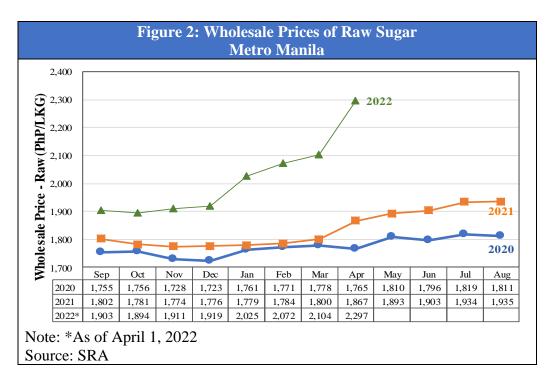
output. In March 2022, mill site prices of raw sugar have gone up to an average of PhP2,022.94 (\$39.37) per LKG, compared to PhP1,585.92 (\$32.18) per LKG in March 2021.

	Table 4: Mill Site Prices in Pesos per 50-Kilogram Bags								
		2020		2021			2022		
Month	''A'' US Quota	"B" Domestic	Composite Price	''A'' US Quota	"B" Domestic	Composite Price	''A'' US Quota	"B" Domestic	Composite Price
Sep	1,097.37	1,519.10	1,498.01	1,114.03	1,521.20	1,492.70	-	1,597.37	1,597.37
Oct	1,118.81	1,481.65	1,463.51	1,192.76	1,469.80	1,450.40	-	1,708.81	1,708.81
Nov	1,191.42	1,515.42	1,499.22	1,266.74	1,524.73	1,506.67	-	1,680.67	1,680.67
Dec	1,182.03	1,509.23	1,492.87	1,283.97	1,509.18	1,493.42	-	1,735.39	1,735.39
Jan	1,450.01	1,513.66	1,510.48	1,269.79	1,507.10	1,490.48	-	1,889.43	1,889.43
Feb	1,495.24	1,537.18	1,535.09	1,256.83	1,522.05	1,503.48	-	1,816.10	1,816.10
Mar	1,484.87	1,472.71	1,473.32	1,289.59	1,608.23	1,585.92	-	2,022.94	2,022.94
Apr	1,429.41	1,415.73	1,416.41	-	1,658.61	1,658.61			
May	1,490.54	1,573.78	1,569.62	-	1,653.92	1,653.92			
Jun	1,194.17	1,479.95	1,465.66	-	1,603.56	1,603.56			
Jul	1,116.67	1,413.33	1,398.50	-	1,613.33	1,613.33			
Aug	-	-	-	-	1,600.00	1,600.00			
Ave.	1,295.50	1,493.79	1,483.88	1,239.10	1,565.98	1,554.37	-	1,778.67	1,778.67

Note: \* As of March 27, 2022

No milling operations terminated during August 2020 Source: SRA

*Wholesale Prices*. The low sugar output for MY 2022 has led to soaring wholesale prices for both raw and refined sugar in Metro Manila. Refined sugar prices have spiked to PhP3,084 (\$60.02) per LKG in April 2022. The Philippine media has reported that the government is looking to import more sugar to stabilize prices, although SRA has not yet issued a new Sugar Order.

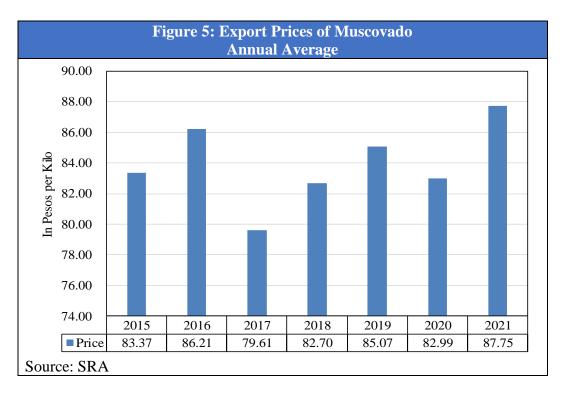




*Retail Prices.* High wholesale prices translate to elevated retail prices, which have risen to PhP65.82 (\$1.28) per kilo in April 2022. The Philippine Department of Agriculture (DA) sets suggested retail price of refined sugar at PhP50 per kilo, which groceries and supermarket have not followed as reflected in the numbers below. The wholesale and retail prices of sugar in Metro Manila can be accessed <u>here</u>.



*Muscovado Prices*. Foreign markets like Europe and Japan are willing to pay a higher price for muscovado. The export price has at times been up to four times higher for high quality muscovado than the prevailing market price of about PhP80 (\$1.56) per kilo in the domestic market, although local prices have risen recently. The favorable retail price in the domestic and export market pulls up farm gate prices to the benefit of producers. Muscovado offers a better price than raw and refined sugar with relatively low capital to operate.

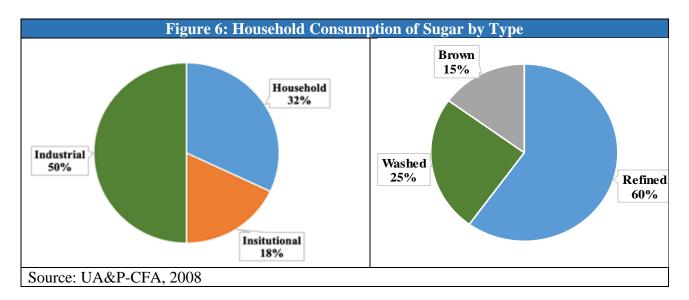


# **Consumption:**

*Centrifugal Sugar (Raw Sugar).* Post forecasts sugar consumption at 2.3 million MT in MY 2023, flat with MY 2022. The demand for sugar by industrial users is expected to grow as a result of the loosening of COVID-19 restrictions but remains constrained by high prices following lower domestic production and absent an increase in imports to stabilize prices.

Consumption is divided into three main segments: household (32 percent), institutional (18 percent) and industrial (50 percent). Most important among industrial users are the beverage industry, preserved fruits, and confectioneries. However, the share among these consumer segments is likely to have shifted given the effects of COVID-19.

Based on previous studies (1993, 2001, 2008) by the University of Asia and the Pacific-Center for Food and Agri Business (UA&P-CFA), Philippine consumers preferred refined sugar (60 percent) over washed (25 percent) and brown sugar (15 percent).



*Non-centrifugal Sugar (Muscovado).* Currently, demand outstrips supply resulting in high retail prices for muscovado, making both the domestic and export markets lucrative for muscovado producers. Consumers of muscovado come from the health and wellness sectors as well as institutional buyers.

Table 5: Muscovado Supply and DemandIn 1,000 Metric Tons						
DEMAND/	DEMAND/ MARKETING YEAR					
CONSUMPTION	2019 2020 2021					
PRODUTION	193	196	190			
+ Import	+ Import					
- Export (a) 3 5 34						
= Consumption	190	191	156			

Note: (a) Excludes exports of raw sugar to the United States Source: SRA, PSA, and Trade Data Monitor, LLC

# Sugar Substitutes

There are other forms of sugar and sugar substitutes or alternative sweeteners traded, such as high fructose corn syrup (HFCS), coconut sap sugar, and honey, among others. These alternative sweeteners serve niche markets.

**High Fructose Corn Syrup (HFCS)** (HS Code 170260) is a starch-based sweetener consisting of a combination of fructose, dextrose, and higher saccharides. The Philippines used to be the biggest market for HFCS, importing about half of China's exports estimated at about 300,000 MT annually. This changed once the Philippines placed an excise tax on sweetened beverages on January 1, 2018. The law states that all drinks with caloric and non-caloric sweeteners are taxed PhP6 (\$0.12) per liter, while those using HFCS are charged PhP12 (\$0.24). As a result, the sweetened beverage producers, the biggest HFCS buyers, shifted back to domestic sugar to avoid the higher taxes.

Table 6: Philippine Fructose/HFCS ImportsMetric Tons					
	2019	2020	2021		
September	486	1,074	378		
October	558	878	1,386		
November	787	925	453		
December	636	507	993		
January	429	734	873		
February	666	493	1,151		
March	700	498	909		
April	611	561	2,058		
May	675	265	1,198		
June	1,078	587	1,369		
July	1,267	806	1,161		
August	522	419	705		
Total	8,414	7,746	12,635		

Source: SRA

<u>Coconut Sap Sugar or Coco Sugar</u> (HS Code 170290). Coco sugar is natural, unrefined, and concentrated. Currently, coco sugar is only a small fraction of the country's coconut industry, but the Philippine Coconut Authority has been actively promoting coco sugar as an alternative to cane sugar to boost local demand. Coco sugar has low glycemic index (GI) of 35 per serving, compared to GI 65 to 100 for cane-based sugar. Coco sugar is exempt from additional excise tax on sweetened products in the Philippines.

**Honey** (HS Code 040900). Honey has fructose (40 percent), glucose (30 percent), water, and minerals such as iron, calcium, potassium, and magnesium. It is sweeter than sugar due to the high level of fructose, with a GI value of 55. Honey substitutes sugar in baking, sauces and beverages. The Philippines is a net importer of honey. Imports reached 640 MT in MY 2021. Production is lower, estimated at 100 MT per year.

# Alternative Sweeteners

The Philippines produces and imports a number of sugar alternatives generally accepted and approved by the Philippine Food and Drug Administration (FDA). Many dieters use alternative sweeteners and artificially sweetened foods to cut sugar consumption without eliminating sweetness on beverages, baked foods, and ice cream, among others. For more information on sugar alternatives, please see the 2021 Sugar Annual Report.

The consumption of sugar alternatives including lactose, glucose, and fructose/HFCS is much lower as compared to total sugar consumption in the country. Consumption has been declining for the past years, with a slight recovery in MY 2021.

Table 7: Consumption of Sugar and Alternative SweetenersIn '000 MT Raw Sugar Equivalent							
DEMAND/		MARKETING YEAR					
CONSUMPTION	2020	2020 2021 2022					
Sugar	2,275	2,300	2,300				
Sugar Alternatives	375	513	271*				
Aspartame	182	177	110*				
Acesulfame	148	183	56*				
Sucralose	NA	113	78*				
Saccharin	30	21	16*				
Stevia	9	9	7*				
Fructose/HFCS	6	10	4				

Note: \*September to December 2021 only.

Aspartame – HS Code 292429, Cyclic Amides (Including Cyclic Carbamates) And Their Derivatives, And Salts Thereof, Nesoi; Saccharin – HS Code 292511; Sucralose – HS Code 293214

Acesulfame – HS Code 293499, Nucleic Acids And There Salts, Wheter Or Not Chemically Defined; Other Heterocyclic Compounds, Nesoi

Stevia – HS Code 293890, Glycosides, Natural Or Reproduced By Synthesis, And Their Salts, Ethers, Esters And Other Derivatives, Nesoi

Philippines has minimal production

NA = no data available

Source: Trade Data Monitor, LLC and SRA for Sugar and Fructose/HFCS

#### **Trade:**

*Exports.* The United States is the sole export market for Philippine raw sugar, but SRA has not approved any MY 2022 sugar exports, per <u>SO No. 1</u>. Considering MY 2023 production is forecast to decline to 2 million MT, Post also expects no exports in MY 2023. Muscovado exports, while in smaller volumes, have steadily increased over the years, surpassing 3,400 MT in 2021 and valued at \$6 million.

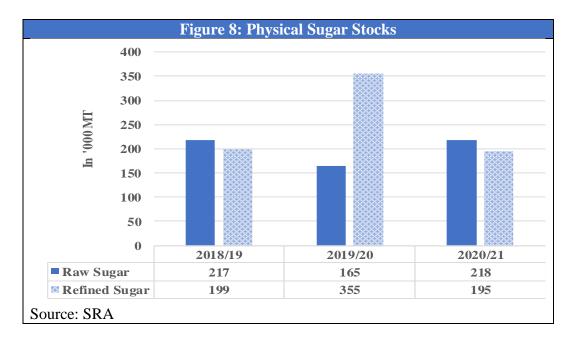


*Imports.* Post forecasts sugar imports at 275,000 MT in MY 2023, up 175,000 MT from the previous year, to supplement lower production as household demand drives consumption growth. SRA released <u>SO No. 3</u> on February 4, 2022, allowing the importation of 200,000 MT of refined sugar to address low production and increasing demand. Farmers appealed to local officials and to the DA and SRA to cease importation during the harvest season. The Regional Trial Court of Negros Occidental issued a Temporary Restraining Order in favor of sugarcane farmers. Delays in the release of import licenses are expected and possibly the revision of import volumes. On February 16, 2022, SRA issued the temporary halting of the 200,000 MT sugar import program through <u>Memorandum Circular No. 5</u>.

The Philippine press has reported that SRA has drafted a fourth Sugar Order that would authorize the importation of 100,000 MT of raw sugar and 250,000 MT of refined sugar. At the time of this GAIN report, however, SO No. 3 remains the latest order from SRA.

### Stocks:

Sugar stocks for MY 2023 are forecast 7 percent lower than the previous year, because of lower production and more quedans released to take advantage of higher prices. The onset of COVID-19 had resulted in higher stocks of refined sugar in MY2020 due to lower demand, while raw sugar was lower as *quedan* holders released their stocks to avail of rising prices. Raw sugar stocks stay in the mill until the *quedan* holders withdraw their sugar for selling. Sugar stock is use during months of minimal production or nil. Note: a *quedan* is the warehouse receipt issued by a sugar mill once the sugar is processed. It is issued to the farmer representing their share of the sugar. The warehouse receipt attests to the physical presence of the sugar in the storage facility. There are five different types of *quedans* (A, B, B-1, C, and D), although currently 100 percent of sugar is allocated to the B *quedan* for the domestic market.



# **Trade Policy:**

*Executive Order 892* (*EO 892*). Imports of sugar from ASEAN countries are levied a 5 percent duty. EO 892 reduced tariffs in ASEAN Trade in Goods Agreement (ATIGA) from 38 percent in 2010 to the current 5 percent, which started in 2015 (see table in the above link). This reduction in ASEANs tariff was expected to increase trade, as other ASEAN producers, particularly Thailand, have lower production costs. Despite the drop in duties, there are still multiple administrative barriers in place to restrict imports.

The Philippines is a signatory to the World Trade Organization (WTO). The country has lifted quantitative restrictions on imports of all food products but maintains tariff rate quotas on sugar and other sensitive products such as rice, corn, poultry meat, pork, and coffee. The tariff rates for sugar were established in Executive Order 313 which set varying in-quota and out-quota rates. In-quota rates apply for sugar imported within the minimum access volume (MAV) while any imports in excess of the MAV are assessed the out-of-quota rate.

For non-ASEAN countries, under the Uruguay Round of the WTO, the Philippines committed to a final tenth-year MAV of 64,050 MT of raw sugar, with a tariff rate of 50 percent. All importation in excess of the MAV is subject to a tariff rate of 65 percent. The tariff on sugar is among the highest of all agricultural commodities, essentially blocking all imports under this agreement. The Most Favored Nation (MFN) tariff has not changed since 2016. See this prior <u>Sugar Annual Report</u> for a table of ASEAN harmonized tariff codes and MFN rates.

#### **Policy:**

SRA has the mandate under <u>EO 18 Series of 1986</u> and <u>Republic Act No. 10659</u> of the Sugar Industry Development Act (SIDA) of 2015 to establish a balance between domestic production and the country's sugar requirement.

*Sugar Order*. Philippine sugar policy, trade, and domestic prices are generally regulated by the SRA, working closely with various influential industry stakeholders. During the start of each crop year, the SRA issues a central policy (known as Sugar Order No.1) on production and marketing of sugar for the country, which allocates how much production goes to the domestic and export markets as well as for reserves. These orders are adjusted as the season progresses. A running history of SRA sugar orders may be accessed <u>here</u>.

Sugar Order No. 1. SRA issued SO No.1 on August 31, 2021, which forecast production at 2,099,721 MT for Crop Year 2021/22. Sugar production was allocated 100 percent for the domestic market or "B" sugar.

Sugar Order No. 2. SRA released SO No. on November 9, 202,1 amending SO No.3 Series of 2020-2021 by extending the "A" Sugar Export Replenishment Program from October 31 to November 15, 2021.

<u>Sugar Order No, 3.</u> SRA issued SO No. 3 on February 4, 2022, allowing the importation of 200,000 MT refined sugar to address the concerns of low sugar production.

<u>Memorandum Circular No. 5</u> issued on February 16, 2022 temporarily halting the previously-announced implementation of the import program for 200,000 MT of refined sugar until further notice.

*Excise Tax on Sweetened Beverages*. Taking effect in January 2018, the law states that all drinks with caloric and non-caloric sweeteners are taxed P6 (\$0.12) per liter, while those using HFCS are charged P12 (\$0.24) per liter. All milk (whether powdered, ready-to-drink, flavored, or fermented) are excluded from the tax, as well as ground and 3-in-1 coffee and 100-percent natural fruits and vegetable juices, meal replacements, medically indicated drinks, and beverages sweetened with stevia and coco sugar.

*Value Added Tax*. The Philippine government imposes a value added tax of 12 percent on raw and refined sugar. The proceeds go to the general tax revenues of the government.

*Sugar Industry Development Act*. Republic Act 10659, otherwise known as the Sugarcane Industry Development Act (SIDA) was passed in 2015. The main objective of this law is to promote the competitiveness of the sugarcane industry through mandated programs and appropriations. SIDA, has five components:

- 1. Establish productivity improvement programs;
- 2. Provide the needed infrastructure support;
- 3. Enhance research and development of other products derived from sugar, sugarcane, and their by-products;
- 4. Provide human resource development and extension services; and
- 5. Provide financial assistance to small farmers.

SIDA requires an annual allocation of P2 billion (\$41 million) for the sugar industry – 15 percent for block farm grants, 15 percent for research and development, capacity building and technology transfer, 15 percent for socialized credits for farm support and mechanization, 5 percent for scholarship grants and human resources development programs, and 50 percent for infrastructure development programs for farm to mill roads, irrigation, and transport infrastructure.

*Sugar Sharing System*. The Sugar Act of 1954 mandates the sharing of raw sugar and molasses, with 65 to 70 percent to the planter and 30 to 35 percent to the miller. This sharing system has remained unchanged for over six decades. The Philippine government is studying the possibility of revising or eliminating the sugar sharing system.

Social Amelioration Act of 1991 – Republic Act 6982 and Department of Labor and Employment (DOLE) Department Order No. 114, Series of 2011 Implementing Rules and Regulations (IRR). The DOLE implements an industry-based social protection program, the Social Amelioration Program (SAP) in the Sugar Industry, as mandated under RA 6982. It was established with the aim of contributing to the attainment of decent living for sugar workers and their families through the imposition of lien on the volume of sugar produced. Every 50 kg bag of sugar produced is levied a P7.9 (\$0.16) lien collected upon withdrawal of raw sugar from the mill's warehouse. The proceeds shall form the Social Amelioration Fund dedicated for: 1) Cash Bonus Fund to augment the income of sugar farmworkers; and 2) the Socio-Economic Program Related Fund to finance social and economic programs to improve their livelihood and well-being. The social amelioration funds collected from the sugar production amount to about P330 million (\$6.8 million) annually.

**Biofuels** Act of 2006 - Republic Act 9367. The Biofuels Act was enacted in early 2007, making bioethanol from molasses the second largest sugarcane product. The ethanol blend mandate of 5 percent (E5) was implemented in 2009 and 10 percent (E10) in 2011. The target of 15 percent blend (E15) by 2020 has not been implemented, as the country remains stalled on E10.

Sugarcane and sugar molasses are the primary feedstocks used for bioethanol ethanol production, while the bagasse from sugarcane is mainly used for power cogeneration of sugar mills and refineries and bioethanol distilleries. There are currently 13 operating bioethanol distilleries and 6 power-generating plants in the country. For more information, see the 2021 Biofuels Annual Report.

The reference price of bioethanol is based on the mill site prices of sugar and molasses. Initially, the National Biofuel Board through the SRA set a price index or reference price of bioethanol, which serves as a basis during the negotiation of the oil companies and bioethanol producers.

	Table 8: Sugar, Molasses, and Bioethanol Prices					
Marketing	Sugar Composite	Molasses Price	Bioethanol			
Year	Price	(PhP/MT	Reference Price			
	(PhP/Lkg)		(PhP/Li)			
2020	1,483.88	11,464.13	61.07			
2021	1,554.37	9,268.77	57.48			
2022*	1,778.67	10,856.79	61.81			

Note: \*September 2021 to March 2022 only Source: SRA

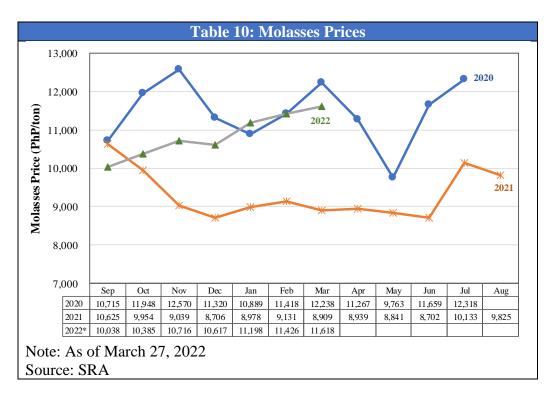
<u>Renewable Energy Law of 2008</u> - Republic Act 9513. This law established the development, utilization, and commercialization of renewable energy, including bagasse from sugarcane. Bagasse is the cellulosic material from sugarcane which is left after extracting the juice from the sugarcane stalk. It is mainly used for power cogeneration of sugar mills, sugar refineries, and bioethanol distilleries.

*Molasses* (HS 170310). Molasses is the major by-product from sugar production and is used as a raw material in the manufacture of bioethanol and potable alcohol. Molasses imports decreased in 2021 to 411,000 MT from 494,000 MT in 2020. In 2021, imported molasses was mainly supplied by Indonesia (40 percent), India (23 percent), and Thailand (17 percent).

Table 9: Molasses Supply and DemandIn '000 MT						
DEMAND/ MARKETING YEAR						
CONSUMPTION	2019 2020 2021					
PRODUCTION	1,031	1,134	1,165			
+ Import	672	494	411			
- Export	-	-	-			
= Total Demand (a)	1,703	1,628	1,577			

Note: (a) including molasses for ethanol production (potable and disinfectant). Under the law, imported molasses is not allowed to be used as feedstock for fuel ethanol production. Source: SRA and TDM

In MY 2020, molasses prices had drastic highs and lows as a result of erratic global supply and domestic production and demand. For MY 2022, prices show an increasing trend but have not yet reached the highs of 2020.



#### **Attachments:**

No Attachments