



**Final report of 2016/2017 harvest season**

**South-Central region**

**Table 1.** 2016/2015 sugarcane harvest in South-Central Brazil - final numbers  
Comparison with 2015/2016 crop year

Products	Crop year		
	2015/2016	2016/2017	Var. (%)
Sugarcane <sup>1</sup>	617,709	607,137	↓ -1.71%
Sugar <sup>1</sup>	31,221	35,628	↑ 14.11%
Anhydrous ethanol <sup>2</sup>	10,643	10,655	↑ 0.12%
Hydrous ethanol <sup>2</sup>	17,581	14,996	↓ -14.71%
Total ethanol <sup>2</sup>	28,225	25,651	↓ -9.12%
ATR <sup>1</sup>	80,614	80,769	↑ 0.19%
ATR/ ton of sugarcane <sup>3</sup>	130.50	133.03	↑ 1.94%
Share (%) sugar ethanol	40.65%	46.29%	↑
	59.35%	53.71%	↓
Liters of ethanol/ ton of sugarcane	45.46	41.86	↓ -7.92%
Kilograms of sugar/ ton of sugarcane	50.54	58.68	↑ 16.10%

Source: UNICA. Note: <sup>1</sup> - thousand tons; <sup>2</sup> - million liters; <sup>3</sup> - kg of ATR/ ton of sugarcane; To calculate the " ATR product" effect, it was excluded from the production of corn ethanol , specified in Table 20 .

**Table 2.** Sugarcane harvest per State of South-Central region

State	Sugarcane <sup>1</sup>		Sugar <sup>1</sup>		Total ethanol <sup>2</sup>		Anhydrous ethanol <sup>2</sup>		Hydrous ethanol <sup>2</sup>	
	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017
ES	2,809,562	1,351,437	70,952	64,035	150,600	59,892	88,972	51,161	61,628	8,731
GO	73,521,677	67,629,843	1,892,232	2,101,731	4,688,856	4,384,455	1,313,789	1,312,683	3,375,067	3,071,772
MT	17,150,551	16,342,510	337,162	397,695	1,325,870	1,220,605	508,214	524,398	817,656	696,207
MS	47,816,602	50,291,825	1,301,563	1,734,741	2,789,858	2,708,519	645,725	806,808	2,144,133	1,901,711
MG	64,853,319	63,516,093	3,245,184	3,992,717	3,057,073	2,640,802	1,058,889	1,190,171	1,998,184	1,450,631
PR	42,107,627	40,417,087	2,806,939	3,059,860	1,573,191	1,354,898	601,945	616,335	971,246	738,563
RJ	1,066,157	1,552,740	0	28,596	58,652	81,816	0	0	58,652	81,816
RS	61,238	45,523	0	0	3,786	2,914	0	0	3,786	2,914
SP	368,322,649	365,989,639	21,567,455	24,248,144	14,576,624	13,196,876	6,425,674	6,151,009	8,150,950	7,045,867
<b>TOTAL</b>	<b>617,709,382</b>	<b>607,136,697</b>	<b>31,221,487</b>	<b>35,627,519</b>	<b>28,224,510</b>	<b>25,650,777</b>	<b>10,643,208</b>	<b>10,652,565</b>	<b>17,581,302</b>	<b>14,998,212</b>

State	Kg TRS/ton of sugarcane		Kg of sugar/ton of sugarcane		Liters of ethanol/ ton of sugarcane		Sugar mix (%)		Ethanol mix (%)	
	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017
ES	118.66	126.78	25.25	47.38	53.60	44.32	22.34%	39.23%	77.66%	60.77%
GO	134.98	140.68	25.74	31.08	63.64	63.64	20.01%	23.18%	79.99%	76.82%
MT	139.48	137.24	19.66	24.34	69.67	65.30	14.79%	18.61%	85.21%	81.39%
MS	127.35	127.64	27.22	34.49	58.34	53.86	22.43%	28.36%	77.57%	71.64%
MG	132.72	137.03	50.04	62.86	47.14	41.58	39.57%	48.15%	60.43%	51.85%
PR	133.63	136.76	66.66	75.71	37.36	33.52	52.36%	58.10%	47.64%	41.90%
RJ	92.21	107.64	0.00	18.42	55.01	52.69	0.00%	17.96%	0.00%	82.04%
RS	103.62	107.29	0.00	0.00	61.82	64.01	0.00%	0.00%	0.00%	0.00%
SP	129.06	131.20	58.56	66.25	39.58	36.06	47.62%	53.00%	52.38%	47.00%
<b>TOTAL</b>	<b>130.50</b>	<b>133.03</b>	<b>50.54</b>	<b>58.68</b>	<b>45.46</b>	<b>41.86</b>	<b>40.65%</b>	<b>46.29%</b>	<b>59.35%</b>	<b>53.71%</b>

Source: UNICA. Note: <sup>1</sup> - thousand tons; <sup>2</sup> - million liters; <sup>3</sup> - kg of TRS/ton. of sugarcane. "ATR" index was calculated excluding corn ethanol production, in the South Central region and the state of Mato Grosso do Sul.

**Table 3.** Sugarcane harvest by autonomous distilleries and mixed production mills in South-Central region

Mills	2015/2016	2016/2017
<b>Mixed production mills</b>		
Sugarcane <sup>1</sup>	505,757	505,856
Sugar <sup>1</sup>	31,221	35,628
Anhydrous ethanol <sup>2</sup>	8,194	8,063
Hydrous ethanol <sup>2</sup>	11,036	9,193
Total ethanol <sup>2</sup>	19,230	17,256
<b>Distilleries</b>		
Sugarcane <sup>1</sup>	111,952	101,281
Sugar <sup>1</sup>	0	0
Anhydrous ethanol <sup>2</sup>	2,449	2,589
Hydrous ethanol <sup>2</sup>	6,546	5,805
Total ethanol <sup>2</sup>	8,994	8,395

Source: UNICA. Note: <sup>1</sup> - thousand tons; <sup>2</sup> - million liters; autonomous distilleries are plants dedicated exclusively to ethanol production; mixed production mills are dedicated to producing both ethanol and sugar.

**Table 4.** Bi-weekly sugarcane crushing, ACCUMULATED - results for the South-Central region

Bi-weekly period	SUGARCANE (tons)								
	São Paulo State			South-Central region			Others states		
	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)
16/04	6,260,159	20,807,630	232%	13,045,798	32,937,311	152%	6,785,639	12,129,681	79%
01/05	22,419,779	43,810,763	95%	40,163,462	69,171,409	72%	17,743,683	25,360,646	43%
16/05	38,729,132	69,016,962	78%	68,834,754	108,863,461	58%	30,105,622	39,846,499	32%
01/06	63,333,390	87,700,200	38%	109,360,654	141,370,048	29%	46,027,264	53,669,848	17%
16/06	86,683,264	100,021,436	15%	149,018,051	167,356,847	12%	62,334,787	67,335,411	8%
01/07	114,893,242	129,051,362	12%	195,794,905	215,590,640	10%	80,901,663	86,539,278	7%
16/07	131,529,555	157,304,500	20%	225,197,229	262,674,418	17%	93,667,674	105,369,918	12%
01/08	161,868,401	187,232,304	16%	274,865,024	312,104,495	14%	112,996,623	124,872,191	11%
16/08	190,265,519	214,372,448	13%	322,673,330	357,238,412	11%	132,407,811	142,865,964	8%
01/09	218,569,400	237,768,230	9%	370,154,202	395,835,298	7%	151,584,802	158,067,068	4%
16/09	234,227,156	259,735,670	11%	399,846,191	433,716,722	8%	165,619,035	173,981,052	5%
01/10	258,595,112	285,928,550	11%	440,495,574	476,244,153	8%	181,900,462	190,315,603	5%
16/10	281,571,462	306,207,163	9%	476,812,027	508,436,907	7%	195,240,565	202,229,744	4%
01/11	304,688,167	325,384,943	7%	515,461,995	540,248,567	5%	210,773,828	214,863,624	2%
16/11	319,425,082	338,343,695	6%	541,164,156	562,019,791	4%	221,739,074	223,676,096	1%
01/12	331,070,914	351,467,856	6%	560,006,355	581,701,477	4%	228,935,441	230,233,621	1%
16/12	343,518,973	356,160,979	4%	577,999,118	588,930,295	2%	234,480,145	232,769,316	-1%
01/01	350,797,650	358,316,216	2%	588,559,666	592,050,880	1%	237,762,016	233,734,664	-2%
16/01	352,152,420	358,936,280	2%	590,444,376	593,232,706	0%	238,291,956	234,296,426	-2%
01/02	354,346,982	359,013,578	1%	594,486,990	593,822,054	0%	240,140,008	234,808,476	-2%
16/02	355,974,301	359,316,264	1%	597,260,437	594,733,767	0%	241,286,136	235,417,503	-2%
01/03	356,472,118	359,568,552	1%	598,313,888	595,893,532	0%	241,841,770	236,324,980	-2%
16/03	359,197,097	361,301,457	1%	603,615,148	599,173,394	-1%	244,418,051	237,871,937	-3%
01/04	368,322,631	365,989,639	-1%	617,709,382	607,136,697	-2%	249,386,751	241,147,058	-3%

Source: UNICA.

**Table 5.** Bi-weekly sugar production, ACCUMULATED - results for the South-Central region

Bi-weekly period	SUGAR (tons)								
	São Paulo State			South-Central region			Others states		
	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)
16/04	197,449	1,005,677	409%	395,716	1,437,979	263%	198,267	432,302	118%
01/05	918,009	2,300,450	151%	1,448,957	3,251,370	124%	530,948	950,920	79%
16/05	1,728,794	3,813,636	121%	2,672,044	5,322,367	99%	943,250	1,508,731	60%
01/06	3,132,291	4,964,788	59%	4,647,586	7,009,621	51%	1,515,295	2,044,833	35%
16/06	4,494,279	5,633,646	25%	6,624,672	8,212,518	24%	2,130,393	2,578,872	21%
01/07	6,256,168	7,531,789	20%	9,154,973	11,015,606	20%	2,898,805	3,483,817	20%
16/07	7,261,288	9,448,820	30%	10,606,497	13,858,080	31%	3,345,209	4,409,260	32%
01/08	9,265,890	11,582,723	25%	13,411,916	16,974,251	27%	4,146,026	5,391,528	30%
16/08	11,249,414	13,601,807	21%	16,294,754	19,953,726	22%	5,045,340	6,351,919	26%
01/09	13,214,513	15,363,132	16%	19,145,208	22,501,315	18%	5,930,695	7,138,183	20%
16/09	14,276,914	16,937,206	19%	20,816,955	24,920,066	20%	6,540,041	7,982,860	22%
01/10	15,933,575	18,961,130	19%	23,212,836	27,882,326	20%	7,279,261	8,921,196	23%
16/10	17,482,910	20,545,257	18%	25,312,059	30,137,080	19%	7,829,149	9,591,823	23%
01/11	18,990,278	21,909,293	15%	27,492,102	32,199,541	17%	8,501,824	10,290,248	21%
16/11	19,796,746	22,802,139	15%	28,694,726	33,566,703	17%	8,897,980	10,764,564	21%
01/12	20,308,313	23,611,117	16%	29,401,488	34,702,950	18%	9,093,175	11,091,833	22%
16/12	20,793,636	23,873,691	15%	30,045,901	35,078,181	17%	9,252,265	11,204,490	21%
01/01	21,063,804	23,969,564	14%	30,433,577	35,209,645	16%	9,369,773	11,240,081	20%
16/01	21,087,448	23,991,909	14%	30,460,039	35,245,140	16%	9,372,591	11,253,231	20%
01/02	21,144,327	23,992,722	13%	30,553,631	35,256,499	15%	9,409,304	11,263,777	20%
16/02	21,176,946	24,000,842	13%	30,603,365	35,265,633	15%	9,426,419	11,264,791	20%
01/03	21,185,768	24,005,709	13%	30,616,308	35,284,809	15%	9,430,540	11,279,100	20%
16/03	21,258,576	24,058,865	13%	30,756,836	35,357,421	15%	9,498,260	11,298,556	19%
01/04	21,567,455	24,248,144	12%	31,221,487	35,627,519	14%	9,654,032	11,379,375	18%

Source: UNICA.

**Table 6.** Bi-weekly ethanol production, ACCUMULATED - results for the South-Central region

Bi-weekly period	TOTAL ETHANOL (m <sup>3</sup> )								
	São Paulo State			South-Central region			Others states		
	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)
16/04	232,868	738,479	217%	569,955	1,284,273	125%	337,087	545,794	62%
01/05	844,494	1,579,674	87%	1,710,335	2,779,862	63%	865,841	1,200,188	39%
16/05	1,481,747	2,481,235	67%	2,954,354	4,404,005	49%	1,472,607	1,922,770	31%
01/06	2,431,351	3,195,267	31%	4,701,214	5,854,411	25%	2,269,863	2,659,144	17%
16/06	3,280,118	3,585,403	9%	6,372,638	6,933,414	9%	3,092,520	3,348,011	8%
01/07	4,343,530	4,587,165	6%	8,383,488	8,880,415	6%	4,039,958	4,293,250	6%
16/07	5,006,163	5,560,781	11%	9,777,167	10,803,082	10%	4,771,004	5,242,301	10%
01/08	6,165,577	6,612,866	7%	11,979,502	12,879,519	8%	5,813,925	6,266,653	8%
16/08	7,291,619	7,594,443	4%	14,165,772	14,822,261	5%	6,874,153	7,227,818	5%
01/09	8,475,602	8,472,242	0%	16,475,029	16,542,215	0%	7,999,427	8,069,973	1%
16/09	9,166,246	9,238,920	1%	18,026,043	18,152,207	1%	8,859,797	8,913,287	1%
01/10	10,176,578	10,180,020	0%	20,023,365	19,967,351	0%	9,846,787	9,787,331	-1%
16/10	11,067,780	10,955,802	-1%	21,715,992	21,379,468	-2%	10,648,212	10,423,666	-2%
01/11	11,997,316	11,661,218	-3%	23,559,915	22,691,938	-4%	11,562,599	11,030,720	-5%
16/11	12,586,658	12,155,082	-3%	24,757,644	23,614,462	-5%	12,170,986	11,459,380	-6%
01/12	13,057,597	12,631,206	-3%	25,641,276	24,409,606	-5%	12,583,679	11,778,400	-6%
16/12	13,552,784	12,830,035	-5%	26,435,683	24,746,794	-6%	12,882,899	11,916,759	-7%
01/01	13,882,682	12,923,898	-7%	26,943,621	24,915,402	-8%	13,060,939	11,991,504	-8%
16/01	13,938,180	12,951,070	-7%	27,036,902	24,983,218	-8%	13,098,722	12,032,148	-8%
01/02	14,018,169	12,954,180	-8%	27,210,891	25,027,975	-8%	13,192,722	12,073,795	-8%
16/02	14,089,239	12,964,604	-8%	27,347,333	25,092,273	-8%	13,258,094	12,127,669	-9%
01/03	14,115,340	12,975,050	-8%	27,416,997	25,162,989	-8%	13,301,657	12,187,939	-8%
16/03	14,220,187	13,036,056	-8%	27,641,173	25,324,426	-8%	13,420,986	12,288,370	-8%
01/04	14,576,624	13,196,876	-9%	28,224,510	25,651,319	-9%	13,647,886	12,454,443	-9%

Source: UNICA. Note: data include the volume of reprocessed ethanol and corn ethanol production.

**Table 7.** Bi-weekly anhydrous ethanol production, ACCUMULATED - results for the South-Central region

Bi-weekly period	ANHYDROUS ETHANOL (m <sup>3</sup> )								
	São Paulo State			South-Central region			Others states		
	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)
16/04	55,706	263,997	374%	87,975	387,350	340%	32,269	123,353	282%
01/05	263,202	617,723	135%	407,047	928,364	128%	143,845	310,641	116%
16/05	485,873	1,031,662	112%	802,021	1,580,198	97%	316,148	548,536	74%
01/06	851,574	1,366,415	60%	1,406,514	2,153,983	53%	554,940	787,568	42%
16/06	1,210,654	1,548,918	28%	2,043,710	2,590,879	27%	833,056	1,041,961	25%
01/07	1,681,476	2,039,097	21%	2,831,670	3,427,652	21%	1,150,194	1,388,555	21%
16/07	1,992,250	2,519,640	26%	3,359,555	4,275,332	27%	1,367,305	1,755,692	28%
01/08	2,548,766	3,032,975	19%	4,251,870	5,190,367	22%	1,703,104	2,157,392	27%
16/08	3,094,935	3,480,789	12%	5,144,865	6,009,092	17%	2,049,930	2,528,303	23%
01/09	3,657,879	3,901,951	7%	6,063,858	6,742,664	11%	2,405,979	2,840,713	18%
16/09	3,990,004	4,277,966	7%	6,660,872	7,447,953	12%	2,670,868	3,169,987	19%
01/10	4,469,636	4,740,071	6%	7,460,369	8,257,341	11%	2,990,733	3,517,270	18%
16/10	4,895,119	5,131,394	5%	8,127,125	8,922,061	10%	3,232,006	3,790,667	17%
01/11	5,367,488	5,488,930	2%	8,907,846	9,548,125	7%	3,540,358	4,059,195	15%
16/11	5,679,302	5,748,981	1%	9,460,869	10,007,026	6%	3,781,567	4,258,045	13%
01/12	5,942,187	5,991,565	1%	9,886,709	10,368,924	5%	3,944,522	4,377,359	11%
16/12	6,188,191	6,073,893	-2%	10,261,032	10,491,605	2%	4,072,841	4,417,712	8%
01/01	6,327,118	6,105,137	-4%	10,466,983	10,542,890	1%	4,139,865	4,437,753	7%
16/01	6,340,106	6,116,305	-4%	10,495,339	10,561,865	1%	4,155,233	4,445,560	7%
01/02	6,366,005	6,116,855	-4%	10,545,398	10,571,225	0%	4,179,393	4,454,370	7%
16/02	6,391,130	6,108,141	-4%	10,576,714	10,553,856	0%	4,185,584	4,445,715	6%
01/03	6,390,622	6,106,598	-4%	10,577,600	10,555,924	0%	4,186,978	4,449,326	6%
16/03	6,341,655	6,107,762	-4%	10,531,140	10,574,049	0%	4,189,485	4,466,287	7%
01/04	6,425,674	6,151,011	-4%	10,643,208	10,655,454	0%	4,217,534	4,504,443	7%

Source: UNICA. Note: data include the volume of reprocessed ethanol and corn ethanol production.

**Table 8.** Bi-weekly hydrous ethanol production, ACCUMULATED - results for the South-Central region

Bi-weekly period	HYDROUS ETHANOL (m <sup>3</sup> )								
	São Paulo State			South-Central region			Others states		
	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)	2015/2016	2016/2017	Var. (%)
16/04	177,162	474,482	168%	481,980	896,923	86%	304,818	422,441	39%
01/05	581,292	961,951	65%	1,303,288	1,851,498	42%	721,996	889,547	23%
16/05	995,874	1,449,573	46%	2,152,333	2,823,807	31%	1,156,459	1,374,234	19%
01/06	1,579,777	1,828,852	16%	3,294,700	3,700,428	12%	1,714,923	1,871,576	9%
16/06	2,069,464	2,036,485	-2%	4,328,928	4,342,535	0%	2,259,464	2,306,050	2%
01/07	2,662,054	2,548,068	-4%	5,551,818	5,452,763	-2%	2,889,764	2,904,695	1%
16/07	3,013,913	3,041,141	1%	6,417,612	6,527,750	2%	3,403,699	3,486,609	2%
01/08	3,616,811	3,579,891	-1%	7,727,632	7,689,152	0%	4,110,821	4,109,261	0%
16/08	4,196,684	4,113,654	-2%	9,020,907	8,813,169	-2%	4,824,223	4,699,515	-3%
01/09	4,817,723	4,570,291	-5%	10,411,171	9,799,551	-6%	5,593,448	5,229,260	-7%
16/09	5,176,242	4,960,954	-4%	11,365,171	10,704,254	-6%	6,188,929	5,743,300	-7%
01/10	5,706,942	5,439,949	-5%	12,562,996	11,710,010	-7%	6,856,054	6,270,061	-9%
16/10	6,172,661	5,824,408	-6%	13,588,867	12,457,407	-8%	7,416,206	6,632,999	-11%
01/11	6,629,828	6,172,288	-7%	14,652,069	13,143,813	-10%	8,022,241	6,971,525	-13%
16/11	6,907,356	6,406,101	-7%	15,296,775	13,607,436	-11%	8,389,419	7,201,335	-14%
01/12	7,115,410	6,639,641	-7%	15,754,567	14,040,682	-11%	8,639,157	7,401,041	-14%
16/12	7,364,593	6,756,142	-8%	16,174,651	14,255,189	-12%	8,810,058	7,499,047	-15%
01/01	7,555,564	6,818,761	-10%	16,476,638	14,372,512	-13%	8,921,074	7,553,751	-15%
16/01	7,598,074	6,834,765	-10%	16,541,563	14,421,353	-13%	8,943,489	7,586,588	-15%
01/02	7,652,164	6,837,325	-11%	16,665,493	14,456,750	-13%	9,013,329	7,619,425	-15%
16/02	7,698,109	6,856,463	-11%	16,770,619	14,538,417	-13%	9,072,510	7,681,954	-15%
01/03	7,724,718	6,868,452	-11%	16,839,397	14,607,065	-13%	9,114,679	7,738,613	-15%
16/03	7,878,532	6,928,294	-12%	17,110,033	14,750,377	-14%	9,231,501	7,822,083	-15%
01/04	8,150,950	7,045,865	-14%	17,581,302	14,995,865	-15%	9,430,352	7,950,000	-16%

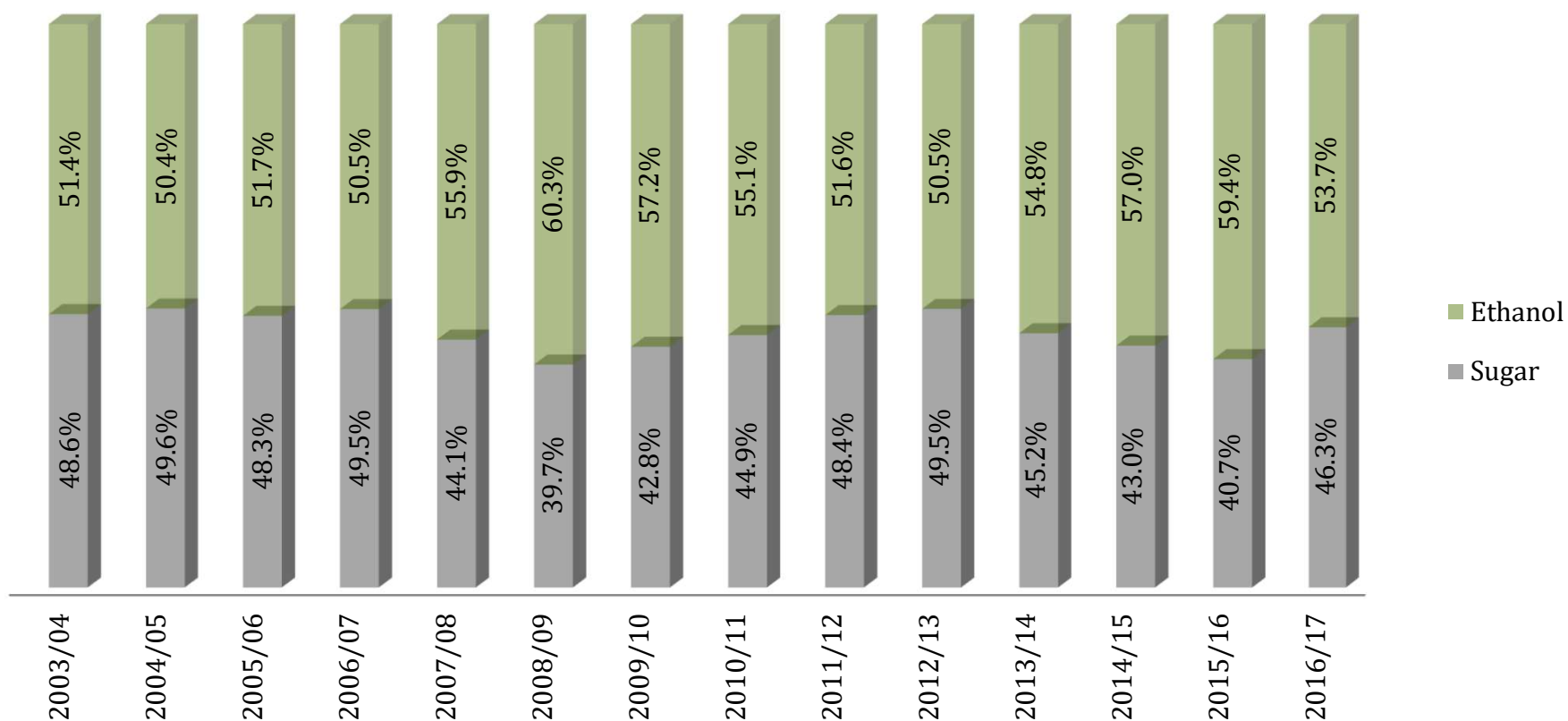
Source: UNICA. Note: data include the volume of reprocessed ethanol and corn ethanol production.

**Table 9.** Bi-weekly ethanol mix (%) South-Central region

Bi-weekly period	ETHANOL MIX (%)					
	São Paulo State		South-Central region		Others states	
	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017
16/04	65.56	54.36	69.51	58.97	72.63	66.78
01/05	57.91	51.38	63.50	57.09	71.65	66.82
16/05	56.03	49.25	62.15	55.99	70.29	67.64
01/06	52.35	50.27	58.85	58.23	69.18	68.91
16/06	50.34	48.73	57.83	59.27	68.39	67.60
01/07	49.56	46.26	56.32	53.01	66.59	62.81
16/07	51.79	45.31	60.87	52.34	72.53	62.37
01/08	48.53	44.57	56.04	51.95	67.79	62.74
16/08	48.07	44.19	55.18	51.43	65.58	61.83
01/09	49.55	44.83	56.80	52.25	67.24	63.30
16/09	51.46	44.27	60.06	51.91	69.49	61.70
01/10	49.85	43.13	57.51	49.85	68.33	60.03
16/10	48.39	44.42	56.67	50.38	70.16	60.41
01/11	50.17	45.78	57.86	50.71	68.69	58.14
16/11	54.42	47.47	61.80	52.05	71.28	58.80
01/12	60.10	49.00	66.91	52.85	77.15	60.27
16/12	62.47	55.18	66.50	58.18	74.77	63.82

Source: UNICA. Note: ethanol mix was calculated excluding corn ethanol production registered.

Use of sugarcane in South-Central region. Values in %.

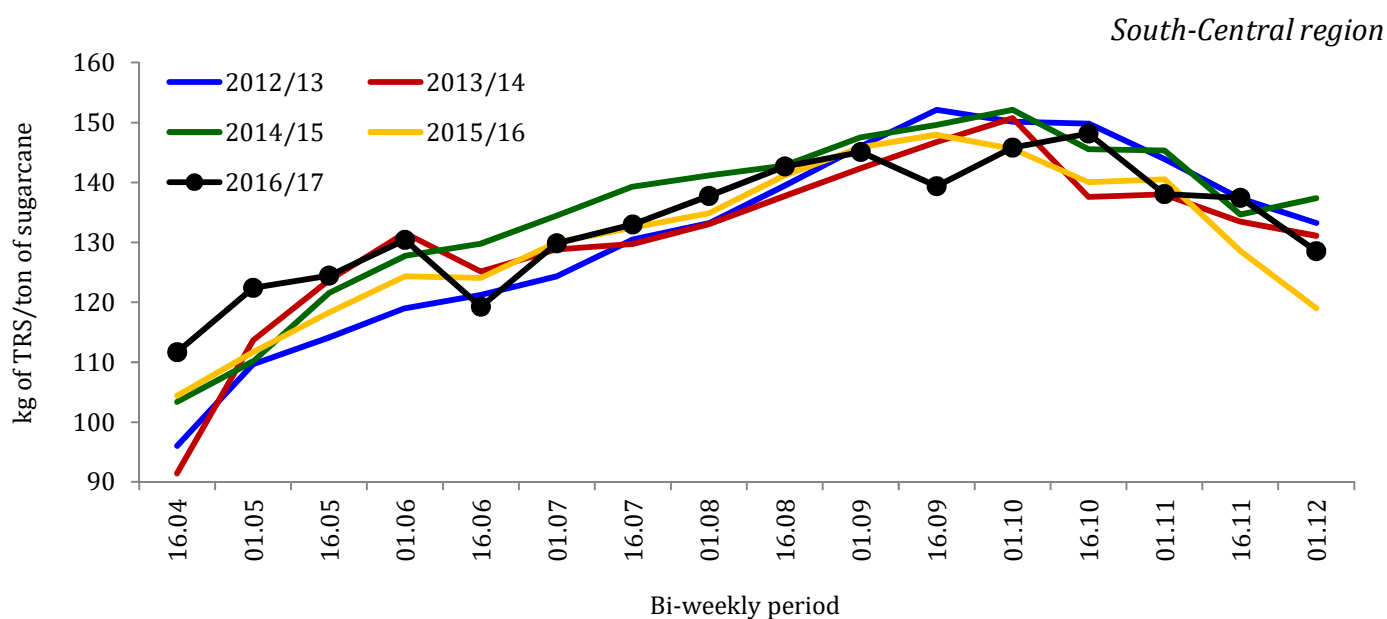


Source: UNICA.

**Table 10.** Bi-weekly sugarcane quality index (kg of TRS per ton of sugarcane) for South-Central region

Bi-weekly period	kg of TRS/ ton of sugarcane					
	São Paulo State		South-Central region		Others states	
	2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017
16/04	96.10	111.14	104.40	111.67	112.05	112.58
01/05	111.17	121.49	111.67	122.41	112.39	124.00
16/05	118.66	124.15	118.29	124.42	117.80	124.88
01/06	125.64	130.03	124.34	130.41	122.33	130.93
16/06	123.27	111.13	124.07	119.26	125.22	126.60
01/07	129.95	127.70	129.97	129.80	130.00	132.98
16/07	131.53	130.21	132.42	132.95	133.59	137.05
01/08	134.74	135.01	134.84	137.71	134.99	141.85
16/08	141.18	139.90	141.21	142.63	141.25	146.75
01/09	144.43	143.21	145.84	145.07	147.92	147.93
16/09	146.69	134.95	147.96	139.35	149.37	145.43
01/10	142.28	142.61	145.57	145.77	150.48	150.83
16/10	137.14	147.52	140.02	148.15	144.98	149.22
01/11	137.33	137.66	140.48	138.03	145.17	138.60
16/11	126.01	137.65	128.57	137.44	132.00	137.12
01/12	115.53	126.85	118.99	128.51	124.58	131.84
16/12	109.04	131.01	112.21	130.26	119.33	128.88

Source: UNICA. Note: data exclude corn ethanol production.



**Table 11.** Historical series of sugarcane quality (kg of TRS per ton of sugarcane) and the number of new mills and closed mills, per harvest season, in South-Central region.

Harvest season	Average TRS (kg TRS/ ton of sugarcane)	Number of new mills	Number of closed mills
2007/2008	143.63	22	3
2008/2009	140.11	29	2
2009/2010	129.36	21	3
2010/2011	140.88	10	4
2011/2012	137.64	4	15
2012/2013	135.46	2	14
2013/2014	133.27	2	10
2014/2015	136.45	0	9
2015/2016	130.50	2	8
2016/2017	133.03	1	6

Source: UNICA.

**Table 12.** Ethanol sales by mills in South-Central region, per ethanol type and destination (m<sup>3</sup>).

Products	Month	Total		External market		Domestic market	
		2015/2016	2016/2017	2015/2016	2016/2017	2015/2016	2016/2017
Total ethanol	Apr	2,185,449	2,073,057	33,865	61,598	2,151,584	2,011,459
	May	2,275,775	2,394,252	73,722	213,297	2,202,053	2,180,955
	Jun	2,499,778	2,474,207	124,077	240,748	2,375,701	2,233,459
	Jul	2,673,394	2,405,724	214,869	168,328	2,458,525	2,237,396
	Aug	2,748,361	2,472,073	258,907	150,489	2,489,454	2,321,584
	Sep	2,704,484	2,342,285	253,277	105,809	2,451,207	2,236,476
	Oct	2,752,942	2,138,285	272,921	74,455	2,480,021	2,063,830
	Nov	2,532,566	1,960,603	268,213	53,890	2,264,353	1,906,713
	Dec	2,524,772	2,120,749	178,560	76,472	2,346,212	2,044,277
	Jan	2,214,021	1,863,540	116,274	90,618	2,097,747	1,772,922
	Feb	1,945,856	1,679,094	36,677	39,808	1,909,179	1,639,286
	Mar	2,226,198	2,045,032	100,729	81,899	2,125,469	1,963,133
	<b>Total</b>	<b>29,283,596</b>	<b>25,968,901</b>	<b>1,932,091</b>	<b>1,357,411</b>	<b>27,351,505</b>	<b>24,611,490</b>
Anhydrous ethanol	Apr	710,609	875,407	26,179	54,958	684,430	820,449
	May	785,086	956,517	54,914	129,606	730,172	826,911
	Jun	884,817	953,910	50,745	92,221	834,072	861,689
	Jul	968,554	957,521	112,743	93,161	855,811	864,360
	Aug	1,046,438	950,144	182,619	74,263	863,819	875,881
	Sep	1,013,770	868,850	158,504	36,947	855,266	831,903
	Oct	880,545	865,712	117,184	32,438	763,361	833,274
	Nov	945,083	910,320	137,667	43,227	807,416	867,093
	Dec	1,012,691	970,427	76,155	53,379	936,536	917,048
	Jan	890,201	963,710	57,297	88,075	832,904	875,635
	Feb	850,862	837,622	11,525	34,815	839,337	802,807
	Mar	1,070,868	970,146	66,873	71,065	1,003,995	899,081
	<b>Total</b>	<b>11,059,524</b>	<b>11,080,286</b>	<b>1,052,405</b>	<b>804,155</b>	<b>10,007,119</b>	<b>10,276,131</b>
Hydrous ethanol	Apr	1,474,840	1,197,650	7,686	6,640	1,467,154	1,191,010
	May	1,490,689	1,437,735	18,808	83,691	1,471,881	1,354,044
	Jun	1,614,961	1,520,297	73,332	148,527	1,541,629	1,371,770
	Jul	1,704,840	1,448,203	102,126	75,167	1,602,714	1,373,036
	Aug	1,701,923	1,521,929	76,288	76,226	1,625,635	1,445,703
	Sep	1,690,714	1,473,435	94,773	68,862	1,595,941	1,404,573
	Oct	1,872,397	1,272,573	155,737	42,017	1,716,660	1,230,556
	Nov	1,587,483	1,050,283	130,546	10,663	1,456,937	1,039,620
	Dec	1,512,081	1,150,322	102,405	23,093	1,409,676	1,127,229
	Jan	1,323,820	899,830	58,977	2,543	1,264,843	897,287
	Feb	1,094,994	841,472	25,152	4,993	1,069,842	836,479
	Mar	1,155,330	1,074,886	33,856	10,834	1,121,474	1,064,052
	<b>Total</b>	<b>18,224,072</b>	<b>14,888,615</b>	<b>879,686</b>	<b>553,256</b>	<b>17,344,386</b>	<b>14,335,359</b>

Source: UNICA. Note: data includes ethanol for fuel, industrial purposes, beverage production and the volume destined to own consumption by mills. It also includes the imports by producers and non-producers, beyond the amount used for transfer duct ethanol ballast.

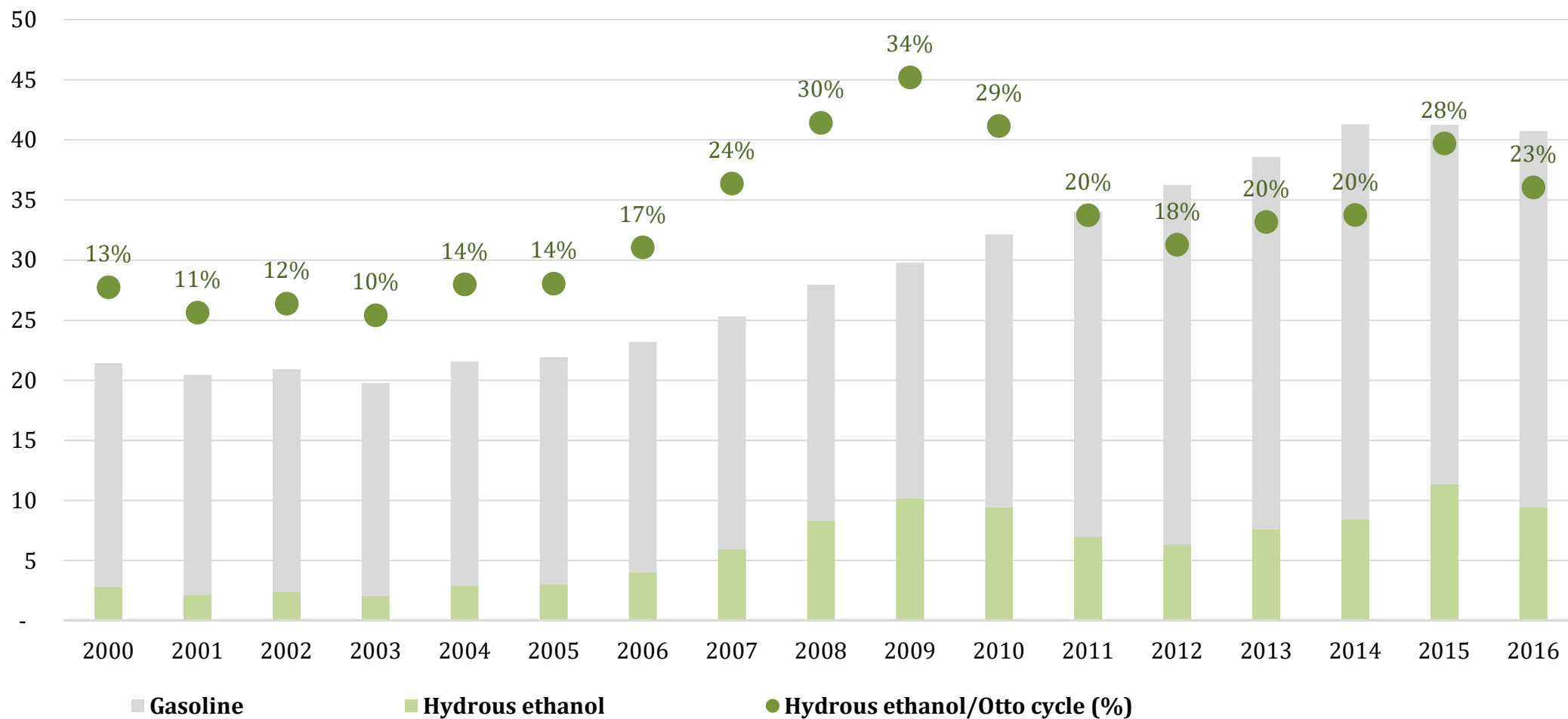
**Table 13.** Monthly sales by mills in South-Central region - ethanol for other uses (m<sup>3</sup>)

Product	Month	Total				Anhydrous ethanol				Hydrous ethanol			
		2015/2016	2016/2017	Var. (%)		2015/2016	2016/2017	Var. (%)		2015/2016	2016/2017	Var. (%)	
Ethanol for other uses	Apr	74,454	58,902	↓	-20.89%	12,078	12,042	↓	-0.30%	62,376	46,860	↓	-24.87%
	May	76,786	62,244	↓	-18.94%	14,688	12,300	↓	-16.26%	62,098	49,944	↓	-19.57%
	Jun	84,796	66,611	↓	-21.45%	12,454	14,830	↑	19.08%	72,342	51,781	↓	-28.42%
	Jul	94,706	66,335	↓	-29.96%	20,112	12,023	↓	-40.22%	74,594	54,312	↓	-27.19%
	Aug	75,963	66,026	↓	-13.08%	18,033	11,158	↓	-38.12%	57,930	54,868	↓	-5.29%
	Sep	58,025	66,810	↑	15.14%	14,874	11,629	↓	-21.82%	43,151	55,181	↑	27.88%
	Oct	60,719	71,834	↑	18.31%	15,043	12,889	↓	-14.32%	45,676	58,945	↑	29.05%
	Nov	70,887	68,146	↓	-3.87%	12,559	14,845	↑	18.20%	58,328	53,301	↓	-8.62%
	Dec	68,334	75,389	↑	10.32%	12,595	11,293	↓	-10.34%	55,739	64,096	↑	14.99%
	Jan	65,279	60,418	↓	-7.45%	14,328	10,480	↓	-26.86%	50,951	49,938	↓	-1.99%
	Feb	63,571	59,362	↓	-6.62%	13,534	13,478	↓	-0.41%	50,037	45,884	↓	-8.30%
	Mar	65,702	63,307	↓	-3.65%	13,231	12,774	↓	-3.45%	52,471	50,533	↓	-3.69%
Total		859,222	785,384	↓	-8.59%	173,529	149,741	↓	-13.71%	685,693	635,643	↓	-7.30%

Source: UNICA. Note: ethanol sales destined to the domestic market shown in Table 12, include the volume of ethanol fuel traded, ethanol for other purposes (shown in the table above), imports, losses and own use by mills, beyond the amount used for transfer duct ethanol ballast.

## Ethanol participation in the fuel matrix - Region South-Central

*Fuel consumption (billion liters - equivalent petrol)*



Source: ANP (consumption of ethanol, anhydrous and hydrated in the Central-South region). Elaboration: UNICA. Data do not include consumption of CNG.

**Table 14.** Sugar exports by South-Central region of Brazil (thousand tons).

Month	Harvest season		Var. (%)	
	2015/2016	2016/2017		
April	817	1,463	↑	79.00%
May	1,625	1,884	↑	15.92%
June	1,932	2,601	↑	34.62%
July	2,141	2,857	↑	33.42%
August	1,807	2,964	↑	64.01%
September	1,728	3,170	↑	83.47%
October	2,475	2,120	↓	-14.32%
November	2,193	2,305	↑	5.12%
December	2,468	2,372	↓	-3.89%
January	1,317	2,036	↑	54.65%
February	2,567	1,628	↓	-36.58%
March	1,984	1,430	↓	-27.90%
<b>Total</b>	<b>23,054</b>	<b>26,831</b>	<b>↑</b>	<b>16.38%</b>

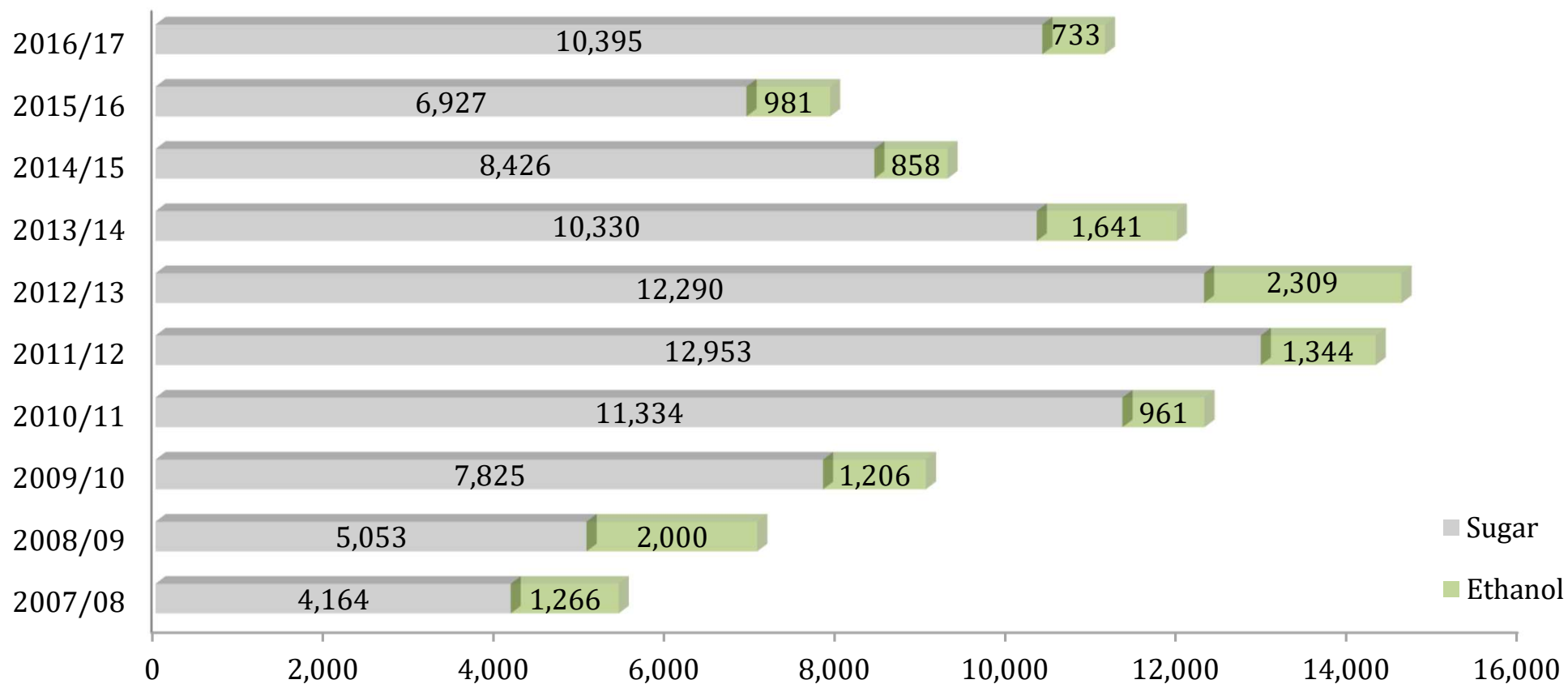
Source: Secex. Elaboration: UNICA.

**Table 15.** Ethanol imports by South-Central region of Brazil (m<sup>3</sup>).

Month	Harvest season		Var. (%)	
	2015/2016	2016/2017		
April	14,356	24,288	↑	69%
May	73	51,351	↑	
June	103	89,727	↑	
July	108	21,793	↑	
August	116	90	↓	-22%
September	33	32	↓	-2%
October	57	61	↑	7%
November	28	15	↓	-46%
December	9	26	↑	201%
January	14	27	↑	102%
February	7	10,452	↑	
March	128	39,829	↑	
<b>Total</b>	<b>15,032</b>	<b>237,692</b>	↑	
Share of ethanol imports from USA (%)	96.17%	98.79%		
Imports as a share of ethanol consumption (%)	0.06%	0.99%		

Source: Secex (for imports, considering the place of unloading) and ANP (for consumption data). Elaboration: UNICA.

### Sugar and ethanol export revenues generated by Brazilian South-Central region (million US\$)



Source: Secex. Elaboration: UNICA. Note: data from South-Central region has been compiled according to the state where the exporting company is located.

**Table 16.** Ethanol conversion in South-Central region of Brazil (m<sup>3</sup>).

Mês	Conversion of anhydrous ethanol into hydrous ethanol		Conversion of hydrous ethanol into anhydrous ethanol	
	2015/2016	2016/2017	2015/2016	2016/2017
Apr	63.0	8.6	30.2	17.1
May	4.0	7.0	39.5	61.1
Jun	4.3	9.9	74.2	99.6
Jul	7.1	2.7	61.6	93.1
Aug	0.3	2.7	58.5	93.9
Sep	2.9	0.7	69.6	109.2
Oct	0.2	0.4	81.7	118.8
Nov	1.1	1.5	127.2	122.2
Dec	2.6	3.4	108.4	36.7
Jan	8.4	6.4	23.6	5.1
Feb	21.8	36.4	4.9	0.4
Mar	113.4	18.4	1.9	4.2
<b>Total</b>	<b>229.0</b>	<b>98.1</b>	<b>681.4</b>	<b>761.3</b>

Source: UNICA.

**Table 17.** Ethanol supply & demand balance in South-Central region of Brazil. Volume in thousand m<sup>3</sup>.

	Anhydrous ethanol	Hydrous ethanol	Total
<b>Stock in April 1, 2016</b>	<b>791</b>	<b>574</b>	<b>1,365</b>
<b>Production during 2016/2017 harvest season - beginning in 04/01/2016*</b>	<b>11,129</b>	<b>14,998</b>	<b>26,128</b>
<b>Sales to domestic market - April 2016 to March of 2017</b>	<b>10,276</b>	<b>14,335</b>	<b>24,611</b>
<i>Sales of fuel ethanol</i>	<i>10,085</i>	<i>13,562</i>	<i>23,647</i>
<i>Sales of ethanol for industrial purposes and to own consumption by mills</i>	<i>191</i>	<i>773</i>	<i>964</i>
<b>Sales to external market - April 2016 to March of 2017</b>	<b>804</b>	<b>553</b>	<b>1,357</b>
<b>Stock in April 1, 2017</b>	<b>840</b>	<b>684</b>	<b>1,525</b>

Source: UNICA. Note: \*production include the volume of hydrous ethanol converted into anhydrous ethanol (vice versa), the imports by producers and non-producers, corn ethanol production and production of new crop (2016/2017) held until April 1, 2016.

**Table 18.** Sugar supply & demand balance in South-Central region of Brazil. Values in thousand tonns.

	2015/2016	2016/2017	Var. (%)	
Initial stock	2,982	2,225	↓	-25.37%
Production	31,221	35,628	↑	14.11%
Exports*	23,054	26,831	↑	16.38%
Domestic market**	8,924	8,632	↓	-3.27%
Final stock	2,225	2,390	↑	7.40%

Source: UNICA and Secex. Note: \*export data provided by Secex; \*\*domestic market calculated by the difference between the sum of the initial stock and production, minus sales to external market and the stock registered at the end of the harvest season.

**Table 19.** Average prices of TRS and of the sugarcane delivered by growers in São Paulo state. Nominal values.

Harvest season	Kg of TRS/ ton. of sugarcane*	R\$/ton. of sugarcane	R\$/ton. of sugarcane	
			Sugarcane destined to sugar production	Sugarcane destined to ethanol production
2007/2008	143.85	35.14	32.86	37.14
2008/2009	141.80	39.45	39.49	39.43
2009/2010	130.10	45.43	51.81	39.94
2010/2011	141.50	56.91	62.37	51.83
2011/2012	137.78	69.12	74.28	64.69
2012/2013	135.34	63.99	68.02	59.16
2013/2014	133.35	60.97	59.61	62.39
2014/2015	137.79	65.63	64.94	66.29
2015/2016	129.06	71.65	70.48	72.67
2016/2017	131.20	89.73	97.10	81.40

Source: Consecana, Orplana and UNICA. Elaboration: UNICA. Note: \*TRS product - average value for the State of São Paulo.

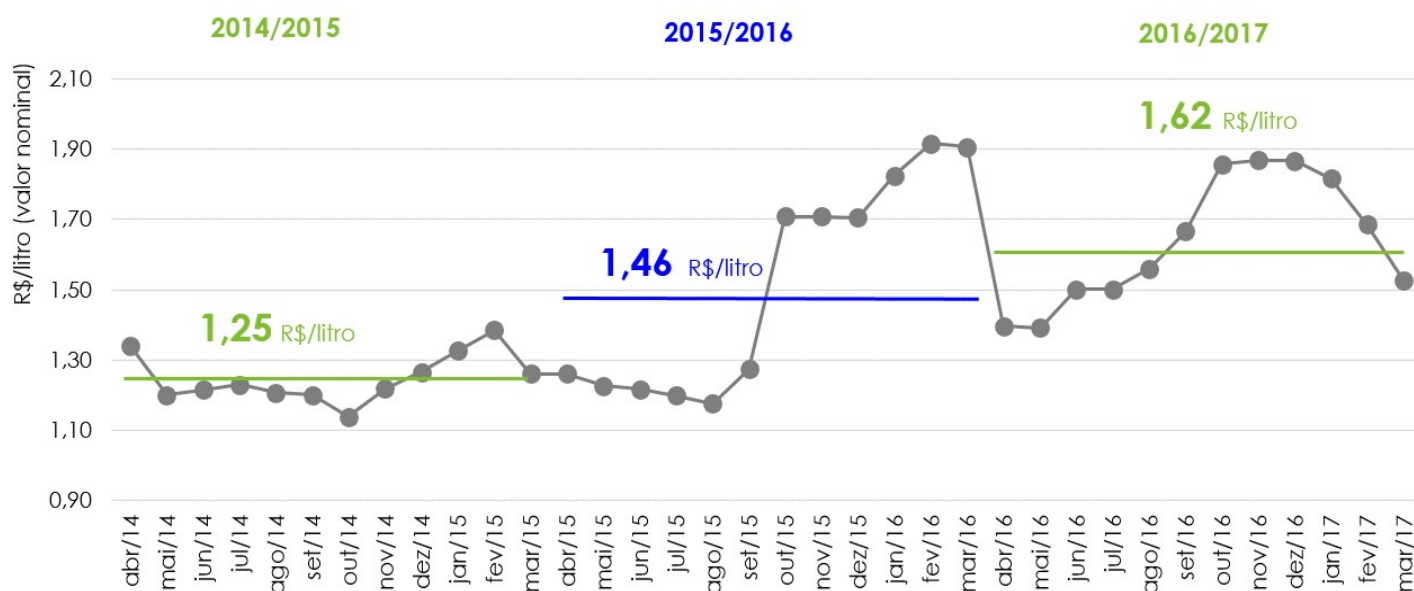
**Table 20.** Corn ethanol production in South Central region during 2016/2017 harvest season (m<sup>3</sup>).

Bi-weekly period	CORN ETHANOL PRODUCTION					
	Bi-weekly production			Accumulated production		
	Anhydrous	Hydrous	Total	Anhydrous	Hydrous	Total
16/04	2,193	4,821	7,014	2,193	4,821	7,014
01/05	446	8,008	8,454	2,639	12,829	15,468
16/05	0	2,983	2,983	2,639	15,812	18,451
01/06	0	2,642	2,642	2,639	18,454	21,093
16/06	0	2,196	2,196	2,639	20,650	23,289
01/07	0	3,377	3,377	2,639	24,027	26,666
16/07	0	4,771	4,771	2,639	28,798	31,437
01/08	0	6,373	6,373	2,639	35,171	37,810
16/08	0	3,307	3,307	2,639	38,478	41,117
01/09	0	6,508	6,508	2,639	44,986	47,625
16/09	0	5,808	5,808	2,639	50,794	53,433
01/10	0	6,772	6,772	2,639	57,566	60,205
16/10	1,260	6,191	7,451	3,899	63,757	67,656
01/11	5,113	6,047	11,160	9,012	69,804	78,816
16/11	4,093	9,137	13,230	13,105	78,941	92,046
01/12	3,132	10,058	13,190	16,237	88,999	105,236
16/12	1,541	14,072	15,613	17,778	103,071	120,849
01/01	3,967	15,670	19,637	21,745	118,741	140,486
16/01	563	12,763	13,326	22,308	131,504	153,812
01/02	1,958	13,768	15,726	24,266	145,272	169,538
16/02	2,816	14,615	17,431	27,082	159,887	186,969
01/03	3,566	6,845	10,411	30,648	166,732	197,380
16/03	4,441	14,035	18,476	35,089	180,767	215,856
01/04	1,552	16,739	18,291	36,641	197,506	234,147

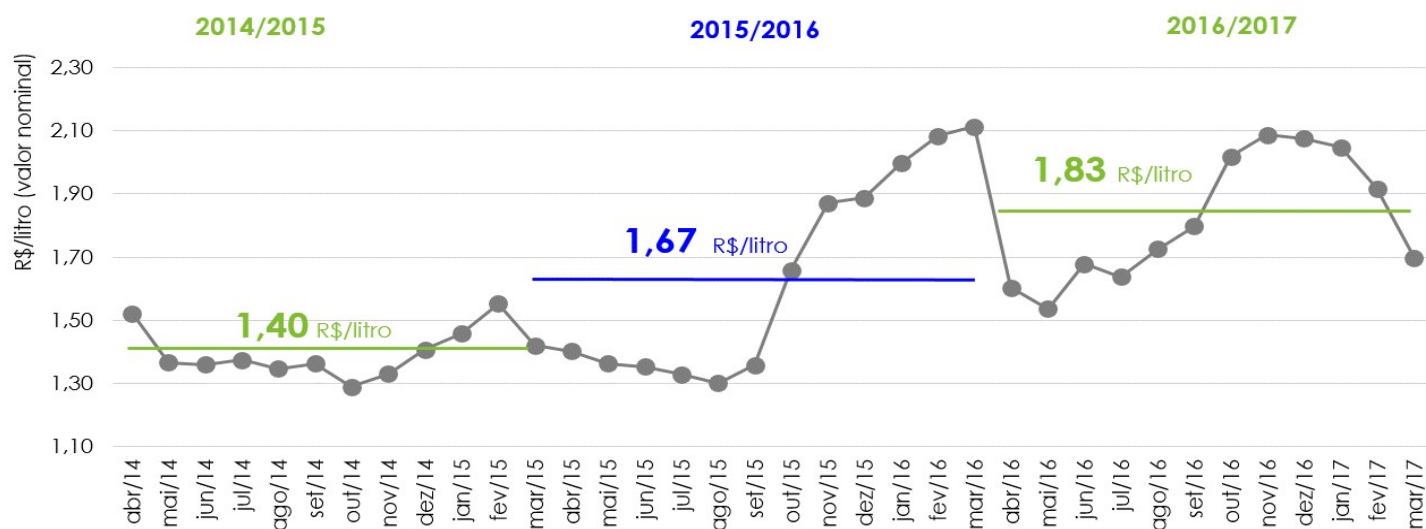
Source: UNICA.

## Monthly prices received by producers in São Paulo state - ethanol

### Fuel hydrous ethanol (R\$/liter)



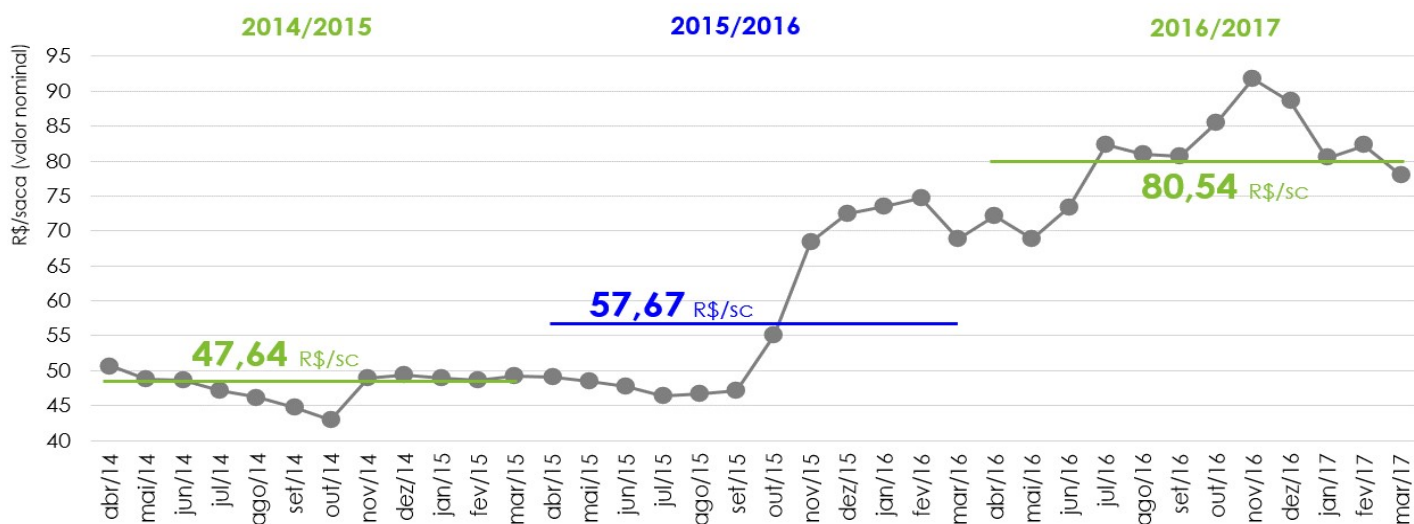
### Fuel anhydrous ethanol (R\$/liter)



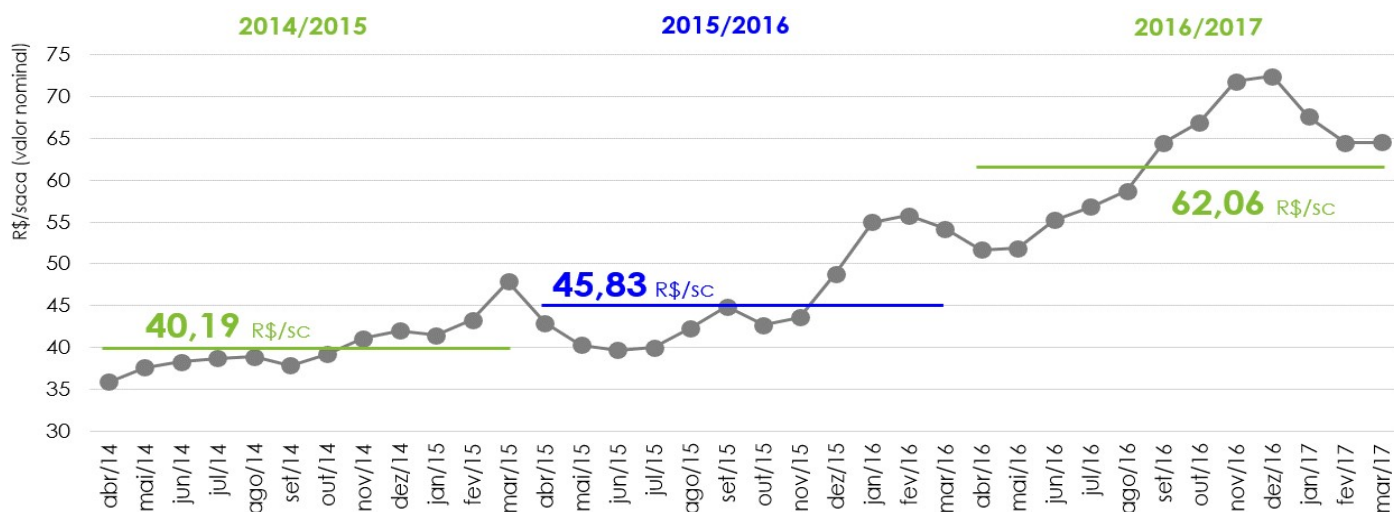
Source: CEPEA. Elaboration: UNICA. Note: prices minus freight charges and taxes; highlighted values refer to the average prices of the harvest season and they are calculated considering the trading curve published by Consecana; nominal values.

## Monthly prices received by producers in São Paulo state - sugar

White sugar - domestic market (R\$/ 50 kg bag) - spot market



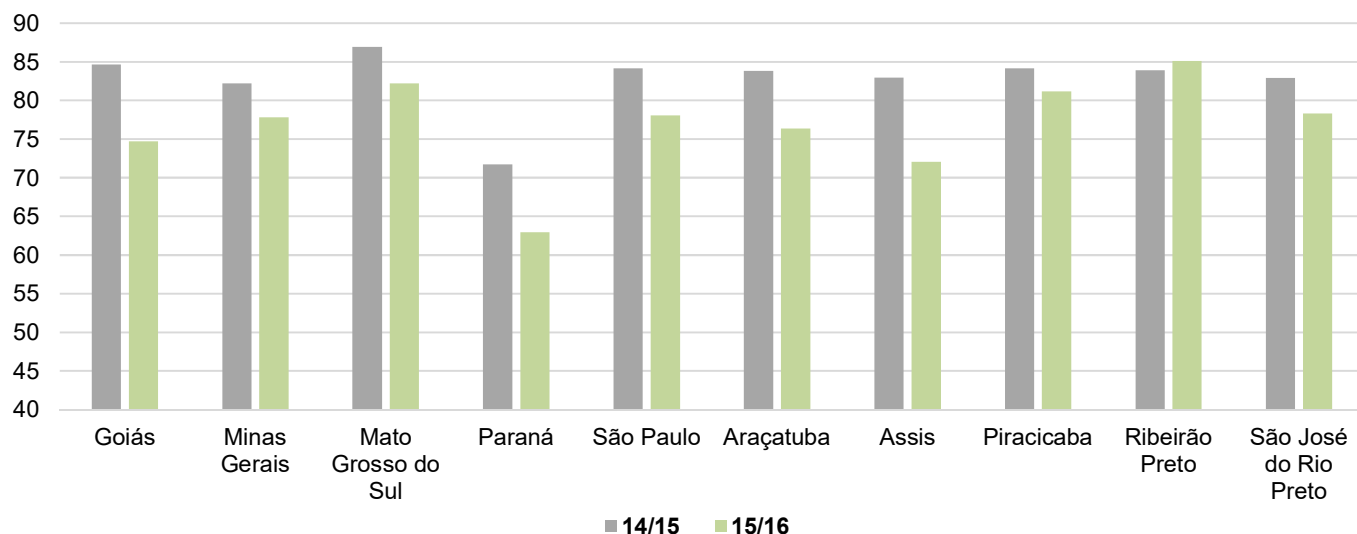
Raw sugar - external market (R\$/ 50 kg bag)



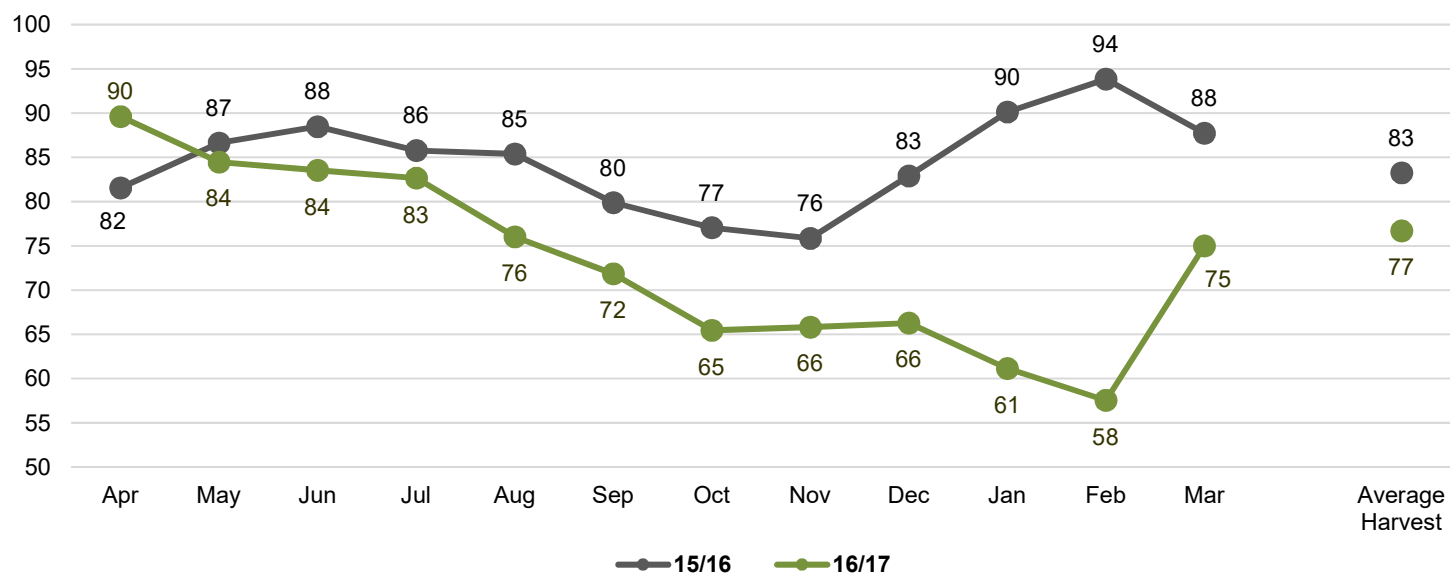
Source: CEPEA. Elaboration: UNICA. Note: prices minus freight charges but include taxes; highlighted values refer to the average prices of the harvest season and they are calculated considering the trading curve published by Consecana; nominal values.

## Agricultural productivity in South-Central region of Brazil. Values in tonnes of sugarcane per hectare.

Agricultural productivity by sugarcane cutting stage - South-Central region of Brazil and regions of the State of São Paulo

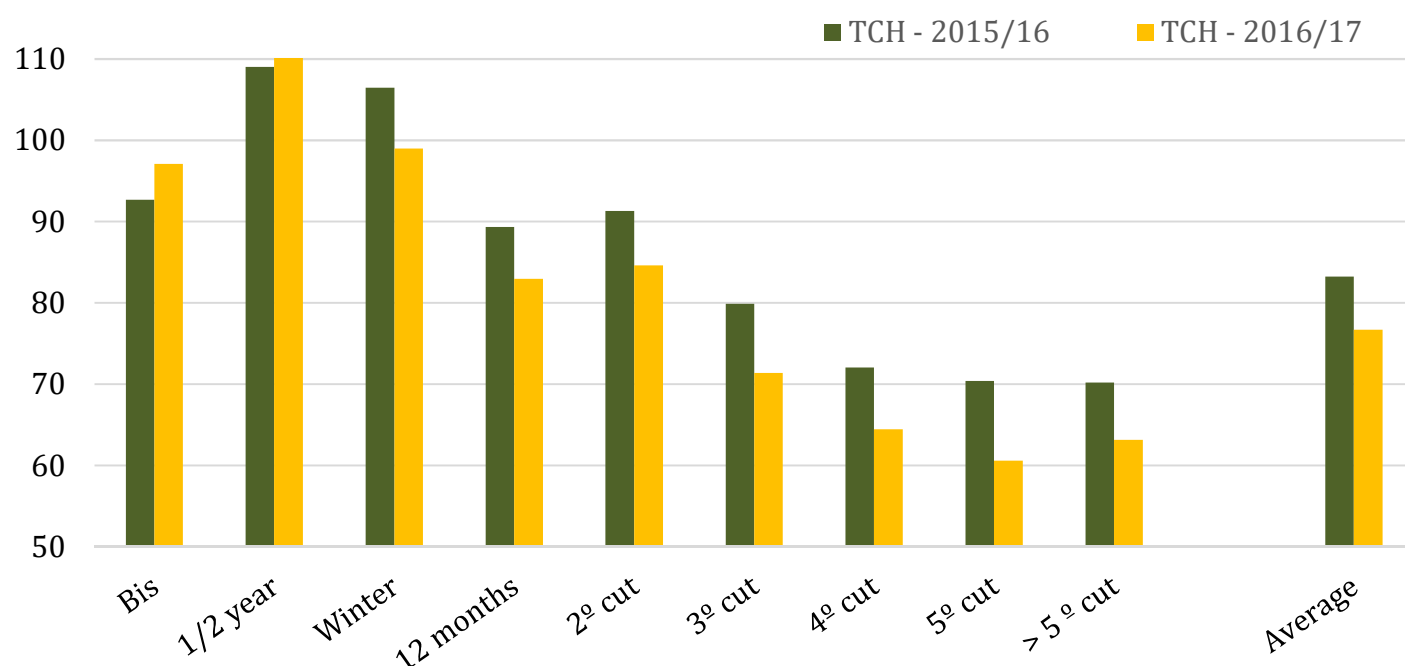


Monthly agricultural productivity - South-Central region of Brazil

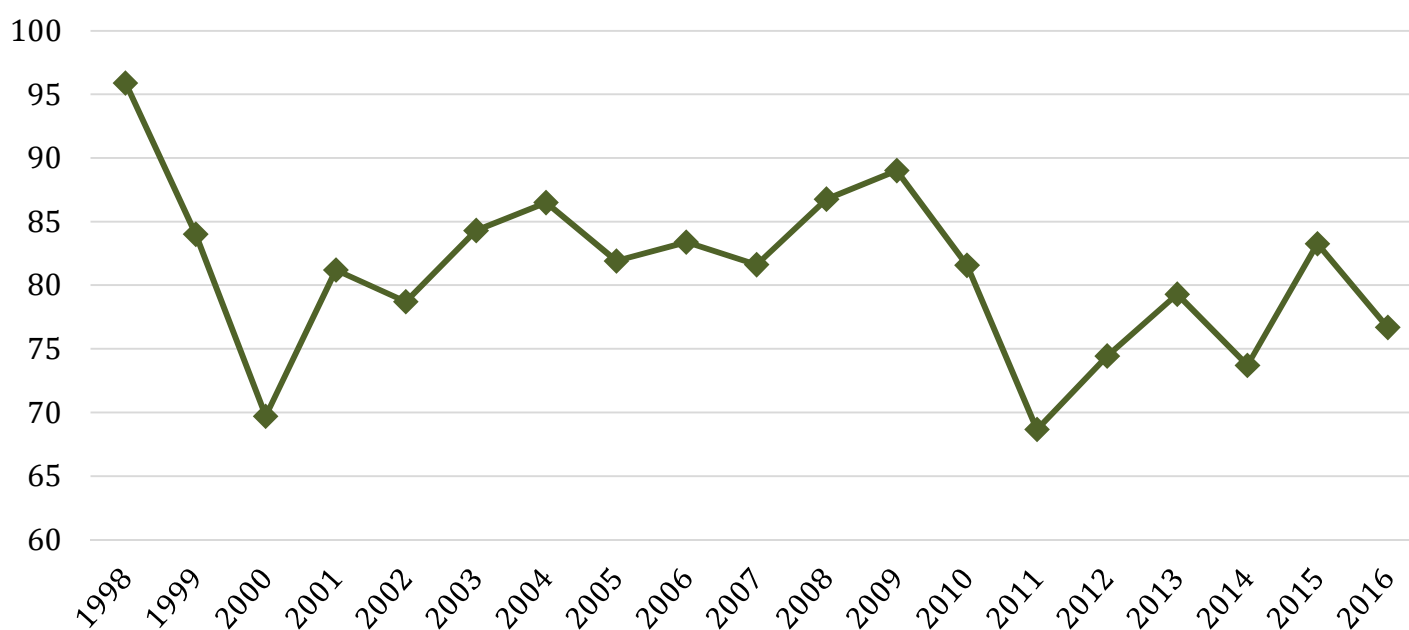


# **Agricultural productivity in South-Central region of Brazil. Values in tonns of sugarcane per hectare.**

*Agricultural productivity by sugarcane cutting stage - South-Central region of Brazil*



*Historical average agricultural productivity, by calendar year - South-Central region of Brazil*



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*Data released in this report has been compiled and analyzed by UNICA, with figures provided by mills and by the following associations of producers from South-Central states:*

- *Ethanol and sugar producers association in the state of Paraná (Alcopar);*
- *Bioenergy producers association of Mato Grosso do Sul (Biosul);*
- *Sugar and ethanol industries association in the state of Minas Gerais (SIAMIG);*
- *Association of ethanol industry of Goiás state (SIFAEG);*
- *Sugar and ethanol industry association of Mato Grosso (SINDALCOOL);*
- *Plants and distilleries society of Espírito Santo state (SUDES);*
- *Ethanol and sugar industry association of Rio de Janeiro (SISERJ).*

*Data regarding weather and agricultural conditions has been provided by the Center for Sugarcane Technology (CTC).*

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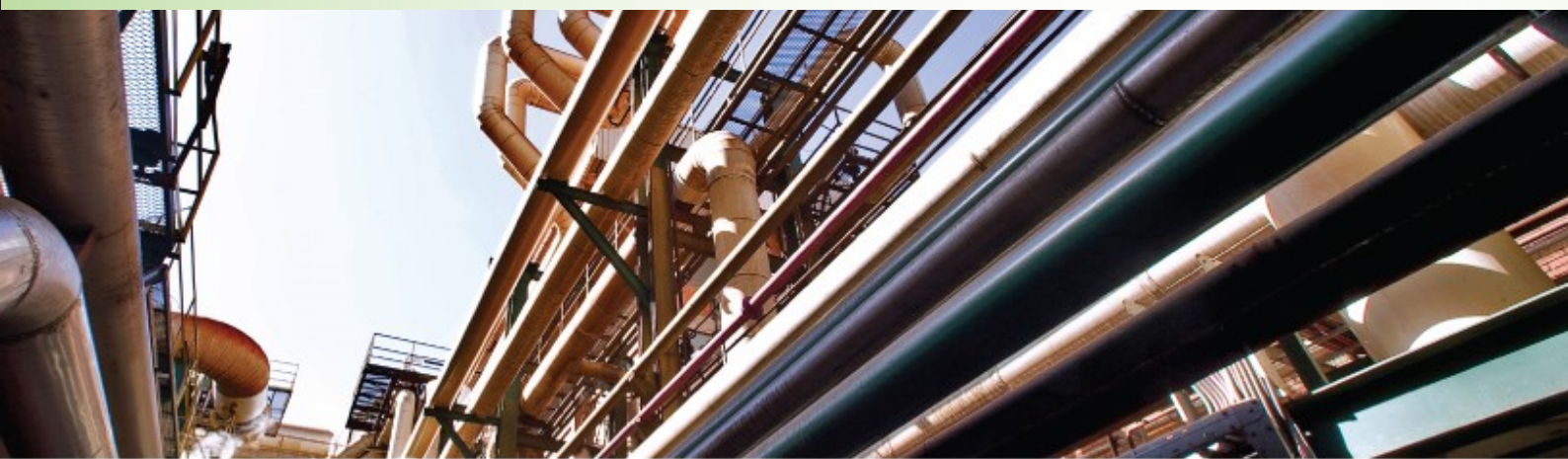
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