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# Zimbabwe

# **Sugar Annual**

# Zimbabwe Sugar Production Expected to Rebound from Drought

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# **Report Highlights:**

Post forecasts that sugar cane production in Zimbabwe will increase by 9 percent to 3.5 million MT in the 2018/19 MY, based on a return to normal weather after the previous year's drought and improved sugar cane yields from more available irrigation water. Post forecasts that sugar production in Zimbabwe will increase by 17 percent to 460,000 MT in the 2018/19 MY, based on an increase in the quantity of sugar cane delivered to the mills and better quality sugar cane for crushing, resulting in good factory recoveries. Post forecasts that Zimbabwe will fully utilize the United States Tariff Rate Quota (TRQ) allocation for the 2018/19 MY.

**Commodities:** Sugar, Centrifugal Sugar Cane for Centrifugal

#### **Executive Summary**

Post forecasts that sugar cane production in Zimbabwe will increase by 9 percent to 3.5 million MT in the 2018/19 MY, based on a return to normal weather after the previous year's drought and improved sugar cane yields from more available irrigation water. This increase is expected to be offset by lower sugar cane yields from some poorly performing new smallholder sugar farms and beneficiaries of the land reform program.

Post forecasts that raw sugar production in Zimbabwe will increase by 17 percent to 460,000 MT in the 2018/19 MY, based on an increase in the quantity of sugar cane delivered to the mills and better quality sugar cane for crushing, resulting in good factory recoveries.

Post forecasts that Zimbabwe sugar exports will increase by 21 percent to 145,000 MT in the 2018/19 MY, based on an increase in sugar production and the large available stocks. Post forecasts that sugar imports will decrease by 12 percent to 38,000 MT in the 2018/19 MY, based on the adequate sugar supply in the domestic market, and the only imports will be from South Africa and Swaziland, who enjoy duty free access into the Zimbabwe market.

Post forecasts that sugar consumption in Zimbabwe will increase by 5 percent to 345,000 MT in the 2018/19 MY, due to an increase in production, improved market access in the remote areas of the country and the increased uptake from beverage and food manufactures.

Post forecasts that Zimbabwe will fully utilize the United States Tariff Rate Quota (TRQ) allocation for the 2018/19 MY.

#### Sources:

Tongaat Hulett - <u>http://www.tongaat.co.za/imc/presentations/presentation.asp</u> Zimbabwe Sugar Association Experiment Station

MT – Metric Tons MY – Marketing Year (April to March)

# Background

Sugar cane in Zimbabwe is grown under canal irrigation in the lowveld area of Triangle and Hippo Valley, in the Chiredzi District, Masvingo Province, as shown in **Figure 1** below. About 80 percent of Zimbabwe's sugar cane crop is produced by two large estates, namely, the Triangle Sugar Estate and Hippo Valley Estate. Private farmers, including large scale farmers and newly resettled farmers, produce about 20 percent of the country's sugar cane crop. There are two sugar mills in Zimbabwe, the Hippo Valley Estates Ltd and Triangle Sugar Estates Ltd, with a combined sugar production capacity of about 640,000 MT and installed milling capacity of 4.8 Million MT of sugar cane per annum. South African based sugar company, Tongaat-Hulett owns 100 percent of the Triangle Sugar Estate and about 50.5 percent of the Hippo Valley Estate. The remaining 49.5 percent of the Hippo Valley Estate shares are publicly owned through the Zimbabwe Stock Exchange. Currently, Zimbabwe has two sugar refineries; the Triangle Sugar Refinery, which is a back-end refinery, and Star Africa Sugar Refinery Ltd, an independent sugar refinery based in Harare.



Figure 1: Location of the Sugar Cane Growing Areas and Mills in Zimbabwe

Source: Tongaat Hulett (http://www.tongaat.co.za/imc/presentations/presentation.asp)

**Figure 2** shows the structure of the Zimbabwe sugar industry. The Zimbabwe Sugar Association is the highest decision making authority in the industry on common issues of interest for sugar cane growers and sugar millers. In addition, the Zimbabwe Sugar Association Experiment Station (ZSAES) conducts research for the industry and is funded from the sales of sugar based on a zero-budget basis. The Zimbabwe Sugar Sales Company (ZSSC) was founded by growers to sell sugar on their behalf. According to Zimbabwe sugar regulations, all the crystals of sugar produced by the sugar mills are owned by the ZSSC. The ZSSC sells raw sugar to Star Africa, an independent refinery, and also to Triangle Sugar Mill. There are two mills in Zimbabwe owned by Triangle Limited and Hippo Valley Estates. There are two categories of sugar cane growers in Zimbabwe, the Miller-Cum Planters and Private Growers. The Miller-Cum Planters are the two sugar estates (Triangle and Hippo Valley) owned

by South African based Tongaat Hullet Company and in total account for about 62% of the area planted to sugar cane in Zimbabwe. The private growers account for about 38% of the total area planted and refers to all the other individual sugar cane farmers, who are not part of Triangle and Hippo Valley Estates. Due to regular disagreements, the associations representing farmers have increased from one to five now. There are two entities producing ethanol from sugar cane in Zimbabwe, Triangle Sugar Estate and Green Fuels. Green Fuels is not part of the Zimbabwe Sugar Association, and is usually excluded in matters associated with the sugar industry.

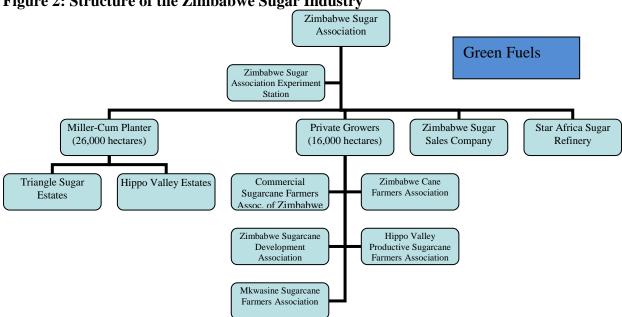


Figure 2: Structure of the Zimbabwe Sugar Industry

Source: Zimbabwe Sugar Association Experiment Station

# Sugarcane:

# Production

Post forecasts that sugar cane production in Zimbabwe will increase by 9 percent to 3.5 million MT in the 2018/19 MY, from 3.2 million MT in the 2017/18 MY, based on a return to normal weather after the previous year's drought and improved sugar cane yields from more available irrigation water. This increase is expected to be offset by lower sugar cane yields from some poorly performing new smallholder sugar farms and beneficiaries of the land reform program, as explained at the end of the report under the section on land reform. The 2017/18 MY sugar cane production was revised downwards to 3.2 million MT due to the higher than projected impact of the previous seasons` drought and limited replanting during 2016. There is no commercial sugar beet production in Zimbabwe.

**Table 1** shows that the current 2018 water levels for the four dams which supply irrigation water to sugar cane farms are generally higher than the previous season's levels. As a result, it is expected that there will be a higher availability of irrigation water in the 2018/19 MY.

Dam Name	Full Volume	Percent Full as at	Percent Full as at	Percent Full as at
	(Cubic	March 31, 2016	March 31, 2017	March 29, 2018
	Meters)	(Percent)	(Percent)	(Percent)
Tokwe	1 802 600	-	69	74
Mukosi*				
Mutirikwi -	1 378 080	25	36	50
Tokwe				
Manjirenji	274 170	38	95	94
Manyuchi	309 600	86	103	107

Table 1: Dam	Levels	Sunnlying	Irrigation	to the	Sugar	Industry
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\* Completed in December 2016

Source: Zimbabwe National Water Authority

Post forecasts that the area of cane harvested in Zimbabwe will increase by 7 percent to 44,000 hectares (ha) in the 2018/19 MY, from 41,000 ha in the 2017/18 MY, due to the availability of irrigation water and sugarcane that was replanted under the Agricultural Improvement Plan in 2017 coming into production. **Table 2** summarizes the production of sugar cane and average yields in Zimbabwe from the 2014/15 MY to the 2018/19 MY. It is to be noted that while average yields are listed as 79.5 tons/ hectare in the 2018/19 MY, the variation in yields ranges widely from 4 tons/ha for poorly performing farmers to about 200 tons/ ha for well managed sugar estates.

Marketing Year	Area Harvested (Ha)	Cane Crushed (MT)	Yield (MT/ha)
2014/15	43,121	3,856,000	89.4
2015/16	43,094	3,348,000	77.7
2016/17	43,500	3,483,000	80.1
2017/18*	41,000	3,180,000	77.6
2018/19**	44,000	3,500,000	79.5

 Table 2: The Production of Sugar Cane and Sugar in Zimbabwe

\*\*Forecast, \*Estimate.

Sources: Tongaat Hulett (http://www.tongaat.co.za/imc/presentations/presentation.asp)

The main diseases of concern in the Zimbabwe sugar industry include Smut, Ratoon Stunt Disease (RSD), Leaf Scald, Brown Rust, Orange Rust (no official reported case), and Sugar Cane Yellow Leaf. The main pests of concern in include Eldana, Sugar Cane Yellow Aphid; and Black Maize Beettle. Viral diseases in crops are not closely monitored and controlled. The Zimbabwe Sugar Association Experiment Station (ZSAES) routinely scouts for pests and diseases in all sugar cane farms, including those subsistence farms that produce chewing sugar cane as part of the industry biosecurity and risk mitigating measures.

Zimbabwe currently has fourteen varieties of sugar cane approved for growing by farmers. While the industry seeks to limit each variety to a maximum of 40 percent in order to minimize and diversify risks, the N14 variety currently accounts for about 60 percent of the sugarcane production. One of the new varieties ZN10 has been gaining popularity with farmers because of its high sucrose content. Although the industry had agreed to limit the production of ZN10 to 10 percent due to its fine particles that could potentially flood the mill diffusers, this variety is suspected to now account for at least 20 percent of production. One of the challenges faced by the ZSAES is that it has no ownership of the varieties listed in Zimbabwe. The industry is in the process of resolving the ownership of the sugar cane varieties through gazetting and listing the approved varieties under the Seed Act. About 450 to 500 hectares is dedicated to the production of seed cane, and the industry replants about 12 percent of the total area under sugar cane annually.

Sugar Cane for Centrifugal	2016/2017 Apr 2016		2017/2018 Apr 2017		2018/2019 Apr 2018	
Market Begin Year						
Zimbabwe	USDA Official	USDA Official	USDA Official	New Post	USDA Official	New Post
Area Planted	46	46	47	44	0	47
Area Harvested	44	44	44	41	0	44
Production	3483	3483	3600	3180	0	3500
Total Supply	3483	3483	3600	3180	0	3500
Utilization for Sugar	3483	3483	3600	3180	0	3500
Utilizatn for Alcohol	0	0	0	0	0	0
Total Utilization	3483	3483	3600	3180	0	3500
(1000 HA) ,(1000 MT)						

#### Table 3: PSD Table for Sugar Cane

# Sugar:

# Production

Post forecasts that sugar production in Zimbabwe will increase by 17 percent to 460,000 MT in the 2018/19 MY, from 393,000 MT in the 2017/18 MY. This is due to an increase in the quantity of sugar cane delivered to the mills and better quality sugar cane for crushing, resulting in good factory recoveries. The 2017/18 MY sugar production was revised downwards to 393,000 MT based on lower than expected quantity of sugar cane delivered to the mills and poor sugar cane quality. **Table 4** below also confirms the better quality of sugar cane and better factory recoveries in the 2018/19 MY, as the Sugar to Cane ratio percentage is expected to increase to 13.1 percent in the 2018/19 MY, from 12.4 percent in the 2017/18 MY.

Marketing	Cane crushed	Sugar Production	Sugar/ Cane Ratio	
Year	( <b>MT</b> )	( <b>MT</b> )	(Percentage)	
2014/15	3,856,000	445,000	11.5	
2015/16	3,348,000	412,000	12.3	
2016/17	3,483,000	453,000	13.0	
2017/18*	3,180,000	393,000	12.4	
2018/19**	3,500,000	460,000	13.1	

#### Table 4: The Production of Sugar and Factory Recoveries in Zimbabwe

\*\*Forecast, \*Estimate.

Sources: Tongaat Hulett (http://www.tongaat.co.za/imc/presentations/presentation.asp)

Hippo Valley and Triangle Sugar Estates Mills are the only sugar mills in Zimbabwe. Hippo Valley only produces raw sugar. Triangle Sugar Estate produces raw sugar and about 20 percent of the refined sugar in Zimbabwe. Both Hippo Valley and Triangle Mills supply raw sugar to Star Africa, an independent refinery located in Harare that produces about 80 percent of refined sugar including bottler grade white sugar.

## Consumption

Post forecasts that sugar consumption in Zimbabwe will increase by 5 percent to 345,000 MT in the 2018/19 MY, from 330,000 MT in the 2017/18 MY. This is due to an increase in production, improved market access in the remote areas of the country, and increased uptake from beverage and food manufactures. This increase was partially offset by the high levels of unemployment, and cash or liquidity challenges faced by consumers. The lack of real cash in the country is being addressed by adopting a four tier pricing system, where customers pay different prices based on whether they are paying in real United States dollars in cash, bond notes, Electronic Fund Transfer (EFT)/ Real Time Gross Settlement (RTGS) or mobile money payment.

The two main categories of consumers for sugar in Zimbabwe are manufacturers (beverages, confectioners, bakers and pharmaceuticals) and households. Domestic sugar consumption is usually categorized by 30 percent of white sugar and the remaining 70 percent of domestic consumption is brown sugar. Star Africa, the independent sugar refinery has significantly improved the quality and capacity of refined sugar that it produces including bottler grade sugar.

Zimbabwe per capita consumption of sugar at 23kg/year is still relatively low when compared to the regional average of about 30 kg/ year. This is due to the limited disposable income and lower demand from manufacturing. The 2018 domestic retail prices of white and brown sugar range from \$0.95 to \$0.99 per kilogram.

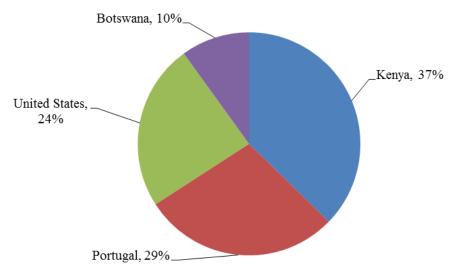
The industry currently sees no impact in the use of alternative sweeteners by some beverage producers, as the quantities utilized are still low and there is widespread negative publicity of artificial sweeteners.

# Trade:

## **Exports**

Post forecasts that Zimbabwe sugar exports will increase by 21 percent to 145,000 MT in the 2018/19 MY, from 120,000 MT in the 2017/18 MY, based on an increase in sugar production and large available stocks. The 2017/18 MY exports were revised downwards to 120,000 MT based on the lower than expected sugar production and updated industry data. Post uses industry figures for exports because the Global Trade Atlas does not have updated data for Zimbabwe.

The main export destinations for Zimbabwe sugar are the United States, European Union, Botswana, South Africa and Eastern Africa (Kenya). Zimbabwe exported about 17,443 MT raw sugar to the United States to fulfill the 2017/18 MY Tariff Rate Quotas (TRQ). Post forecasts that Zimbabwe will fully utilize the United States TRQ allocation for the 2018/19 MY based on the production forecast.



# Figure 3: Zimbabwe Export Markets in the 2017/18 MY

Source: Global Trade Atlas (Derived Exports)

Zimbabwe exports to the European Union (EU) have significantly decreased since 2017, due to unfavorable prices and low returns when compared to other export markets such as East Africa. The EU changed its domestic sugar policy in 2017 and removed restrictions for domestic sugar beet production. This change is expected to result in an increase in sugar supply and decreases in sugar prices in the EU. This is also expected to result in a decrease in EU imports from other countries over time.

#### Imports

Post forecasts that sugar imports will decrease by 12 percent to 38,000 MT in the 2018/19 MY, from 43,000 MT in the 2017/18 MY. This is due to the adequate sugar supply in the domestic market, and the only imports will be from South Africa and Swaziland who enjoy duty free access into the Zimbabwe market. In addition, the drive by the industry to address the sugar refining quality issues and an increase in the local manufacture of bottler grade industrial white sugar will result in lower imports. Tariffs on sugar imports introduced by the Zimbabwean government in 2014 to protect the domestic industry have also resulted in the gradual decline in sugar imports.

#### **Sugar Closing Stocks**

Post forecasts that the closing stocks will increase to 23,000 MT in the 2018/19 MY, from 15,000 MT in the 2017/18 MY. This is based on an increase in sugar production and fewer imports. All the sugar produced in each marketing year is considered sold at the end of the season in order for the industry to share the revenue between growers and millers as per the agreed Division of Proceeds formulas. Ownership of closing stocks is usually held by wholesalers, retailers, refineries and to a limited extent the Zimbabwe Sugar Sales Company. Larger closing stocks, especially those held by the Zimbabwe Sugar Sales Company pose a cost challenge to the industry as the growers and millers have to pay for the storage of such sugar.

Sugar, Centrifugal	2016/2	2016/2017		2017/2018		2018/2019	
Market Begin Year	Apr-16		Apr-17		Apr-18		
Zimbabwe	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Beginning Stocks	18	18	29	29	0	15	
Beet Sugar Production	0	0	0	0	0	0	
Cane Sugar Production	453	453	470	393	0	460	
Total Sugar Production	453	453	470	393	0	460	
Raw Imports	12	12	11	13	0	13	
Refined Imp.(Raw Val)	23	23	22	30	0	25	
Total Imports	35	35	33	43	0	38	
Total Supply	506	506	532	465	0	513	
Raw Exports	124	124	150	110	0	130	
Refined Exp.(Raw Val)	10	10	15	10	0	15	
Total Exports	134	134	165	120	0	145	
Human Dom. Consumption	343	343	343	330	0	345	
Other Disappearance	0	0	0	0	0	0	
Total Use	343	343	343	330	0	345	
Ending Stocks	29	29	24	15	0	23	
Total Distribution	506	506	532	465	0	513	

#### Table 5: PSD Table for sugar

#### **Policies and Regulations:**

#### **Impact of Land Reform**

The impact of the land reform program and the uncertain political situation is evident in the sugar cane industry. Firstly, the condition and high yields (about 160 tons/ hectare) at the well managed Triangle and Hippo Valley Estates are far better than the sugar cane fields and yields (low as 4 tons/ hectare) of the black resettled farmers. One of the main issues confronting smallholder farmers who were allocated land during the land reform process is the lack of coordination and cooperation to maintain, clean or repair public irrigation facilities such as pipes, dams and cleaning water canal. This has resulted in water leaks from dams or pipes resulting in saltation of some cane fields, and poor flow of irrigation water. These issues are reported to be increasing each year and are expected to have further harm the sugar cane production if they are not addressed. Some of the land that was allocated to smallholder farmers during the land reform process is now fallow as new farmers are not re-investing into these farms, or are employing unqualified labor force to manage the farms.

#### **Cogeneration of Electricity**

The Hippo Valley and Triangle Sugar Mills generate sufficient electricity by burning bagasse to power their mills during peak production periods. They can also supply surplus electricity to the national grid. An electricity swap agreement was made with the Zimbabwe Power Company for the sugar mills to supply electricity to the national grid during the mills peak production periods and to draw down some electricity from the national grid during off-peak periods. As a result, the net usage of electricity by the sugar mills is believed to be minimal.

#### **Ethanol Production**

Zimbabwe introduced mandatory blending of fuel with ethanol in 2011. Currently, minimum mandatory blending of vehicle fuels with ethanol is 20 percent, but varies depending on supply and availability of ethanol. Ethanol produced by Triangle Sugar is from molasses and is cheaper than the ethanol produced by Green Fuels from fermentable sugars. Green Fuels has about 9,000 ha under sugarcane for the sole production of ethanol. Green Fuels had a monopoly in the production and supply of ethanol for fuel blending purposes. However, Triangle Sugar recently entered into a partnership with the National Oil Company of Zimbabwe (NOCZIM), to produce and market ethanol for fuel blending purposes. This development is expected to have an impact on the viability and competitiveness of Green fuels. Private farmers are restricted from supplying sugar cane to Green Fuels by binding supply agreements with the sugar mills.

#### **United States Sugar Tariff Rate Quota Allocation**

The United States allows duty free access for Zimbabwe sugar under the Tariff Rate Quota (TRQ) program. The total TRQ and re-allocations offered to Zimbabwe average about 12,000 to 14,000 MT annually. Zimbabwe usually fully utilizes its sugar quota as the United States market remains attractive compared to other markets such as the EU. Post expects that Zimbabwe will fully utilize its allocated TRQ in the 2018/19 MY.

**Customs Duties** 

In 2014, the Zimbabwe government passed a 10 percent customs duty and \$100/ton surtax on all sugar imports from countries other than the Southern African Development Community (SADC) and the Common Market for Eastern and Sothern Africa (COMESA) in a bid to protect the local industry from an influx of sugar imports.

# **Import Permits**

In 2014, the government also confirmed that no raw sugar import permits would be issued from countries other than the Southern African Development Community (SADC) and the Common Market for Eastern and Sothern Africa (COMESA). However, this import permit restriction, does not apply to sugar imports intended to satisfy the requirements for bottler grade sugar. Zimbabwe believes that there is an untapped market for sugar in African countries, and the prospective implementation of the recently signed Continental Free Trade Agreement presents favorable market opportunities.

## Vitamin A Fortification

The Zimbabwean government passed a regulation for the mandatory fortification of household sugar with Vitamin A effective July 1, 2017. This regulation was passed as part of the Zimbabwe National Food Fortification Strategy 2014 - 2018, which is aligned to the National Food and Nutrition Strategy for Zimbabwe that serves as a guideline to both policy and implementation levels to prevent micronutrient deficiencies. <u>Click here to download the National Food and Nutrition Strategy</u>. The strategy was developed to address the micronutrient deficiency burden in the country as revealed by the 2012 Zimbabwe Micronutrient Survey. According to the survey, 19 percent of children aged 6 - 59 months are vitamin A deficient, while 72 percent have iron deficiency, and 31 percent are anemic, and nearly 1.5 Million working age adults with anemia suffer deficits in work performance.

#### **Retail Sugar Price Support**

Star Africa an independent refinery supplies the majority (at least 80 percent) of refined sugar in Zimbabwe. In order to maintain low retail prices for sugar in Zimbabwe, government negotiates a fair price at which Star Africa buys raw sugar from the sugar mills. As a result, Star Africa is also required to obtain permission from the government to increase the wholesale and retail prices of refined sugar.