Appendix

Appendix 1 – Production of sugar cane and anhydrous and hydrated alcohol in Brazil

Year	Sugarcane production [tons, in millions][1]	Ethyl alcohol production [10^3 m^3][2]	Hydrated alcohol production [10^3 m^3][2]	Anhydrous alcohol production [10^3 m^3][2]
1975	88.92	580	360	220
1976	102.77	642	370	272
1977	120.01	1,388	300	1,088
1978	129.06	2,248	399	1,849
1979	139.27	2,854	527	2,327
1980	146.23	3,676	1,501	2,175
1981	153.78	4,207	2,859	1,348
1982	186.38	5,618	2,091	3,527
1983	216.45	7,951	5,395	2,556
1984	241.39	9,201	7,059	2,142
1985	246.54	11,563	8,419	3,144
1986	238.49	9,983	7,863	2,120
1987	268.58	12,340	10,185	2,155
1988	258.45	11,523	9,837	1,686
1989	252.29	11,809	10,315	1,494
1990	262.60	11,518	10,669	849
1991	260.84	12,862	10,818	2,044
1992	271.43	11,766	9,540	2,226
1993	244.30	11,395	8,869	2,526
1994	292.07	12,513	9,715	2,798
1995	303.56	12,745	9,742	3,003
1996	325.93	14,134	9,701	4,433
1997	337.20	15,494	9,823	5,671
1998	338.97	14,121	8,438	5,683
1999	331.71	12,981	6,807	6,174
2000	325.33	10,700	5,056	5,644
2001	344.28	11,466	4,985	6,481
2002	363.72	12,588	5,548	7,040
2003	389.85	14,470	5,638	8,832
2004	416.26	14,648	6,789	7,859
2005	419.56	16,040	7,832	8,208
2006	457.98	17,764	9,851	7,913

Fonte: [1] IBGE; [2] BEN 2007.

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Appendix 2A – Area planted with sugarcane in Brazil

Year	Brasil		
	Production (1000 t)	Area harvested (1000 ha)	Average yield (t/ha)
1990	262,674	4,273	61,5
1991	260,888	4,211	62,0
1992	271,475	4,203	64,6
1993	244,531	3,864	63,3
1994	292,102	4,345	67,2
1995	303,699	4,559	66,6
1996	317,106	4,750	66,8
1997	331,613	4,814	68,9
1998	345,255	4,986	69,2
1999	333,848	4,899	68,1
2000	326,121	4,805	67,9
2001	344,293	4,958	69,4
2002	364,389	5,100	71,4
2003	396,012	5,371	73,7
2004	415,206	5,632	73,7
2005[1]	455,272	6,172	73,8

Appendix 2B – Area planted with sugarcane in principal producing states

Ano	Leading Producing States									
	São Paulo		Paraná		Alagoas		Minas Gerais		Pernambuco	
	Production	Área harvested	Produção	Área colhida	Produção	Área colhida	Produção	Área colhida	Produção	Área colhida
1990	137,835	1,812	11,736	159	26,151	559	17,533	298	22,818	467
1991	136,200	1,852	12,219	172	22,214	484	17,583	276	23,505	467
1992	145,500	1,890	13,571	186	22,669	448	17,354	272	25,199	488
1993	148,647	1,896	13,694	190	12,922	323	15,743	261	14,347	363
1994	174,100	2,173	15,946	216	21,740	439	16,212	262	19,259	400
1995	174,960	2,259	20,430	256	21,573	450	16,726	268	20,665	418
1996	192,320	2,493	23,468	285	20,754	432	13,331	247	18,784	401
1997	194,025	2,446	24,564	300	24,850	450	16,262	279	20,765	421
1998	199,783	2,565	26,642	310	28,524	461	16,918	279	19,622	402
1999	197,144	2,555	27,106	338	26,860	451	17,557	280	12,253	323
2000	189,040	2,485	23,192	327	27,798	448	18,706	291	15,167	304
2001	198,932	2,567	27,424	338	28,693	456	18,975	294	15,977	339
2002	212,707	2,661	28,083	359	25,171	438	18,231	278	17,626	348
2003	227,981	2,818	31,926	374	27,221	416	20,787	303	18,522	359
2004	239,528	2,952	32,643	400	26,284	423	24,332	335	19,015	364
2005[1]	266,071	3,285	34,882	437	23,991	397	31,587	424	18,832	370

Source: Production, area and average yield: IBGE – Agricultural Production by City (PAM – 1990 - 2004) and Systematic Reporting of Agricultural Production (LSPA –July 2006). Prepared by: Secretariat for Agricultural Policy – Ministry of Agriculture, Livestock and Supply (Mapa). Annual Report, 2005.
Note: [1] Estimate.

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Appendix 3 – Price paid for ethanol to the producer in São Paulo

Year (semester)	Anhydrous alcohol (R$/liter)	Hydrated alcohol (R$/liter)
2000 (2)	0.668678	0.749999
2001 (1)	0.629092	0.716373
2001 (2)	0.623336	0.706785
2002 (1)	0.584636	0.503122
2002 (2)	0.6228	0.543285
2003 (1)	0.913213	0.783303
2003 (2)	0.653644	0.559895
2004 (1)	0.521573	0.454482
2004 (2)	0.832212	0.713184
2005 (1)	0.803179	0.70349
2005 (2)	0.883684	0.774705
2006 (1)	1.070215	0.998262
2006 (2)	0.908019	0.795583
2007 (1)	0.850049	0.763721
2007 (2)	0.719413	0.634066

Source: Center for Advanced Studies in Applied Economics (Cepea). <http://www.cepea.esalq.usp.br/alcool/>.
Note: In June 2003, Cepea/Esalq Alcohol Indicators began to use CDI (Interbank Certificate of Deposit) to discount payments over time and no longer used the NPR. Since the week of May 6-10, 2002, weekly indicators for anhydrous alcohol and hydrates alcohol fuels began to be calculated without any tax or tariff (ICM, PIS/Cofins or Cide).

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