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# **Brazil**

# **Sugar Annual**

2017

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## **Report Highlights:**

Brazil's MY 2017/18 sugarcane crush is estimated at 645 mmt, a one percent decrease compared to the previous season due to irregular weather conditions in some growing areas and aging of sugarcane fields. Approximately 48 percent of the crop should be diverted to sugar, due to the expected deficit on the world market. Total exports are projected to increase by five percent reaching 29.07 mmt, raw value **Production** 

The Agricultural Trade Office (ATO/Sao Paulo) projects Brazil's marketing year (MY April-March, unless otherwise stated) 2017/18 sugarcane crush at 645 million metric tons (mmt), down one percent relative to the revised figure for MY 2016/17 (651.5 mmt). The center-south (CS) region is expected to harvest 600 mmt of sugarcane, a seven mmt reduction vis-à-vis the previous crop (607 mmt). Rainfall patterns have showed regular volumes for a large part of growing areas, however production in states such as Goias and Minas Gerais were damaged by below average rainfall volumes. Specific growing regions in the state of São Paulo, like Bauru, were also adversely affected. Aging of sugarcane fields will also likely affect production. The MY 2016/17 sugarcane crushing period just ended in March 31. Approximately 180 mills have already started the MY 2017/18 crushing season.

The North-Northeastern (NNE) production for MY 2017/18 is projected at 45 mmt, similar to the revised figure for MY 2016/17 (44.5 mmt) due to persistent weather related problems (drought) affecting growing regions.

The total sugarcane area for MY 2016/17 is projected stable at 9.9 million hectares (ha). The table below shows the sugarcane harvested area, according to the Ministry of Agriculture, Livestock and Supply's (MAPA) National Supply Company (CONAB), and the Agricultural Economics Institute (IEA) of the State of São Paulo Secretariat of Agriculture. Post contacts report an above average renewal rate in the first quarter of the current year, which could potentially reduce the harvested area, thus affecting total sugarcane output.

Area Harvested to Sugarcane (1,000 ha).								
	2010	2011	2012	2013	2014	2015	2016	
Brazil	8,033.6	8,356.1	8,485.0	8,810.8	9,004.5	8,654.8	9,110.9	
Sao Paulo	5,135.3	5,269.4	5,355.7	5,501.9	5,539.7	5,605.7	5,569.2	
Sources: CONAB, IEA.								

The industrial yield for MY 2017/18 is forecast at 133.14 kg of TRS (total reducing sugars)/mt, unchanged from MY 2016/17, assuming average rainfall volume during the crushing season. The following table shows historic Brazilian yields measured in TRS per metric ton of sugarcane.

Sugarcane Industrial Yields (kg TRS/metric ton)							
	MY 13/14	MY 14/15	MY 15/16	MY 16/17	MY 17/18 *		
TRS/ton	132.63	135.72	130.17	133.14	133.14		
Source: USDA/FAS/ATO/São Paulo * MY 2017/18 - forecast							

The following tables show monthly sugarcane crush data for the state of São Paulo and the CS region for MY 2013/14 through MY 2016/17 (April-March), as reported by the Brazilian Sugarcane Industry Association (UNICA).

Sugarcane crushed in the state of São Paulo (1,000 metric tons)						
Month	13/14 14/15		15/16	16/17		
February	0	0	0	0		

March	0	0	0	0
April	26,582	25,864	22,420	43,811
May	47,857	48,510	40,914	43,889
June	39,393	53,885	51,560	41,351
July	52,875	48,034	46,975	58,181
August	57,868	54,736	56,701	50,536
September	46,719	39,289	40,026	48,160
October	43,117	42,558	46,093	39,456
November	36,445	19,130	26,383	26,083
December	15,482	5,106	19,727	6,848
January	525	573	3,549	697
February	19	95	2,125	555
March	351	0	11,851	6,421
Cumulative	367,233	337,780	368,323	365,990
Source: Brazilian	Sugarcane In	dustry Assoc	iation (UNIC	CA)

Sugarcane crushed in Center-Southern Brazil (1,000 metric tons).							
Month	13/14	14/15	15/16	16/17			
February	0	0	0	0			
March	0	0	0	0			
April	41,716	40,375	40,163	69,171			
May	75,966	76,938	69,197	72,199			
June	65,057	85,676	86,434	74,221			
July	87,425	77,394	79,070	96,514			
August	95,281	92,308	95,289	83,731			
September	77,169	68,750	70,341	80,409			
October	70,227	73,878	74,966	64,004			
November	58,357	38,903	44,544	41,453			
December	23,816	13,850	28,553	10,349			
January	970	2,040	5,927	1,771			
February	204	664	3,827	2,071			
March	416	569	19,395	11,243			
Cumulative	596,603	571,344	617,709	607,137			
Source: Brazilian S	Sugarcane Ind	lustry Associa	tion (UNICA	)			

# **Sugar and Ethanol**

Total sucrose (total reducing sugar, TRS) content diverted for sugar and ethanol production for MY 2017/18 is projected at 48 and 52 percent, respectively, as opposed to 47 and 53 percent, respectively, for MY 2016/17, the consequence of an estimated five mmt deficit on the world sugar market for MY 2016/17 (using October-September data). Sugar-ethanol mills are likely to adopt the same strategy as they did last year, maximizing sugar production and therefore profits, to supply international markets.

ATO/São Paulo forecasts sugar production for MY 2017/18 at 39.65 mmt, raw value, up 500,000 mt compared to MY 2016/17 (39.15 mmt). The CS states should account for 36.50 mmt, raw value, up one percent from MY 2016/17 (36 mmt). The NNE sugar production should remain stable at 3.15 mmt of sugar, raw value.

The tables below show monthly sugar production for the state of São Paulo and the CS region for MY 2013/14 through MY 2016/17 (April-March), as reported by UNICA.

Sugar production in the state of São Paulo (Metric tons, tel quel)								
Month	13/14	14/15	15/16	16/17				
February	0	0	0	0				
March	0	0	0	0				
April	1,204,407	1,077,798	918,009	2,300,450				
May	2,844,117	2,874,125	2,214,282	2,664,338				
June	2,305,372	3,564,842	3,123,877	2,567,001				
July	3,425,222	3,407,713	3,009,722	4,050,934				
August	4,244,576	4,003,035	3,948,623	3,780,409				
September	3,653,913	2,734,179	2,719,062	3,597,998				
October	3,039,994	2,894,877	3,056,703	2,948,163				
November	2,415,600	1,136,646	1,318,035	1,701,824				
December	807,064	203,879	755,491	358,447				
January	10,242	9,542	80,523	23,158				
February	0	2,485	41,441	12,987				
March	14,371	20	381,687	242,435				
Cumulative	23,964,878	21,909,141	21,567,455	24,248,144				
Source: Brazilia	an Sugarcane	Industry Assoc	ciation (UNICA	<u>A)</u>				

Sugar production in Center-Southern Brazil (Metric tons, tel quel)							
Month	13/14	14/15	15/16	16/17			
February	0	0	0	0			
March	0	0	0	0			
April	1,704,682	1,499,504	1,448,957	3,251,370			
May	3,944,719	3,935,971	3,198,629	3,758,251			
June	3,308,644	4,905,573	4,507,387	4,005,985			
July	4,958,695	4,787,076	4,256,943	5,958,645			
August	6,152,387	5,815,997	5,733,292	5,527,064			
September	5,281,370	4,137,377	4,067,628	5,381,011			

October	4,372,655	4,404,882	4,279,266	4,317,215		
November	3,407,612	1,952,698	1,909,386	2,503,409		
December	1,135,957	506,583	1,032,089	506,695		
January	10,513	28,066	120,054	46,854		
February	1	6,250	62,677	28,310		
March	15,640	7,120	605,179	342,710		
Cumulative	34,292,875	31,987,097	31,221,487	35,627,519		
Source: Brazilian Sugarcane Industry Association (UNICA)						

ATO/São Paulo forecasts total ethanol production for MY 2017/18 at 26.65 billion liters (11.83 billion liters of anhydrous ethanol and 14.82 billion liters of hydrated ethanol), down 600 million liters from MY 2016/17 (27.26 billion liters). The sugar-ethanol sector should prioritize the production of anhydrous ethanol to comply with the ethanol mandate set by the Brazilian government.

According to the Ministry of Agriculture, Livestock and Supply (MAPA), cumulative ethanol production for the 2016/17 crop (from April 1, 2016 to March 15, 2017) was reported at 27.48 billion liters, 10.99 billion liters of anhydrous ethanol and 16.49 liters of hydrated ethanol. The table below shows sugarcane, sugar and ethanol production by state for MY 2016/17, as reported by MAPA.

Cane, Sugar & Ethanol Production: 2016/17 Crop (MT and 000 Liters)							
			Ethanol				
State/Region	Cane	Sugar	Anhydrous	Hydrous	Total		
Espirito Santo	1,356,947	64,035	48,199	12,532	60,731		
Goias	67,231,189	2,101,731	1,017,586	3,350,638	4,368,224		
Minas Gerais	63,010,594	3,969,347	1,087,528	1,550,920	2,638,448		
Mato Grosso Sul	48,811,855	1,702,676	775,812	1,861,182	2,636,994		
Mato Grosso	16,341,508	397,695	523,428	685,797	1,209,225		
Parana	41,759,938	3,188,692	589,066	793,817	1,382,883		
Rio de Janeiro	1,005,207	28,595	0	48,315	48,315		
Rio Grande Sul	45,523	0	0	2,914	2,914		
Sao Paulo	365,662,002	23,897,025	6,026,329	7,519,280	13,545,609		
Center South	605,224,763	35,349,796	10,067,948	15,825,395	25,893,343		
Acre	64,076	0	0	3,674	3,674		
Amazonas	261,237	13,859	0	5,496	5,496		
Ceara	73,966	0	0	5,242	5,242		
Maranhao	1,842,340	11,552	109,712	17,649	127,361		
Para	717,776	30,026	28,724	4,486	33,210		
Piaui	760,503	54,800	21,390	215	21,605		
Rondonia	136,136	0	0	9,487	9,487		
Tocantins	2,086,610	0	116,738	45,446	162,184		
North	5,942,644	110,237	276,564	91,695	368,259		
Alagoas	15,827,585	1,428,867	269,965	107,277	377,242		
Bahia	2,366,962	121,316	55,671	50,224	105,895		
Paraiba	4,856,050	186,820	138,746	144,994	283,740		

Pernambuco	11,825,812	1,004,044	131,886	203,166	335,052	
Rio Grande Norte	1,903,228	121,683	32,556	26,591	59,147	
Sergipe	1,706,478	109,735	22,647	43,374	66,021	
Northeast	38,486,115	2,972,465	651,471	575,626	1,227,097	
TOTAL	649,653,522	38,432,498	10,995,983	16,492,716	27,488,699	
Source: Ministry of Agriculture, Livestock and Supply-Sugar, Alcohol Dept, 03/15/2017						

# **Sugar and Ethanol Prices in the Domestic Market**

The Crystal Sugar and Ethanol Indexes released by the University of Sao Paulo's College of Agriculture "Luiz de Queiroz" (ESALQ) follow. The Indexes track crystal sugar, anhydrous and hydrated prices received by producers in the domestic spot market. Note the steady increase in both sugar and ethanol prices in the domestic market due to tight supply.

Crystal Sugar Pric	Crystal Sugar Prices - Domestic Market (Real, 50kg/bag, including tax).								
Period	2013	2014	2015	2016	2017				
January	48.80	50.29	51.05	83.75	88.02				
February	47.97	50.38	50.11	81.25	83.22				
March	45.04	51.86	50.97	77.46	77.48				
April	44.21	51.70	51.57	76.00	73.97				
May	44.55	51.49	51.20	75.68					
June	44.23	49.54	49.03	83.94					
July	44.48	47.07	47.85	86.65					
August	43.55	45.54	46.90	85.89					
September	45.44	44.76	51.06	87.83					
October	50.78	47.62	64.98	97.93					
November	51.94	50.97	76.44	98.06					
December	51.06	52.12	80.57	92.06					
Source: USP/ESAL	Q/CEPEA.	April 2017 r	efers to Apr	il 3-11.					

<b>Price for Fuel</b>	Price for Fuel Anhydrous Ethanol - State of São Paulo (R\$/000 liters).								
Period	2013	2014	2015	2016	2017				
January	1,302.50	1,456.10	1,458.20	1,996.70	2,047.10				
February	1,352.70	1,520.50	1,552.50	2,083.00					
March	1,374.50	1,610.20	1,420.40	2,113.70					
April	1,394.80	1,522.00	1,401.50	1,602.40					
May	1,329.10	1,366.40	1,363.10	1,536.40					
June	1,285.20	1,359.20	1,352.40	1,678.10					
July	1,271.20	1,373.90	1,328.80	1,636.60					
August	1,227.30	1,346.00	1,300.70	1,726.30					
September	1,277.10	1,362.40	1,358.30	1,796.80					
October	1,315.40	1,290.00	1,658.30	2,018.30					
November	1,342.80	1,329.90	1,870.40	2,086.60					

December	1,440.00	1,407.10	1,888.10	2,075.70	
Source: USP/E	SALQ/CEPI	EA.			

<b>Price for Fuel</b>	Hydrated l	Ethanol - St	ate of São F	Paulo (R\$/00	00 liters).
Period	2013	2014	2015	2016	2017
January	1,144.60	1,284.80	1,325.60	1,824.40	1,815.80
February	1,232.00	1,368.60	1,384.70	1,916.40	
March	1,226.40	1,419.50	1,261.30	1,906.60	
April	1,244.30	1,338.50	1,261.60	1,396.60	
May	1,110.20	1,200.90	1,226.50	1,391.00	
June	1,140.20	1,214.90	1,216.20	1,501.90	
July	1,114.50	1,229.10	1,199.00	1,501.50	
August	1,088.60	1,207.00	1,175.50	1,559.70	
September	1,148.50	1,200.60	1,273.40	1,665.90	
October	1,164.00	1,138.30	1,528.80	1,857.90	
November	1,204.70	1,218.20	1,709.00	1,869.30	
December	1,281.10	1,265.50	1,704.60	1,867.90	
Source: USP/E	ESALQ/CEP	EA.			

## Consumption

There is no official source for domestic consumption of sugar in Brazil. ATO/São Paulo forecasts Brazilian sugar consumption for MY 2017/18 at 10.95 mmt, slightly up from MY 2016/17 (10.9 mmt), an indication of the expected slight recovery of the Brazlian economy.

#### **Exports**

## **Sugar Exports**

The sugar-ethanol industry remains steadily driven by the continued estimated deficit in the international sugar market. Brazilian sugar exports for MY 2017/18 are projected at 29.07 mmt, raw value, up 1.3 mmt compared to MY 2016/17 (27.77 mmt). Brazil has remained competitive on the global sugar market in part because of devaluation of the local currency, the Real. Raw sugar exports should account for 23.26 mmt, raw value, whereas the remainder represents exports of refined sugar.

The following tables show Brazilian sugar exports by destination for MY 2015/2016, 2016/17 (April-March) and calendar year (CY) 2016, as reported by the Brazilian Secretariat of Foreign Trade (SECEX). India, China, Algeria, Bangladesh, Indonesia and Malaysia are the major export destinations for Brazilian sugar.

Brazilian Sugar Exports (NCMs 1701.11, 1701.13 & 1701.14, MT, tel quel, US\$ 000 FOB)									
	MY 2015/16 1/			/17 1/	CY2016 2/				
Country	Quantity	Value	Quantity	Value	Quantity	Value			
India	1,848,182	544,159	2,408,913	940,374	2,443,563	884,353			

Total	19,593,175	5,849,183	23,083,008	8,722,801	23,660,982	8,282,168
Others	6,917,848	2,122,584	7,335,597	2,707,400	7,669,941	2,649,478
Egypt	877,906	261,381	753,966	289,003	842,134	306,139
Saudi Arabia	709,508	208,562	1,005,855	393,115	997,164	347,652
Morocco	862,298	246,936	1,049,074	422,287	1,026,797	359,940
Nigeria	1,119,200	324,547	1,295,973	501,038	1,355,877	462,952
Malaysia	945,037	275,753	1,580,255	587,857	1,469,609	502,907
Indonesia	29,942	8,340	1,580,687	611,779	1,510,778	585,969
Bangladesh	2,265,681	674,119	1,960,436	733,585	1,934,355	666,436
Algeria	1,674,423	502,191	1,973,396	755,725	2,019,842	698,314
China	2,343,151	680,610	2,138,855	780,636	2,390,922	818,028

Source: Brazilian Foreign Trade Secretariat (SECEX)

Note: Numbers may add due to rounding 1/ April - Mar - 2/Jan - Dec.

Brazilian Sug	Grazilian Sugar Exports (NCM 1701.99.00, MT, tel quel, US\$ 000 FOB)									
	MY 201	5/16 1/	MY 201	6/17 1/	CY20	CY2016 2/				
Country	Quantity	Value	Quantity	Value	Quantity	Value				
UAE	993,180	268,281	783,453	316,934	1,004,047	355,995				
Yemen	215,683	74,108	448,868	193,393	510,136	207,620				
Myanmar	90,126	31,267	425,069	202,216	365,021	153,068				
Sri Lanka	256,534	87,947	270,379	111,741	321,497	128,616				
Angola	218,328	76,470	335,590	155,660	262,751	115,705				
Mauritania	390,455	137,817	167,804	74,538	258,975	107,609				
Saudi Arabia	409,622	113,453	268,662	118,714	239,216	94,696				
Nigeria	334,551	92,812	276,705	106,464	262,405	89,141				
South Africa	100,161	35,875	247,975	128,749	174,696	85,498				
Djibouti	15,949	5,386	182,505	93,681	155,021	79,533				
Others	2,063,716	748,314	1,796,322	830,734	1,717,620	735,745				
Total	5,088,304	1,671,730	5,203,332	2,332,823	5,271,385	2,153,226				
Source : Brazil	lian Foreign T	rade secretar	iat (SECEX)							
Note : Number	rs may add du	e to rounding	1/ April - M	ar - 2/Jan - D	Dec.					

# **Ethanol Exports**

The tables below show ethanol exports by destination for MY 2015/16, 2016/17 (April-March), as reported by the Brazilian Secretariat of Foreign Trade (SECEX).

Brazilian Ethanol Exports (NCM 2207.10, 2207.20.11 & 2207.20.19, MT, 000 Liters, US\$ 1,000 FOB)

	N	<b>AY 2015/16 1/</b>		M	Y 2016/17 1/	
Country	Volume	Weight	Value	Volume	Weight	Value
United States	983,351	777,466	476,688	740,034	585,677	413,499
South Korea	571,481	461,666	249,521	394,607	323,540	195,435
Japan	62,223	49,213	31,490	76,963	60,742	46,506
Netherlands	106,565	85,659	46,766	37,853	30,508	18,360
India	91,547	74,046	36,392	44,356	35,868	15,535
Nigeria	59,674	48,236	24,707	22,160	17,921	10,354
Colombia	10,820	8,716	5,234	18,056	14,551	10,354
Turkey	25,755	20,735	12,005	15,689	12,632	8,156
Saudi Arabia	33,199	26,821	13,497	9,721	7,861	4,764
Philippines	0	0	0	3,948	3,176	1,658
Others	219,631	174,836	104,963	12,136	9,750	8,359
Total	2,164,246	1,727,394	1,001,263	1,375,523	1,102,227	732,981

Source : Brazilian Foreign Trade Secretariat (SECEX)

Note: Numbers may not add due to rounding 1/April-March.

# **Ethanol Imports**

The tables below show ethanol imports by origin for MY 2015/16, 2016/17 (April-March), as reported by the Brazilian Secretariat of Foreign Trade (SECEX).

	N	IY 2015/16 1/		MY 2016/17 1/			
Country	Volume	Weight	Value	Volume	Weight	Value	
United States	414,787	343,164	199,637	1,407,128	1,122,136	693,657	
Paraguay	0	0	0	2,000	1,583	898	
South Africa	0	0	0	572	452	420	
Jamaica	241	209	796	94	95	323	
Germany	25	48	306	44	35	308	
Poland	26	21	24	122	98	141	
France	3	6	45	11	9	63	
Mexico	9	8	73	5	4	32	
Sweden	95	80	129	24	19	30	
Spain	3	4	17	2	2	11	
Others	98	84	122	0	0	10	
Total	415,286	343,624	201,148	1,410,002	1,124,433	695,894	

## **Stocks**

Post forecasts total sugar ending stocks for MY 2017/18 at 460,000 mt, down 370,000 mt from the revised estimate for MY 2016/17 (830,000 mt). There is no official source for carry-over stocks of sugar in Brazil.

# **Exchange Rate**

<b>Exchange Rate</b>	(R\$/US	\$1.00 - 0	official	rate, las	t day of	period)	
Month	2011	2012	2013	2014	2015	2016	2017
January	1.67	1.74	1.99	2.43	2.66	4.04	3.13
February	1.66	1.71	1.98	2.33	2.88	3.98	3.10
March	1.62	1.82	2.01	2.26	3.21	3.56	3.17
April	1.57	1.89	2.00	2.24	2.98	3.45	
May	1.57	2.02	2.13	2.24	3.18	3.60	
June	1.57	2.02	2.22	2.20	3.10	3.21	
July	1.56	2.05	2.29	2.27	3.39	3.24	
August	1.59	2.04	2.37	2.24	3.65	3.24	
September	1.85	2.03	2.23	2.45	3.98	3.25	
October	1.69	2.03	2.20	2.44	3.86	3.18	
November	1.81	2.10	2.32	2.56	3.85	3.40	
December 1/	1.88	2.04	2.34	2.66	3.90	3.47	_
Source : Brazilia	an Centr	al Bank	(BACE	N)			

## **PS&D Statistics**

Sugar Cane for	2015/20	16	2016/20	17	2017/20	18
Centrifugal	Apr 20	15	Apr 20	16	Apr 201	17
Market Begin Year	USDA	New	USDA	New	USDA	New
Brazil	Official	Post	Official	Post	Official	Post
Area Planted	9900	9900	9900	9900	0	9900
Area Harvested	9450	9450	9450	9450	0	9450
Production	667000	667000	680000	651500	0	645000
<b>Total Supply</b>	667000	667000	680000	651500	0	645000
<b>Utilization for Sugar</b>	273470	273470	292400	305553	0	309600
<b>Utilization</b> for	393530	393530	387600	345947	0	335400
Alcohol						
Total Utilization	667000	667000	680000	651500	0	645000
(1000 HA),(1000 MT)		_		_		_

Sugar, Centrifugal	2015/2016		2016/2017		2017/2018	
Market Begin Year	<b>Apr 20</b> 1	15	Apr 20	)16	Apr 20	17
Brazil	USDA	New	USDA	New	USDA	New
Diazn	Official	Post	Official	Post	Official	Post

Production	0 4650 4650 0	34650 34650 0 0	37780 37780 0 0	39150 39150 0	0 0 0	0 39650 39650 0
Cane Sugar 34 Production  Total Sugar 34 Production  Raw Imports	0 0	34650	37780	39150	0	39650
Production Total Sugar 34 Production Raw Imports	0 0	34650	37780	39150	0	39650
Total Sugar 34 Production Raw Imports	0	0	0	0	0	
Production Raw Imports	0	0	0	0	0	
Raw Imports	0					0
	0					0
Refined Imp.(Raw		0	0			
	0		•	0	0	0
Val)	Λ					
Total Imports	0	0	0	0	0	0
Total Supply 35	600	35600	38130	39500	0	40480
Raw Exports 19	9750	19750	21696	22216	0	23256
Refined Exp.(Raw	1600	4600	5424	5554	0	5814
Val)						
Total Exports 24	1350	24350	27120	27770	0	29070
Human Dom. 10	900	10900	10800	10900	0	10950
Consumption						
Other Disappearance	0	0	0	0	0	0
Total Use 10	900	10900	10800	10900	0	10950
Ending Stocks	350	350	210	830	0	460
	600	35600	38130	39500	0	40480
(1000 MT)	I	l		<u>,                                      </u>		