USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

Required Report - public distribution

Date: 4/14/2016
GAIN Report Number: GT1602

Guatemala

Sugar Annual

Sustained Competitiveness

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Report Highlights:
Guatemalan sugar production for Marketing Year (MY) 2016-2017 (October 2016 to September 2017) is forecast at 3.05 million metric tons (MMT). Production for MY 2015-2016 has been revised slightly up to 2.98 MMT from the previous estimate, and is a record high for the fourth consecutive year. Production for MY 2014-2015 was revised slightly up at 2.98 MMT. Total exports for MY 2016-2017 are forecast at 2.31 MMT, with raw sugar making up 54 percent and refined sugar 46 percent of Guatemalan exports. Guatemala, during MY 2014-2015, positioned itself as the third major producer and second largest exporter in Latin American and the Caribbean, fourth major exporter worldwide and first most efficient at port loading in the global sugar industry. Main technological innovations involve dry sugar cane cleaning systems and increased efficiency in water management, both for irrigation and industrial use.

Executive Summary:

Guatemalan sugarcane planted area has been expanding by three percent (average annual basis) for the past ten years. Production increase is highly dependent on yield increases and sugar extraction efficiency. In MY 2016-2017, planted area is forecast at 278,000 Ha, of which 222,400 Ha will be harvested. Sugar yields in MY2015-2016 are expected to reach 11.0 MT/Ha. Sugar cane area represents roughly three percent of the country's total area and 10 percent of total agricultural area.

Domestic Consumption for MY 2015-2016 is estimated at 765,000 MT. Exports for MY 2016-2017 are forecast at 2.31 MMT, with a 50-50 share of raw and refined sugar. Guatemala is the world's fourth largest exporter (Guatemalan exports represent five percent of total world exports) and second largest producer in Latin America. During MY2015, both the United States and China were the first major export markets for Guatemalan sugar, reaching approximately 14 percent each.

Guatemala's strong competiveness in sugar is due to three main factors: 1) productivity; 2) research and development; and 3) technological innovations.

Commodities:

Sugar, Centrifugal

Production:

For the MY 2016-2017 crop, sugar yields are expected to average close to 12.0 MT/Ha. MY 2015-2016 reported a sugar cane yield of 106 MT/Ha and a sugar yield from sugarcane of 11 MT/Ha of sugar in a total harvested area of 222,400 Ha. Variations in sugar cane and sugar yields are directly related to the industry's production policy, aimed at long term sustainability in both economic and environmental terms. Productivity is conceived as a permanent investment in training and development of personnel that works in the sugar industry as a mechanism to retain human capital. Performance compensation systems combined with corporate social responsibility packages assure both the most competitive professionals in the agricultural sector as the permanent recurrence year after year of the best harvesters for the season -November-April.

Research and Development (R&D) is mainly focused in the following areas: 1) improved genetics, 2) integrated pest management (IPM), 3) irrigation efficiency, and 4) environmental sustainability. The Center for Sugar Cane Research (CENGICAÑA) launched the first locally adapted varieties in 2004, after the 12-year research required to come up with new materials, which accounted for 1.5 percent of the total amount of producing plants in the field. By 2016, 28 percent of the production is sourced from locally developed materials, which has increased productivity for the sector. Sugar cane production at present requires low chemical control through the use of biological controls with natural predators and microbial parasites. Starting with irrigation efficiencies of 0.90 Ha/ML (mega liter), by 2016 the efficiency had increased to more than 1.80 Ha/ML. As part of the environmental sustainability actions, water conservation, energetic forests and ethanol by-production from the molasses have been incorporated by the sugar industry; during MY2014-2015, cogeneration reached 424 MW (21% of the national grid) and produced 280 million liters of alcohol during MY2013-2014 (100 percent of which is presently exported).

Overall, R&D investments in the four areas cited above (improved genetics, IPM, irrigation, and environmental sustainability) have provided for a well-established sector, with a long-term productivity vision. Sugar yield (per hectare) has increased greatly from 6.6 MT/Ha, in 1990, to 11.0 MT/Ha during the last harvest season. The productivity goal for 2020 is that sugar yields will increase to 12.0 MT/Ha on raw sugar terms. Without R&D, Guatemala would presently require a planted area of roughly 550,000 Ha, more than twice as much the actual planted area, to obtain the same production level. Guatemala's sugar cane productivity increases on a 5-6% annually. Sugar extraction efficiency depends on each individual mill's investment, and there is still an important upgrade to be achieved. Innovative mills have migrated to a sugar cane cleaning system where the sugar cane is shaken and all the soil on it is eliminated, therefore significantly reducing the water consumption and increasing the sugar cane juice yield. Production estimates can be followed on a weekly basis at CENGICAÑAS public site: http://www.cengicana.org/.

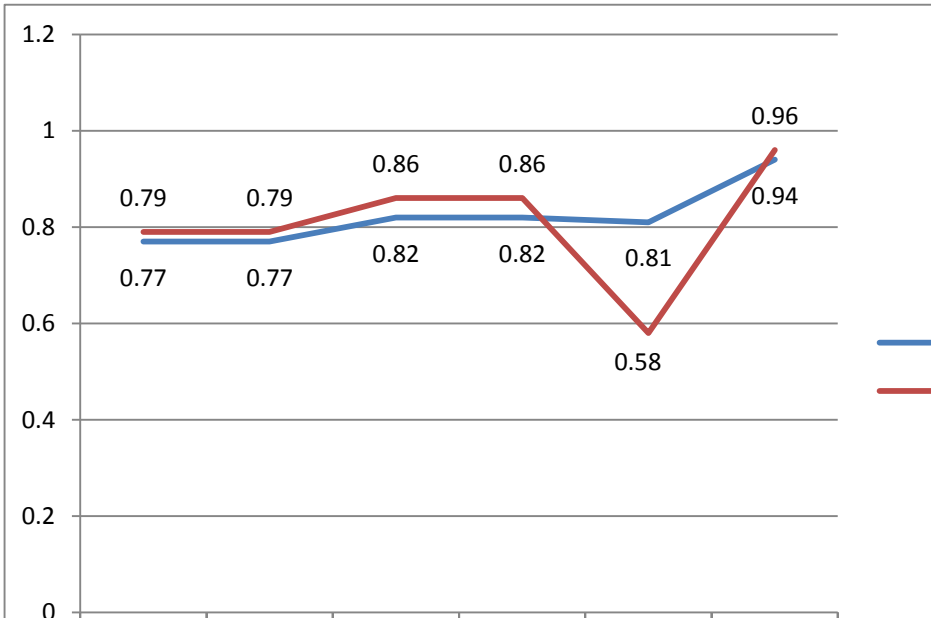
Irrigation has transformed from cannon-type spraying equipment which is less efficient in water and fuel use to self-propelled irrigation equipment for lands with even topography and good soils. For uneven topographies and clay soils, mini-spray irrigation systems for every 100 Ha have been adopted. Flood control via hydrologic, hydraulic and topographic research has helped the sugar industry to progressively adapt to climate change without losing efficiency. Water management is accomplished by implementation of equipment and systems that recirculate industrial water at the same time that is treated via sedimentation ponds.

Sugar outputs will vary significantly on the weather pattern, mainly influenced by El Niño and La Niña phenomenon. El Niño brings more light intensity and less water, while La Niña means cloudiness and floods. La Niña year implies adjusting for lower production estimates. MY 2015/2016 has been characterized by a strong Niño weather pattern, which represented for Guatemala, late rain at the beginning of the sugar harvest (November) and some drought during mid to end of harvest (March-April). Light intensity has positively impacted yields and given the wide irrigated areas, the drought did not reduce production and expected yields are similar to those in MY2014/2015.

Consumption:

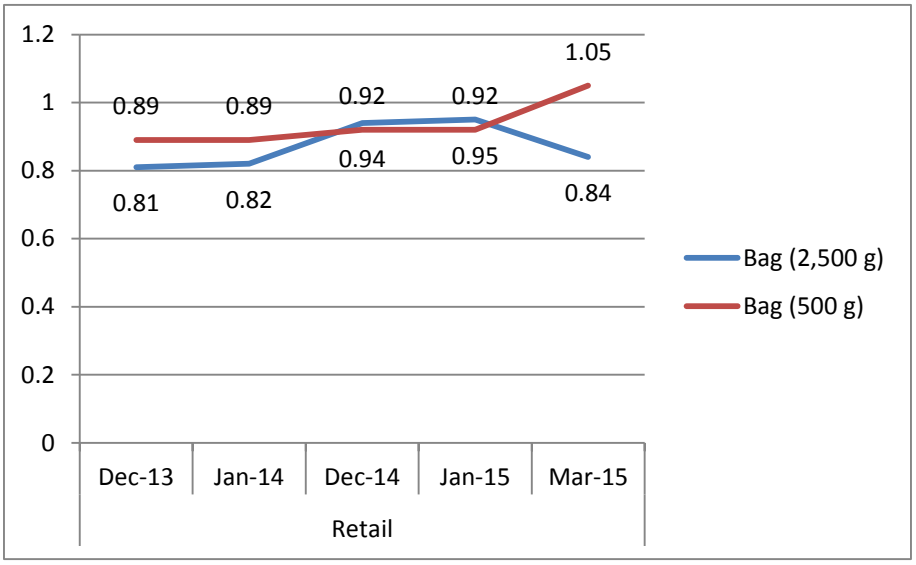
MY 2016-2017 consumption is expected to increase to 784,000 MT. Annual per capita consumption of sugar in Guatemala is close to 100 pounds. Currently, domestic consumption is split, 27 percent for industrial use and 73 percent for direct human consumption. The soft drink industry is the major industrial consumer of sugar, followed by confectioneries, bakeries, juice makers, dairy producers, and pharmaceutical companies. Overall, domestic consumption is roughly 27 percent of total production. Drops in consumption are tightly related to price increases in the basic food basket items. Roughly 97 percent of the local consumption is standard white, 2 percent refined, and 1 percent brown sugar. Historical prices for standard white sugar at wholesale and retail levels in Guatemala are shown in Graph 1. It is clear that the smallest 500 g presentation is the buffer one that absorbs drops in prices, both at the wholesale and retail levels.

Graph 1
Average Standard White Sugar Prices at the Wholesale Market in Guatemala



Source: Historical Prices, DIPLAN, Ministry of Agriculture, 2016

Graph 2
Average Standard White Sugar Prices at the Retail Market in Guatemala



Source: Historical Prices, DIPLAN, Ministry of Agriculture, 2016

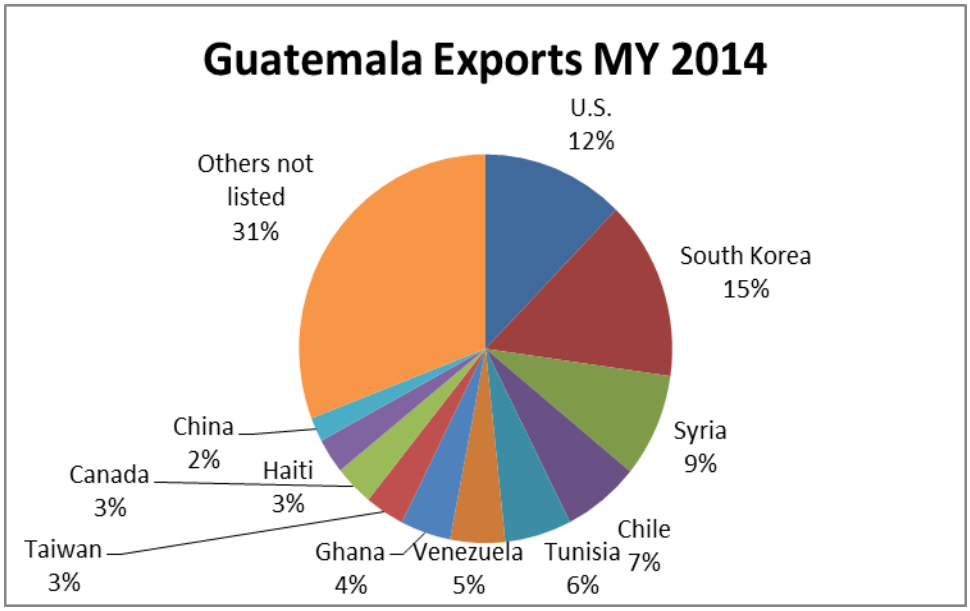
Trade:

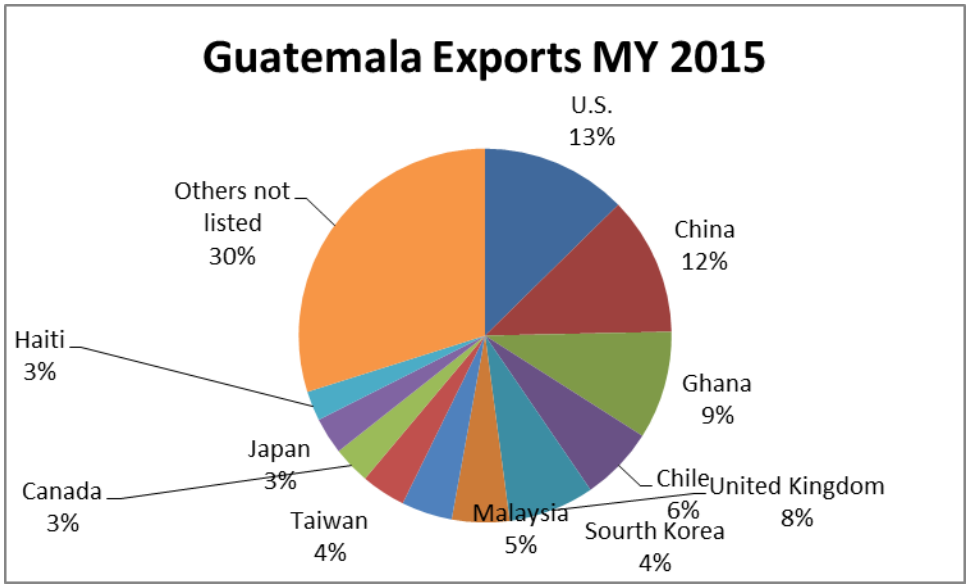
Export Trade Matrix			
Country		Guatemala	
Commodity		Centrifugal Sugar	
Time period		Oct-Sep	
2014		2015	
U.S. (including re-exports)	275,445	U.S. (including re-exports)	339,495
Others		Others	
South Korea	334,100	China	321,560
Syria	192,915	Ghana	250,498
Chile	148,658	Chile	172,255
Tunisia	129,610	United Kingdom	199,664
Venezuela	105,909	Malaysia	133,850
Ghana	97,511	South Korea	118,200
Taiwan	76,235	Taiwan	103,218
Canada	76,050	Canada	87,142
Haiti	65,397	Japan	85,000
China	45,143	Haiti	68,788
Total for others	1,271,528	Total for others	1,540,175
Others not listed	689,523	Others not listed	800,556
Grand Total	**2,111,769**	**Grand Total**	**2,340,731**

Source: Global Trade Atlas for data per country and ASAZGUA for Grand Total

During MY 2014-2015, Guatemala exported 2.34 MMT in raw and refined sugar, six percent above the estimate. Sugar represents the highest source of foreign exchange for the Guatemalan agricultural sector, followed by bananas and then coffee. Exports for MY 2016-2017 are forecast at 2.31 MMT, without much variation. Guatemala continues exporting around 73 percent of its total production. The export markets have changed quite significantly in the past decade. In MY 1999-2000, North America imported 42 percent of Guatemala's sugar. By MY 2015, North America's market share declined to 13 percent for the U.S. and 3 percent for Canada. China's market share grew at the expense of South Korea.

Graph 3
MY2014-2015 Comparison of Guatemala's Sugar Exports to Major Markets





Source: Global Trade Atlas, 2016

For MY 2014-2015, raw sugar exports represented 54 percent share of total exports and refined sugar 46 percent. The trend to increase exports of refined sugar has increased the importance of South American and Caribbean countries for Guatemala's sugar exports. Top buyers for Guatemalan sugar were the United States, China, Ghana, Chile, and the United Kingdom.

Stocks:

MY 2016-2017 ending stocks are expected to reach 112,000 MT. Domestic stocks are held in warehouses managed by the sugar industry throughout the country. All exported sugar is held in warehouses managed by EXPOGRANEL, the loading terminal located at Puerto Quetzal. Its warehousing capacity is set at 365,000 MT for bulk sugar and 66,000 MT for refined sugar (50 kg bags). EXPOGRANEL has an ISO 9001:2008 Quality System Certifications and ISO 22000:2005 standards to secure its Food Safety System. In addition, the sugar industry has a state-of-the-art laboratory for sugar analysis with 19 credited analyses that guarantee the sugar quality for both export and domestic markets. The laboratory is used as a reference lab by countries in the Central American region such as Venezuela and Colombia.

Guatemala is known worldwide as a good partner in the sugar business, due to its high quality sugar (95-98 percent polarization) plus the fact that it has always fulfilled its commitments. Guatemala signs contracts in advance, during the first three months of each calendar year. After March, prices start rising in the international market. During CY2016 Guatemala has been assigned a U.S. TRQ of 44,520 MT, which will be fulfilled before the end-of-year deadline. To insure local demand will be supplied, exports are monitored by the Sugar Producers' Association and a representative from the Ministry of Economy, which approves all exports.

Policy:

The Sugar Board of Guatemala, which includes representatives from the Ministry of Economy, sugar cane producers, and sugar mills, establishes production goals, sets sugarcane prices, and allocates the U.S. sugar quota to the different sugar mills. The allocation to each mill is based on past production performance, previous quotas, and milling capacity. According to the law, all sugar sold domestically must be enriched with vitamin A. The industry claims to invest more than $3.5 million a year in vitamin A. At times the Government of Guatemala (GOG) opens most favored nation quotas for imported sugar to try to control market prices, but the quotas rarely get filled in part due the vitamin A fortification requirement. Fortification is approved and validated by the Institute of Nutrition of Central America and Panama, which has historically monitored and evaluated the impact of Vitamin A fortification, reporting it as a success story. Even though Guatemala has the third highest rate of chronic malnutrition in children less than 5 years old in the world, blindness is not an issue in the country. See http://www.incap.org.gt/index.php/en/areas-and-lines-of-working/nutrition-and-micronutrient/integral-analytical-center-cai.

Marketing:

The main export strategy is geared to continue increasing refined sugar exports. ASAZGUA is also continuing its marketing strategy designed to maintain domestic sugar consumption. The industry is actively engaged with supporting the "millennium challenge goals" in Guatemala and has been collaborating for more than 20 years in maternal-child nutrition and health components; its major program is focused on increasing local capabilities of rural primary school teachers. As a result, the sugar industry is well known and highly recognized in the country.
http://www.azucar.com.gt/index.html.

Production, Supply and Demand Data Statistics:

Sugar, Centrifugal	2014/2015	2015/2016	2016/2017

Market Begin Year	Oct 2014		Oct 2015		Oct 2016	
Guatemala	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	309	309	234	201	0	156
Beet Sugar Production	0	0	0	0	0	0
Cane Sugar Production	2900	2975	2965	2975	0	3050
Total Sugar Production	2900	2975	2965	2975	0	3050
Raw Imports	0	0	0	0	0	0
Refined Imp.(Raw Val)	0	0	0	0	0	0
Total Imports	0	0	0	0	0	0
Total Supply	3209	3284	3199	3176	0	3206
Raw Exports	1100	1319	1150	1225	0	1255
Refined Exp.(Raw Val)	1100	1021	1200	1030	0	1055
Total Exports	2200	2340	2350	2255	0	2310
Human Dom. Consumption	775	743	779	765	0	784
Other Disappearance	0	0	0	0	0	0
Total Use	775	743	779	765	0	784
Ending Stocks	234	201	70	156	0	112
Total Distribution	3209	3284	3199	3176	0	3206
(1000 MT)						

Source: Guatemala Sugar Association (ASAZGUA), 2016