

# Detailed Tables

## Chapter 10

**Detailed Table 10.1**

Gross domestic product (GDP) at market prices and São Paulo State's share of gross value added in Brazil at basic prices by economic sector – São Paulo State, 2002-200

10-4

**Detailed Table 10.2**

Share of gross value added in Brazil by selected state and economic sector – Brazil, 2003-2006

10-5

**Detailed Table 10.3**

Total value added by economic sector and GDP for selected countries and country groups – 1995-2005

10-6

**Detailed Table 10.4**

Exports, imports and agribusiness balance – Brazil, 1997-2007

10-8

**Detailed Table 10.5**

S&T expenditure by Fundo de Defesa da Citricultura (Fundecitrus) – 1999-2007

10-24

**Detailed Table 10.6**

Public expenditure on S&T in agriculture by type of funding and institution – Brazil, 2001-2005

10-25

**Detailed Table 10.7**

Consolidated budget of 17 SAROs by source of funding – Brazil, 2001-2005

10-26

**Detailed Table 10.8**

S&T expenditure under federal government partnership agreements via MCT by type of partner – Brazil, 1996-2006

10-27

**Detailed Table 10.9**

Public expenditure on S&T in agriculture by type of funding and institution – São Paulo State, 1996-2006

10-28

**Detailed Table 10.10**

Embrapa expenditure on agricultural S&T – Brazil & São Paulo State, 1996-2006

10-29

**Detailed Table 10.11**

Budget of Agência Paulista de Tecnologia dos Agronegócios (APTA) – São Paulo State, 1996-2006

10-30

**Detailed Table 10.12**

Agricultural S&T expenditure under federal government partnership agreements via MCT by type of partner – São Paulo State, 1996-2006

10-31

**Detailed Table 10.13**

FAPESP disbursements for agrarian sciences by funding group – São Paulo State, 1996-2006

10-32

**Detailed Table 10.14**

FAPESP disbursements for agrarian sciences by funding line – São Paulo State, 1996-2006

10-33

**Detailed Table 10.15**

FAPESP disbursements for agrarian sciences by discipline and funding group – São Paulo State, 1996-2006 (cumulative)

10-34

**Detailed Table 10.16**

FAPESP disbursements for agrarian sciences by discipline and funding line – São Paulo State, 1996-2006 (cumulative)

10-35

**Detailed Table 10.17A**

FAPESP disbursements for agrarian sciences by discipline and funding line – São Paulo State, 1996-2006 (cumulative)

10-36

**Detailed Table 10.17B**

FAPESP disbursements for agrarian sciences and subareas of agronomy by funding lines – São Paulo State, 1996-2006 (cumulative)

10-37

<b>Detailed Table 10.17C</b>	FAPESP disbursements for agrarian sciences and veterinary medicine by subarea and funding line – São Paulo State, 1996-2006 (cumulative)	10-38
<b>Detailed Table 10.17D</b>	FAPESP disbursements for agrarian sciences and food science and technology by subarea and funding line – São Paulo State, 1996-2006 (cumulative)	10-39
<b>Detailed Table 10.17E</b>	FAPESP disbursements for agrarian sciences and animal science by subarea and funding line – São Paulo State, 1996-2006 (cumulative)	10-40
<b>Detailed Table 10.18</b>	CNPq and CAPES disbursements for master's, doctoral, development (short-term) and post-doctoral scholarships in agrarian sciences and total - Brazil & São Paulo State, 2001-2005	10-41
<b>Detailed Table 10.19</b>	Percentage of budgets of public universities located in São Paulo transferred to schools of agrarian sciences – São Paulo State, 1996-2006	10-42
<b>Detailed Table 10.20</b>	Budgets of public universities and schools of agrarian sciences – São Paulo State, 1996-2006	10-43
<b>Detailed Table 10.21</b>	Budgets of schools of agrarian sciences at public universities, estimated active faculty pay and estimated share of faculty pay allocated to research – São Paulo State, 1996-2006	10-44
<b>Detailed Table 10.22</b>	Faculty of schools of agrarian sciences at public universities – São Paulo State, 1996-2006	10-45
<b>Detailed Table 10.23</b>	Active faculty of schools of agrarian sciences at public universities and budget for faculty pay – São Paulo State, 1996-2006	10-46
<b>Detailed Table 10.24</b>	FINEP loans to firms in all sectors and agricultural sector – Brazil & São Paulo State, 1996-2006	10-47
<b>Detailed Table 10.25</b>	FINEP loans to agribusiness firms by state and CNAE class – Brazil, 1996-2006	10-48
<b>Detailed Table 10.26</b>	Technical courses at agricultural colleges by type of course – São Paulo State, 2006	10-52
<b>Detailed Table 10.27</b>	Undergraduate courses in agrarian sciences and related areas by administrative region – São Paulo State, 2006	10-53
<b>Detailed Table 10.28</b>	Undergraduate courses in agrarian sciences and related areas by municipality – São Paulo State, 2006	10-54
<b>Detailed Table 10.29</b>	Undergraduate courses in agrarian sciences by higher education institution (HEI) and discipline – São Paulo State, 2006	10-56
<b>Detailed Table 10.30</b>	Post-graduate courses in agrarian sciences and related areas by administrative region – São Paulo State, 2006	10-59
<b>Detailed Table 10.31</b>	Estimated number of people employed in agriculture – São Paulo State, 1996-2006	10-60
<b>Detailed Table 10.32</b>	Main crop areas, production volumes and yields – São Paulo State, 1996-2006	10-62

<b>Detailed Table 10.33</b>	USPTO agricultural patents granted to and applications filed by Brazilian institutions and individuals by applicant – Brazil, 1996-2006	10-64
<b>Detailed Table 10.34</b>	INPI agricultural patent applications, patents granted, dismissals and other decisions – Brazil, 1996-2006	10-66
<b>Detailed Table 10.35</b>	INPI agricultural patents and applications by type – Brazil, 1996-2006	10-67
<b>Detailed Table 10.36</b>	INPI agricultural patent applications and patents granted by origin of applicant – Brazil, 1996-2006	10-68
<b>Detailed Table 10.37</b>	INPI agricultural resident patents by state – Brazil, 1996-2006	10-69
<b>Detailed Table 10.38</b>	Protected plant varieties by first-named applicant – Brazil, 1998-2007	10-70
<b>Detailed Table 10.39</b>	Origin of owners of rights to protected plant varieties – Brazil, 1998-2007	10-74
<b>Detailed Table 10.40</b>	Protected plant varieties by crop – São Paulo State, 1998-2007	10-75
<b>Detailed Table 10.41</b>	Owners of rights to protected plant varieties by crop – São Paulo State, 1998-2007	10-76
<b>Detailed Table 10.42</b>	Protected plant varieties by state and legal representative – Brazil, 1998-2007	10-78
<b>Detailed Table 10.43</b>	Publications in agrarian sciences indexed by <i>Web of Science</i> – São Paulo State, 1996-2006	10-79
<b>Detailed Table 10.44</b>	São Paulo researcher co-authorship of articles in agrarian sciences indexed by <i>Web of Science</i> with foreign researchers by main country – São Paulo State, 1996-2006	10-80
<b>Detailed Table 10.45</b>	São Paulo researcher articles indexed by <i>Web of Science</i> and published domestically or internationally by Qualis journal classification – São Paulo State, 1996-2006	10-81
<b>Detailed Table 10.46</b>	São Paulo research groups, researchers, students, technicians and lines of research in agrarian sciences as share of national total for same knowledge area – São Paulo State, 2000-2006	10-82
<b>Detailed Table 10.47</b>	São Paulo research groups, researchers, students, technicians and lines of research in agrarian sciences by group's predominant knowledge subarea – São Paulo State, 2000-2006	10-83
<b>Detailed Table 10.48</b>	Researchers and other staff at state agricultural research organizations (SAROs) and Embrapa by category – Brazil, 2001-2003	10-84
<b>Detailed Table 10.49</b>	Embrapa and APTA staff in active service by category – São Paulo State, 1996-2003	10-85
<b>Detailed Table 10.50</b>	APTA staff in active service by category – São Paulo State, 1996-2007	10-86

**Detailed Table 10.1**  
**Gross domestic product (GDP) at market prices and São Paulo State's share of gross value added in Brazil at basic prices by economic sector – São Paulo State, 2002-2006**

Economic sector	GDP at market prices and São Paulo State's share of gross value added in Brazil at basic prices (%)				
	2002	2003	2004	2005	2006
<b>GDP at market prices</b>	34.6	34.1	33.1	33.9	33.9
<b>Gross value added at basic prices</b>	33.7	33.3	32.3	33.2	33.2
Agriculture, silviculture, forestry	16.9	13.4	11.9	13.4	16.5
Livestock farming, fishing	5.7	6.0	5.8	5.3	4.7
Mining	2.5	1.8	2.1	1.5	1.3
Manufacturing	43.5	44.1	42.7	44.0	43.3
Production & distribution of electricity, gas, water, sewerage, street cleaning	32.6	31.8	31.2	31.9	29.6
Construction	32.6	30.8	28.6	26.9	27.7
Commerce, maintenance/repair services	34.0	32.0	31.7	33.4	32.8
Accommodation, food services	36.3	38.5	35.0	30.8	37.1
Transport, storage, postal services	35.7	35.7	34.6	36.3	35.7
Information services	41.7	40.5	42.4	42.3	42.6
Financial intermediation, insurance, private pensions	47.7	50.6	48.6	51.0	50.4
Real estate, renting activities	34.7	34.2	33.6	33.8	34.3
Business services	47.2	45.6	41.8	45.3	47.5
Household & associative services	36.1	35.6	35.0	36.1	36.9
Public administration, healthcare, education	19.2	19.3	18.7	18.7	18.5
Private healthcare, education	41.7	41.4	41.5	41.6	41.9
Domestic services	31.2	31.4	31.0	32.2	32.3

**Source:** Fundação Seade; IBGE.

**Detailed Table 10.2**

Share of gross value added in Brazil by selected state and economic sector – Brazil, 2003-2006

State/economic sector	Share of gross value added in Brazil (%)				
	2003	2004	2005	2006	Média
<b>São Paulo (SP)</b>					
Agriculture, silviculture, forestry	13.4	11.9	13.4	16.5	13.8
Livestock farming, fishing	6.0	5.8	5.3	4.7	5.5
<b>Minas Gerais (MG)</b>					
Agriculture, silviculture, forestry	11.1	12.8	14.6	13.9	13.1
Livestock farming, fishing	15.7	14.7	15.3	14.5	15.1
<b>Bahia (BA)</b>					
Agriculture, silviculture, forestry	6.1	7.1	7.2	6.3	6.7
Livestock farming, fishing	5.1	4.7	4.8	4.9	4.9
<b>Goiás (GO)</b>					
Agriculture, silviculture, forestry	5.6	5.8	5.0	3.7	5.0
Livestock farming, fishing	8.1	7.7	7.1	6.8	7.4
<b>Mato Grosso (MT)</b>					
Agriculture, silviculture, forestry	8.0	11.9	12.4	7.5	10.0
Livestock farming, fishing	5.5	5.7	5.8	6.1	5.8
<b>Rio Grande do Sul (RS)</b>					
Agriculture, silviculture, forestry	13.8	11.2	7.2	11.7	11.0
Livestock farming, fishing	10.3	10.6	10.7	10.5	10.5

Source: IBGE (Diretoria de Pesquisas. Coordenação de Contas Nacionais. Contas Regionais do Brasil 2003-2006.)



**Detailed Table 10.3 (continued)**

Total value added by economic sector and GDP for selected countries and country groups – 1995–2005

Year	Total value added by economic sector						GDP (US\$ million at current prices)		
	Total		Agriculture		Industry				
	US\$ million (at current prices)	%	US\$ million (at current prices)	%	US\$ million (at current prices)	%			
<b>Brazil</b>									
1995	662,973	100.0	56,113	8.5	228,500	34.5	378,360	57.1	704,169
1996	728,311	100.0	57,518	7.9	239,958	32.9	430,835	59.2	774,935
1997	760,788	100.0	57,615	7.6	254,882	33.5	448,290	58.9	807,746
1998	743,457	100.0	58,207	7.8	244,841	32.9	440,409	59.2	787,742
1999	502,375	100.0	39,596	7.9	170,865	34.0	291,915	58.1	536,633
2000	558,146	100.0	42,761	7.7	201,336	36.1	314,049	56.3	601,732
2001	474,368	100.0	37,870	8.0	170,154	35.9	266,344	56.1	508,433
2002	436,342	100.0	35,917	8.2	157,252	36.0	243,172	55.7	460,838
2003	477,810	100.0	44,910	9.4	175,780	36.8	257,121	53.8	505,732
2004	565,713	100.0	54,577	9.6	210,502	37.2	300,635	53.1	603,948
2005	753,667	100.0	68,511	9.1	276,424	36.7	408,732	54.2	799,413
<b>Argentina</b>									
1995	242,395	100.0	13,812	5.7	,67,882	28.0	160,700	66.3	258,096
1996	254,694	100.0	15,275	6.0	72,396	28.4	167,023	65.6	272,242
1997	273,229	100.0	15,301	5.6	79,636	29.1	178,292	65.3	293,005
1998	279,670	100.0	15,711	5.6	79,895	28.6	184,064	65.8	299,098
1999	267,040	100.0	12,645	4.7	74,302	27.8	180,092	67.4	283,665
2000	267,683	100.0	13,307	5.0	73,904	27.6	180,472	67.4	284,346
2001	255,103	100.0	12,282	4.8	67,862	26.6	174,959	68.6	268,831
2002	97,492	100.0	10,415	10.7	31,182	32.0	55,895	57.3	102,042
2003	121,827	100.0	13,385	11.0	42,307	34.7	66,135	54.3	129,596
2004	141,634	100.0	14,760	10.4	50,430	35.6	76,443	54.0	153,129
2005	169,839	100.0	,5,983	9.4	60,509	35.6	93,347	55.0	183,310
<b>USA</b>									
1995	7,361,392	100.0	113,876	1.5	1,902,788	25.8	5,344,728	72.6	7,387,641
1996	7,769,352	100.0	132,966	1.7	1,975,537	25.4	5,660,849	72.9	7,810,487
1997	8,281,526	100.0	130,437	1.6	2,068,421	25.0	6,082,668	73.4	8,304,986
1998	8,777,312	100.0	128,336	1.5	2,096,774	23.9	6,552,202	74.6	8,752,441
1999	9,310,718	100.0	127,729	1.4	2,196,683	23.6	6,986,306	75.0	9,277,902
2000	9,870,891	100.0	136,048	1.4	2,321,887	23.5	7,412,956	75.1	9,834,008
2001	10,189,575	100.0	140,828	1.4	2,284,450	22.4	7,764,297	76.2	10,147,206
2002	10,491,223	100.0	95,129	0.9	2,302,551	21.9	8,093,543	77.1	10,491,962
2003	10,996,521	100.0	114,061	1.0	2,390,683	21.7	8,491,777	77.2	10,997,447
2004	11,759,937	100.0	141,330	1.2	2,538,977	21.6	9,079,631	77.2	11,761,233
2005	12,542,011	100.0	119,166	1.0	2,576,561	20.5	9,846,284	78.5	12,542,682

Source: FAOSTAT.

**Detailed Table 10.4**  
**Exports, imports and agribusiness balance – Brazil, 1997-2007**

Products	1997			1998		
	Exports	Imports	Balance	Exports	Imports	Balance
Brazil total	52,994,000,000	59,749,000,000	-6,755,000,000	51,140,000,000	57,746,000,000	-6,606,000,000
Brazil agribusiness	23,366,542,184	8,193,102,619	15,173,439,565	21,546,135,631	8,040,939,003	13,505,196,628
Agribusiness/Total (%)	44.1	13.7	-	42.1	13.9	-
Live animals	6,870,743	77,824,098	-70,953,355	7,185,876	64,184,308	-56,998,432
Live animals	6,870,743	77,824,098	-70,953,355	7,185,876	64,184,308	-56,998,432
Beverages	123,175,287	225,737,181	-102,561,894	137,728,534	210,899,852	-73,171,318
Alcoholic beverages	69,656,414	189,591,050	-119,934,636	44,217,555	148,229,666	-104,012,111
Non-alcoholic beverages	20,974,644	8,129,700	12,844,944	21,486,773	6,377,516	15,109,257
Preparations for making beverages	32,544,229	28,016,431	4,527,798	72,024,206	56,292,670	15,731,536
Cocoa & cocoa products	185,547,867	107,985,285	77,562,582	206,197,588	99,564,417	106,633,171
Whole or broken cocoa beans	7,865,247	20,257,802	-12,392,555	9,272,940	18,121,292	-8,848,352
Cocoa products	177,682,620	87,727,483	89,955,137	196,924,648	81,443,125	115,481,523
Coffee	3,133,971,896	3,240,128	3,130,731,768	2,606,346,195	1,211,488	2,605,134,707
Green & roasted coffee bean	2,748,974,501	1,121,483	2,747,853,018	2,335,133,090	886,674	2,334,246,416
Coffee extract & coffee substitute	384,997,395	2,118,645	382,878,750	271,213,105	324,814	270,888,291
Meat	1,598,437,589	272,985,890	1,325,451,699	1,625,162,913	237,769,446	1,387,393,467
Beef	462,054,145	217,441,530	244,612,615	615,696,818	177,121,493	438,575,325
Chicken	883,629,687	1,855,871	881,773,816	752,678,856	1,783,001	750,895,855
Mutton & goat meat	268,238	12,558,006	-12,289,768	164,459	17,383,778	-17,219,319
Turkey	42,649,471	448	42,649,023	36,408,009	16,991	36,391,018
Pork	166,076,108	36,261,790	129,814,318	171,498,349	35,995,082	135,503,267
Horse meat	17,511,129	-	17,511,129	20,612,290	-	20,612,290
Other meats, variety meats & preparations	26,248,811	4,868,245	21,380,566	28,104,132	5,469,101	22,635,031
Cereals, flour & preparations	91,392,753	1,564,522,000	-1,473,129,247	51,659,058	1,940,854,934	-1,889,195,876
Cereals	43,915,138	1,113,584,236	-1,069,669,098	4,608,726	1,566,657,215	-1,562,048,489
Cereal preparations	30,155,052	104,546,082	-74,391,030	30,981,278	99,270,225	-68,288,947
Milling industry products & by-products	17,322,563	346,391,682	-329,069,119	16,069,054	274,927,494	-258,858,440
Tea, mate & spices	106,824,075	25,407,485	81,416,590	126,761,808	26,176,945	100,584,863
Tea, mate & preparations of tea or mate	41,201,059	11,559,239	29,641,820	40,662,138	8,721,144	31,940,994
Spices	65,623,016	13,848,246	51,774,770	86,099,670	17,455,801	68,643,869
Soya complex	5,563,786,330	408,705,964	5,155,080,366	4,732,660,098	365,387,230	4,367,272,868
Soya meal	2,680,946,517	77,670,413	2,603,276,104	1,750,156,645	28,587,471	1,721,569,174
Soybean oil	596,681,328	68,760,500	527,920,828	832,837,112	134,844,837	697,992,275
Soybeans	2,286,158,485	262,275,051	2,023,883,434	2,149,666,341	201,954,922	1,947,711,419
Sugar & alcohol complex	1,826,582,868	179,807,370	1,646,775,498	1,978,953,905	4,333,851	1,974,620,054
Sugar	1,772,454,113	225,552	1,772,228,561	1,943,433,650	50,327	1,943,383,323



## ► DETAILED TABLE 10.4 [ CONTINUED ]

Products	2002		2003		2004	
	Balance	Exports	Imports	Balance	Exports	Imports
<b>Brazil total</b>	13,120,000,000	73,084,000,000	48,291,000,000	24,793,000,000	96,475,000,000	62,779,000,000
<b>Brazil agribusiness</b>	20,376,879,674	30,627,042,928	4,746,266,196	25,880,776,732	39,002,857,925	4,830,717,334
<b>Agribusiness/Total (%)</b>	-	41.9	9.8	-	40.4	7.7
<b>Live animals</b>	-24,437,778	11,307,926	8,924,150	2,383,776	19,129,107	5,085,217
Live animals	-24,437,778	11,307,926	8,924,150	2,383,776	19,129,107	5,085,217
<b>Beverages</b>	-7,801,038	147,862,213	133,815,261	14,046,952	168,817,780	163,994,028
Alcoholic beverages	-87,801,625	31,868,119	116,580,011	-84,711,892	36,083,241	143,594,742
Non-alcoholic beverages	-3,456,479	14,701,727	7,379,677	7,322,050	14,713,479	9,539,400
Preparations for making beverages	83,457,066	101,292,367	9,855,573	91,436,794	118,021,060	10,859,886
<b>Cocoa &amp; cocoa products</b>	83,146,244	321,037,019	139,992,508	181,044,511	319,937,044	85,929,828
Whole or broken cocoa beans	-78,676,041	3,073,701	115,544,873	-112,471,172	1,874,915	59,111,267
Cocoa products	161,822,285	317,963,318	24,447,635	293,515,683	318,062,129	26,818,561
<b>Coffee</b>	1,382,607,453	1,546,405,440	1,301,050	1,545,104,390	2,057,860,704	1,521,161
Green & roasted coffee beans	1,199,654,022	1,315,582,739	906,525	1,314,676,214	1,758,432,048	1,091,947
Coffee extract & coffee substitute	182,953,431	230,822,701	394,525	230,428,176	299,428,656	429,214
<b>Meat</b>	3,089,345,190	4,188,480,108	97,785,387	4,090,694,721	6,265,506,316	118,879,170
Beef	1,070,403,042	1,589,679,391	66,950,536	1,522,728,855	2,525,404,759	79,376,020
Chicken	1,392,009,064	1,798,952,693	445,105	1,798,507,588	2,594,882,933	283,700
Mutton & goat meat	-7,130,860	105,659	7,597,582	-7,491,923	57,072	6,356,994
Turkey	104,789,047	154,227,194	14,103	154,213,091	216,573,789	971
Pork	463,812,433	551,107,919	21,950,686	529,157,233	774,749,439	31,974,313
Horse meat	21,893,632	24,279,034	-	24,279,034	31,360,720	-
Other meats, variety meats & preparations	43,568,832	70,128,218	827,375	69,300,843	122,477,604	887,172
<b>Cereals, flour &amp; preparations</b>	-964,582,140	482,190,746	1,673,055,810	-1,190,865,064	910,648,610	1,322,152,202
Cereals	-774,836,082	411,469,482	1,417,406,362	-1,005,936,880	811,031,640	1,028,312,158
Cereal preparations	-8,319,361	53,802,238	81,052,382	-27,250,144	83,262,425	82,523,915
Milling industry products & by-products	-181,426,697	16,919,026	174,597,066	-157,678,040	16,354,545	211,316,129
<b>Tea, mate &amp; spices</b>	109,413,914	108,350,573	20,540,368	87,810,205	133,292,530	30,608,864
Tea, mate & preparations of tea or mate	22,678,163	22,079,746	2,235,217	19,844,529	23,732,973	2,989,895
Spices	86,735,751	86,270,827	18,305,151	67,965,676	109,559,557	27,618,969
<b>Soya complex</b>	5,720,370,600	8,122,102,071	304,728,614	7,817,373,457	10,041,488,282	125,948,753
Soya meal	2,140,516,594	2,602,520,537	55,313,938	2,547,206,599	3,270,961,467	37,072,541
Soybean oil	725,347,278	1,232,549,819	18,222,477	1,214,327,342	1,382,094,464	15,944,142
Soybeans	2,854,506,728	4,287,031,715	231,192,199	4,055,839,516	5,388,432,351	72,932,070
<b>Sugar &amp; alcohol complex</b>	2,261,898,829	2,297,964,502	1,475,621	2,296,488,881	3,137,967,628	410,625
Sugar	2,093,613,049	2,140,002,217	10,365	2,139,991,852	2,640,227,402	93,823



**Detailed Table 10.4**  
**Exports, imports and agribusiness balance – Brazil, 1997-2007**

Products	1997			1998		
	Exports	Imports	Balance	Exports	Imports	Balance
Alcohol	54,128,755	179,581,818	-125,453,063	35,520,255	4,283,524	31,236,731
Hides, skins, furskins, leather & leather products	2,159,193,695	231,377,475	1,927,816,220	1,894,715,199	185,099,075	1,709,616,124
Bovine hides & skins	334,308,837	123,309,031	210,999,806	360,461,687	112,326,871	248,134,816
Other animal hides & skins	405,749,436	45,952,063	359,797,373	310,727,224	33,649,499	277,077,725
Leather products & dressed furskins	1,419,135,422	62,116,381	1,357,019,041	1,223,526,288	39,122,705	1,184,403,583
Other animal products	136,237,537	85,568,691	50,668,846	149,367,402	88,597,199	60,770,203
Albumin, gelatin & other protein substances	67,759,015	39,661,218	28,097,797	66,359,525	34,386,792	31,972,733
Animal fats & oils	6,918,706	12,657,116	-5,738,410	2,836,481	21,288,976	-18,452,495
Bones, ossein, shells, meal of meat & offal	8,145,853	3,450,606	4,695,247	20,636,942	2,318,470	18,318,472
Other animal products	24,506,857	5,024,492	19,482,365	23,466,471	3,610,301	19,856,170
Eggs & egg yolks	9,476,275	6,492,930	2,983,345	17,317,862	5,612,585	11,705,277
Animal feathers, skins, bristles & hair	12,279,720	4,993,645	7,286,075	12,341,772	4,766,634	7,575,138
Animal products used in preparation of pharmaceutical products	6,792,525	2,307,131	4,485,394	6,169,858	2,766,716	3,403,142
Semen & embryos	358,586	10,981,553	-10,622,967	238,491	13,846,725	-13,608,234
Other vegetable products	467,852,046	212,163,888	255,688,158	292,647,835	227,574,630	65,073,205
Other sugars	12,011,397	11,064,023	947,374	12,445,597	11,447,765	997,832
Enzymes & enzyme concentrates	4,574,501	38,797,698	-34,223,197	4,584,956	35,076,084	-30,491,128
Dyeing & tanning extracts; tannins & their derivatives; dyeing materials of vegetable origin	38,802,483	6,715,544	32,086,939	29,362,553	7,031,696	22,330,857
Gums, resins & other vegetable saps/extracts	36,153,259	47,173,451	-11,020,192	38,208,420	44,613,129	-6,404,709
Essential oils	67,501,055	33,043,704	34,457,351	44,639,958	35,259,196	9,380,762
Other vegetable products	85,069,875	17,362,429	67,707,446	72,543,371	32,325,523	40,217,848
Plants & parts of plants for industry, medicine or perfumery	6,346,323	14,911,698	-8,565,375	7,382,465	17,413,367	-10,030,902
Chemical substances of vegetable origin	24,233,357	8,708,795	15,524,562	22,676,784	8,709,231	13,967,553
Seeds	193,159,796	34,386,546	158,773,250	60,803,731	35,698,639	25,105,092
Textile fibers & textiles	873,143,084	1,122,290,335	-249,147,251	753,371,340	784,890,070	-31,518,730
Cotton & cotton textiles	640,132,440	985,323,062	-345,190,622	575,306,018	696,717,989	-121,411,971
Other fibers & textiles	5,383,736	19,365,938	-13,982,202	1,993,947	11,222,860	-9,228,913
Wool or fine animal hair; wool or fine animal hair textiles	47,869,679	89,970,922	-42,101,243	33,722,574	61,019,711	-27,297,137
Flax & flax products	11,567,089	18,277,325	-6,710,236	8,260,693	8,814,574	-553,881



## ► DETAILED TABLE 10.4 [ CONTINUED ]

Products	2002		2003		2004	
	Balance	Exports	Imports	Balance	Exports	Imports
Alcohol	168,285,780	157,962,285	1,465,256	156,497,029	497,740,226	316,802
<b>Hides, skins, furskins, leather &amp; leather products</b>	<b>2,175,621,850</b>	<b>2,451,677,082</b>	<b>151,499,723</b>	<b>2,300,177,359</b>	<b>2,881,970,344</b>	<b>182,260,976</b>
Bovine hides & skins	826,175,832	1,036,098,958	110,482,513	925,616,445	1,241,190,420	112,709,488
Other animal hides & skins	8,487,882	25,903,936	23,278,669	2,625,267	51,955,834	49,882,249
Leather products & dressed furskins	1,340,958,136	1,389,674,188	17,738,541	1,371,935,647	1,588,824,090	19,669,239
<b>Other animal products</b>	<b>84,378,937</b>	<b>163,437,141</b>	<b>67,052,583</b>	<b>96,384,558</b>	<b>220,047,674</b>	<b>78,901,805</b>
Albumin, gelatin & other protein substances	58,717,885	89,140,586	21,989,696	67,150,890	107,548,838	23,052,657
Animal fats & oils	-1,105,613	4,432,035	6,900,041	-2,468,006	22,383,310	8,891,545
Bones, ossein, shells, meal of meat & offal	6,454,395	17,336,401	8,550,730	8,785,671	22,561,178	7,333,963
Other animal products	17,103,403	23,770,415	5,275,512	18,494,903	28,152,459	7,051,789
Eggs & egg yolks	743,804	11,019,753	7,359,280	3,660,473	19,433,219	11,946,412
Animal feathers, skins, bristles & hair	8,518,034	11,399,422	2,963,153	8,436,269	11,242,175	3,579,941
Animal products used in preparation of pharmaceutical products	677,111	5,879,578	9,380,516	-3,500,938	8,345,635	10,759,250
Semen & embryos	-6,730,082	458,951	4,633,655	-4,174,704	380,860	6,286,248
<b>Other vegetable products</b>	<b>163,041,776</b>	<b>412,107,450</b>	<b>169,011,794</b>	<b>243,095,656</b>	<b>424,100,289</b>	<b>204,950,262</b>
Other sugars	8,022,287	17,932,088	9,984,947	7,947,141	15,400,638	12,681,429
Enzymes & enzyme concentrates	-12,554,699	9,201,334	22,167,370	-12,966,036	11,690,629	25,315,214
Dyeing & tanning extracts; tannins & their derivatives; dyeing materials of vegetable origin	16,844,065	23,349,115	5,259,147	18,089,968	29,045,255	6,871,447
Gums, resins & other vegetable saps/extracts	-11,039,759	38,632,164	41,974,963	-3,342,799	38,694,097	45,922,680
Essential oils	47,782,399	114,385,026	32,155,814	82,229,212	98,529,017	40,272,131
Other vegetable products	110,603,523	135,336,286	13,753,805	121,582,481	143,400,247	12,362,833
Plants & parts of plants for industry, medicine or perfumery	-7,548,659	6,864,891	14,283,039	-7,418,148	5,530,939	17,502,558
Chemical substances of vegetable origin	12,194,240	27,568,221	6,841,299	20,726,922	24,294,964	9,510,367
Seeds	-1,261,621	38,838,325	22,591,410	16,246,915	57,514,503	34,511,603
<b>Textile fibers &amp; textiles</b>	<b>712,492,948</b>	<b>1,161,844,357</b>	<b>212,343,445</b>	<b>949,500,912</b>	<b>1,440,278,782</b>	<b>279,227,020</b>
Cotton & cotton textiles	637,827,367	1,037,598,543	180,866,357	856,732,186	1,303,547,792	238,055,226
Other fibers & textiles	1,285,673	12,826,670	9,332,127	3,494,543	12,660,052	9,905,659
Wool or fine animal hair; wool or fine animal hair textiles	5,662,320	27,795,835	16,092,794	11,703,041	22,728,098	23,196,620
Flax & flax products	717,565	3,083,313	2,115,152	968,161	3,161,594	2,748,188

DETAILED TABLE 10.4 [ CONTINUES ON NEXT PAGE ]

## Exports, imports and agribusiness balance (US\$ FOB (1))

Balance	2005		2006		2007	
	Exports	Imports	Balance	Exports	Imports	Balance
497,423,424	765,529,199	294,781	765,234,418	1,604,730,220	248,684	1,604,481,536
2,699,709,368	3,053,643,696	168,920,958	2,884,722,738	3,470,529,519	210,832,902	3,259,696,617
1,128,480,932	1,320,783,921	94,345,406	1,226,438,515	1,810,021,456	113,367,065	1,696,654,391
2,073,585	80,345,072	34,485,903	45,859,169	68,330,391	30,836,247	37,494,144
1,569,154,851	1,652,514,703	40,089,649	1,612,425,054	1,592,177,672	66,629,590	1,525,548,082
141,145,869	275,327,976	84,342,688	190,985,288	315,112,296	83,497,357	231,614,939
84,496,181	132,826,843	22,360,909	110,465,934	167,398,157	21,512,355	145,885,802
13,491,765	20,175,631	7,761,514	12,414,117	9,734,535	8,475,570	1,258,965
15,227,215	26,721,224	7,119,368	19,601,856	42,964,590	5,823,236	37,141,354
21,100,670	39,875,757	9,128,041	30,747,716	35,124,210	11,462,828	23,661,382
7,486,807	29,789,999	16,359,254	13,430,745	27,558,206	16,080,971	11,477,235
7,662,234	15,065,287	6,383,010	8,682,277	18,706,618	5,387,278	13,319,340
-2,413,615	10,420,781	6,869,415	3,551,366	13,087,229	4,928,626	8,158,603
-5,905,388	452,454	8,361,177	-7,908,723	538,751	9,826,493	-9,287,742
219,150,027	444,400,300	226,243,920	218,156,380	562,432,771	261,769,526	300,663,245
2,719,209	14,452,829	15,256,496	-803,667	16,375,326	17,934,790	-1,559,464
-13,624,585	13,571,656	30,759,487	-17,187,831	28,261,023	36,013,882	-7,752,859
22,173,808	32,300,696	8,974,174	23,326,522	37,608,818	8,592,029	29,016,789
-7,228,583	46,015,444	53,636,366	-7,620,922	46,321,770	62,022,811	-15,701,041
58,256,886	105,565,930	40,033,602	65,532,328	130,340,531	50,896,317	79,444,214
131,037,414	136,900,364	14,722,909	122,177,455	157,255,506	17,578,090	139,677,416
-11,971,619	5,141,895	17,062,452	-11,920,557	6,649,172	20,167,337	-13,518,165
14,784,597	30,141,833	8,951,036	21,190,797	56,839,322	10,998,840	45,840,482
23,002,900	60,309,653	36,847,398	23,462,255	82,781,303	37,565,430	45,215,873
1,161,051,762	1,525,651,479	237,894,917	1,287,756,562	1,388,727,882	444,066,020	944,661,862
1,065,492,566	1,381,550,118	189,455,496	1,192,094,622	1,217,384,469	384,249,796	833,134,673
2,754,393	16,175,942	8,070,580	8,105,362	22,049,123	14,940,776	7,108,347
-468,522	24,141,720	27,232,959	-3,091,239	27,017,205	29,849,099	-2,831,894
413,406	4,322,053	3,356,124	965,929	4,236,993	5,583,261	-1,346,268

[ CONTINUES ON NEXT PAGE ] ▼

**Detailed Table 10.4**  
Exports, imports and agribusiness balance – Brazil, 1997-2007

	Products	1997			1998		
		Exports	Imports	Balance	Exports	Imports	Balance
Fruits & nuts	Silk & silk products	77,882,248	8,928,351	68,953,897	63,910,733	6,913,867	56,996,866
	Sisal & sisal products	90,307,892	424,737	89,883,155	70,177,375	201,069	69,976,306
		314,032,908	366,471,144	-52,438,236	306,705,050	349,406,431	-42,701,381
	Prepared & preserved fruit (except juice)	18,903,921	36,444,475	-17,540,554	21,549,587	38,917,078	-17,367,491
	Frozen fruit	757,291	2,945,564	-2,188,273	745,711	7,059,864	-6,314,153
	Fresh fruit	109,134,035	232,157,622	-123,023,587	119,495,925	227,552,553	-108,056,628
Tobacco & tobacco products	Dry fruit	546,899	60,810,155	-60,263,256	267,743	46,304,374	-46,036,631
	Nuts	184,690,762	34,113,328	150,577,434	164,646,084	29,572,562	135,073,522
		1,664,806,336	92,083,427	1,572,722,909	1,558,989,645	78,050,637	1,480,939,008
Dairy products	Unmanufactured tobacco & tobacco refuse	1,091,393,964	67,179,978	1,024,213,986	939,891,187	50,695,167	889,196,020
	Manufactured tobacco products	573,412,372	24,903,449	548,508,923	619,098,458	27,355,470	591,742,988
		10,656,305	459,162,954	-448,506,649	8,582,563	515,488,506	-506,905,943
Fish & seafood	Other dairy products	1,246,727	9,143,979	-7,897,252	477,619	13,237,289	-12,759,670
	Yogurt & buttermilk	278,273	2,468,013	-2,189,740	502,071	2,487,628	-1,985,557
	Condensed milk & fluid cream	1,137,535	14,552,862	-13,415,327	1,316,583	12,047,596	-10,731,013
	UHT milk & dry milk	2,863,132	330,766,483	-327,903,351	2,681,615	372,846,437	-370,164,822
	Butter & other fats/oils derived from milk	3,460,911	11,967,155	-8,506,244	172,213	25,460,099	-25,287,886
	Cheese	1,668,671	84,107,140	-82,438,469	3,431,704	70,256,375	-66,824,671
	Whey	1,056	6,157,322	-6,156,266	758	19,153,082	-19,152,324
Live plants & flowers		125,669,058	446,770,901	-321,101,843	120,458,275	453,367,867	-332,909,592
	Crustaceans & mollusks	72,071,224	8,697,019	63,374,205	68,477,863	5,052,398	63,425,465
	Fish	38,246,225	387,671,754	-349,425,529	36,106,756	399,490,900	-363,384,144
Miscellaneous food products	Prepared or preserved fish & seafood	15,351,609	50,402,128	-35,050,519	15,873,656	48,824,569	-32,950,913
		11,004,990	5,875,812	5,129,178	12,042,129	7,961,696	4,080,433
	Live plants not for ornamental purposes	183,682	633,078	-449,396	211,174	1,552,164	-1,340,990
Apiculture products	Cut flowers & buds etc.	10,821,308	5,242,734	5,578,574	11,830,955	6,409,532	5,421,423
		113,222,994	177,812,217	-64,589,223	117,246,667	178,906,240	-61,659,573
	Peanuts & preparations (except oil)	672,297	7,145,328	-6,473,031	1,231,000	2,779,652	-1,548,652
	Other food products	34,416,044	106,936,386	-72,520,342	42,176,054	110,172,981	-67,996,927
Forest products	Confectionery	78,134,653	63,730,503	14,404,150	73,839,613	65,953,607	7,886,006
		7,452,805	3,340,821	4,111,984	7,122,857	4,476,541	2,646,316
	Other apiculture products	7,347,046	47,559	7,299,487	7,068,731	46,437	7,022,294
	Natural honey	105,759	3,293,262	-3,187,503	54,126	4,430,104	-4,375,978
		3,500,949,686	1,282,186,173	2,218,763,513	3,370,036,188	1,287,420,117	2,082,616,071



## ► DETAILED TABLE 10.4 [ CONTINUED ]

	Produto	2002		2003		2004	
		Balance	Exports	Imports	Balance	Exports	Imports
Fruits & nuts	Silk & silk products	34,310,522	32,111,470	3,882,946	28,228,524	36,263,820	5,304,328
	Sisal & sisal products	32,689,501	48,428,526	54,069	48,374,457	61,917,426	16,999
		232,324,842	521,681,513	133,533,492	388,148,021	614,841,818	170,147,347
	Prepared & preserved fruit (except juice)	-6,665,643	17,962,350	16,111,064	1,851,286	23,745,722	18,515,864
	Frozen fruit	2,200,612	6,293,575	1,688,272	4,605,303	5,199,873	711,576
	Fresh fruit	158,293,516	338,520,858	68,478,785	270,042,073	370,808,935	81,772,779
Tobacco & tobacco products	Dry fruit	-25,436,398	226,674	29,807,387	-29,580,713	467,979	40,162,970
	Nuts	103,932,755	158,678,056	17,447,984	141,230,072	214,619,309	28,984,158
		983,026,544	1,090,259,057	24,758,243	1,065,500,814	1,425,762,500	19,824,864
Dairy products	Unmanufactured tobacco & tobacco refuse	956,685,107	1,052,464,852	20,071,959	1,032,392,893	1,380,460,825	15,464,363
	Manufactured tobacco products	26,341,437	37,794,205	4,686,284	33,107,921	45,301,675	4,360,501
		-205,891,218	56,948,182	112,462,474	-55,514,292	113,519,036	84,065,271
	Other dairy products	-2,814,147	8,497,091	1,754,562	6,742,529	18,143,935	3,240,651
	Yogurt & buttermilk	-2,663,085	1,662,131	3,692,973	-2,030,842	1,846,182	1,410,665
	Condensed milk & fluid cream	22,107,772	27,055,007	240,045	26,814,962	29,401,520	128,671
Fish & seafood	UHT milk & dry milk	-175,043,787	10,379,249	72,082,586	-61,703,337	47,731,976	51,315,821
	Butter & other fats/oils derived from milk	-10,388,488	2,562,415	4,848,234	-2,285,819	1,848,151	2,279,543
	Cheese	-16,447,995	6,788,698	14,143,789	-7,355,091	14,536,898	11,821,081
	Whey	-20,641,488	3,591	15,700,285	-15,696,694	10,374	13,868,839
		129,630,158	419,005,302	202,916,542	216,088,760	426,528,139	252,258,914
Live plants & flowers	Crustaceans & mollusks	247,292,486	315,136,427	1,383,500	313,752,927	310,100,261	1,386,135
	Fish	-115,294,613	96,579,318	188,007,764	-91,428,446	105,904,355	239,703,011
	Prepared or preserved fish & seafood	-2,367,715	7,289,557	13,525,278	-6,235,721	10,523,523	11,169,768
Miscellaneous food products		6,811,440	19,533,856	6,869,943	12,663,913	23,608,357	6,736,525
	Live plants not for ornamental purposes	-3,453,980	424,281	1,764,505	-1,340,224	211,665	1,809,176
	Cut flowers & buds etc.	10,265,420	19,109,575	5,105,438	14,004,137	23,396,692	4,927,349
Apiculture products		69,508,740	202,658,052	74,480,808	128,177,244	281,312,665	91,809,943
	Peanuts & preparations (except oil)	2,797,638	10,174,422	940,894	9,233,528	28,919,973	1,222,888
	Other food products	-14,186,019	57,700,191	60,116,296	-2,416,105	83,613,489	76,949,959
Forest products	Confectionery	80,897,121	134,783,439	13,423,618	121,359,821	168,779,203	13,637,096
		29,227,492	52,108,486	49,658	52,058,828	49,549,436	126,127
	Other apiculture products	6,167,079	6,563,388	15	6,563,373	7,246,147	27,702
Forest products	Natural honey	,23,060,413	45,545,098	49,643	45,495,455	42,303,289	98,425
		3,518,154,103	5,452,713,181	783,202,354	4,669,510,827	6,691,179,484	1,080,564,479



**Detailed Table 10.4**  
**Exports, imports and agribusiness balance – Brazil, 1997-2007**

Products	1997			1998		
	Exports	Imports	Balance	Exports	Imports	Balance
Natural rubber & natural gum	3,286	119,165,571	-119,162,285	45,863	91,291,736	-91,245,873
Wood pulp	1,023,736,815	151,528,997	872,207,818	1,048,902,561	174,466,886	874,435,675
Wood	1,510,435,057	132,906,788	1,377,528,269	1,390,574,149	126,684,276	1,263,889,873
Paper	966,774,528	878,584,817	88,189,711	930,513,615	894,977,219	35,536,396
<b>Edible vegetables, legumes, greens, roots &amp; tubers</b>	<b>59,034,209</b>	<b>524,789,969</b>	<b>-465,755,760</b>	<b>59,678,004</b>	<b>591,400,699</b>	<b>-531,722,695</b>
Edible vegetables, legumes, greens, roots & tubers, frozen	45,476	10,326,568	-10,281,092	43,118	13,702,899	-13,659,781
Edible vegetables, legumes, greens, roots & tubers, prepared or preserved	4,124,157	172,764,662	-168,640,505	9,162,492	182,450,746	-173,288,254
Edible vegetables, legumes, greens, roots & tubers, prepared or preserved	51,554,322	224,437,074	-172,882,752	44,782,270	212,425,347	-167,643,077
Edible vegetables, legumes, greens, roots & tubers, dry	3,310,254	117,261,665	-113,951,411	5,690,124	182,821,707	-177,131,583
<b>Oilseed products (except soybeans)</b>	<b>99,009,388</b>	<b>241,544,194</b>	<b>-142,534,806</b>	<b>79,200,443</b>	<b>256,765,609</b>	<b>-177,565,166</b>
Oilseed & oilseed flour/meal (except soybeans)	18,569,262	11,787,116	6,782,146	1,500,445	9,436,739	-7,936,294
Vegetable oils	80,440,126	229,757,078	-149,316,952	77,699,998	247,328,870	-169,628,872
<b>Animal feed</b>	<b>130,155,604</b>	<b>62,654,931</b>	<b>67,500,673</b>	<b>37,772,404</b>	<b>56,566,988</b>	<b>-18,794,584</b>
Feed for domestic animals	130,155,604	62,654,931	67,500,673	37,772,404	56,566,988	-18,794,584
<b>Fruit juices</b>	<b>1,057,532,131</b>	<b>12,794,286</b>	<b>1,044,737,845</b>	<b>1,305,543,655</b>	<b>24,584,227</b>	<b>1,280,959,428</b>
Fruit juice	1,006,660,930	733,953	1,005,926,977	1,266,424,346	1,345,827	1,265,078,519
Other fruit juice	50,871,201	12,060,333	38,810,868	39,119,309	23,238,400	15,880,909

DETAILED TABLE 10.4 [ CONTINUES ON NEXT PAGE ] ►

Exports, imports and agribusiness balance (US\$ FOB (1))										
1999			2000			2001			2002	
Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports
180,045	64,373,589	-64,193,544	319,741	99,471,295	-99,151,554	79,736	82,211,982	-82,132,246	267,843	105,277,846
1,243,122,588	184,209,377	1,058,913,211	1,601,605,102	233,309,381	1,368,295,721	1,246,713,072	182,179,579	1,064,533,493	1,160,144,738	170,214,111
1,710,842,957	69,494,518	1,641,348,439	1,875,172,129	81,677,979	1,793,494,150	1,878,290,390	65,633,551	1,812,656,839	2,214,066,253	53,019,695
901,263,093	644,708,381	256,554,712	941,807,101	735,499,463	206,307,638	943,406,295	590,045,903	353,360,392	895,440,397	423,253,476
62,964,275	323,796,544	-260,832,269	53,273,235	269,825,363	-216,552,128	54,179,146	277,814,904	-223,635,758	51,812,645	219,583,815
51,615	8,147,719	-8,096,104	243,780	5,637,029	-5,393,249	179,520	5,601,035	-5,421,515	196,069	4,054,574
22,157,130	102,080,737	-79,923,607	15,206,860	71,966,033	-56,759,173	12,427,729	70,633,129	-58,205,400	7,912,325	58,704,159
35,757,882	160,620,594	-124,862,712	31,630,792	147,175,897	-115,545,105	35,634,497	127,538,998	-91,904,501	31,584,007	112,659,489
4,997,648	52,947,494	-47,949,846	6,191,803	45,046,404	-38,854,601	5,937,400	74,041,742	-68,104,342	12,120,244	44,165,593
57,164,660	162,136,642	-104,971,982	60,469,600	163,142,686	-102,673,086	60,048,812	120,947,423	-60,898,611	63,250,698	122,077,925
3,835,010	8,335,825	-4,500,815	368,124	7,485,157	-7,117,033	2,019,595	6,538,563	-4,518,968	3,884,063	5,046,985
53,329,650	153,800,817	-100,471,167	60,101,476	155,657,529	-95,556,053	58,029,217	114,408,860	-56,379,643	59,366,635	117,030,940
75,380,299	48,419,249	26,961,050	60,911,483	49,315,442	11,596,041	92,630,228	54,194,231	38,435,997	35,255,792	70,931,099
75,380,299	48,419,249	26,961,050	60,911,483	49,315,442	11,596,041	92,630,228	54,194,231	38,435,997	35,255,792	70,931,099
1,290,054,442	9,389,767	1,280,664,675	1,090,132,658	5,288,539	1,084,844,119	880,054,758	7,575,731	872,479,027	1,095,996,605	5,132,113
1,239,033,843	156,824	1,238,877,019	1,033,646,269	190,877	1,033,455,392	845,094,498	32,554	845,061,944	1,040,753,100	5,028
51,020,599	9,232,943	41,787,656	56,486,389	5,097,662	51,388,727	34,960,260	7,543,177	27,417,083	55,243,505	5,127,085

## ► DETAILED TABLE 10.4 [ CONTINUED ]

Products	2002		2003		2004	
	Balance	Exports	Imports	Balance	Exports	Imports
Natural rubber & natural gum	-105,010,003	332,342	156,729,637	-156,397,295	470,559	238,640,199
Wood pulp	989,930,627	1,743,634,177	154,401,917	1,589,232,260	1,722,019,275	193,219,289
Wood	2,161,046,558	2,621,223,056	65,101,199	2,556,121,857	3,781,578,219	84,391,208
Paper	472,186,921	1,087,523,606	406,969,601	680,554,005	1,187,111,431	564,313,783
<b>Edible vegetables, legumes, greens, roots &amp; tubers</b>	<b>-167,771,170</b>	<b>47,035,234</b>	<b>216,952,330</b>	<b>-169,917,096</b>	<b>50,420,389</b>	<b>263,860,102</b>
Edible vegetables, legumes, greens, roots & tubers, frozen	-3,858,505	117,568	3,744,563	-3,626,995	28,845	3,542,319
Edible vegetables, legumes, greens, roots & tubers, fresh	-50,791,834	8,515,679	64,852,497	-56,336,818	9,250,785	77,355,881
Edible vegetables, legumes, greens, roots & tubers, prepared or preserved	-81,075,482	34,314,100	98,215,097	-63,900,997	36,930,140	134,815,456
Edible vegetables, legumes, greens, roots & tubers, dry	-32,045,349	4,087,887	50,140,173	-46,052,286	4,210,619	48,146,446
<b>Oilseed products (except soybeans)</b>	<b>-58,827,227</b>	<b>67,601,042</b>	<b>138,097,831</b>	<b>-70,496,789</b>	<b>114,228,581</b>	<b>176,188,943</b>
Oilseed & oilseed flour/meal (except soybeans)	-1,162,922	2,296,664	8,672,970	-6,376,306	12,869,618	9,461,717
Vegetable oils	-57,664,305	65,304,378	129,424,861	-64,120,483	101,358,963	166,727,226
<b>Animal feed</b>	<b>-35,675,307</b>	<b>33,240,749</b>	<b>69,449,524</b>	<b>-36,208,775</b>	<b>49,503,667</b>	<b>81,879,036</b>
Feed for domestic animals	-35,675,307	33,240,749	69,449,524	-36,208,775	49,503,667	81,879,036
<b>Fruit juice</b>	<b>1,090,864,492</b>	<b>1,249,491,646</b>	<b>1,966,683</b>	<b>1,247,524,963</b>	<b>1,141,358,763</b>	<b>3,385,872</b>
Orange juice	1,040,748,072	1,192,979,783	580	1,192,979,203	1,058,090,916	4,706
Other fruit juice	50,116,420	56,511,863	1,966,103	54,545,760	83,267,847	3,381,166

Sources: Secex/MDIC. Data on export and import totals prepared by: CGOE / DPI / SRI / MAPA and MDIC.

(1) FOB (*Free on board*) indicates that the seller bears the cost of transportation to the shipping port, in addition to freight.

DETAILED TABLE 10.4 [ CONTINUED ]

## Exports, imports and agribusiness balance (US\$ FOB (1))

		2005		2006		2007			
Balance	Exports	Imports	Balance	Exports	Imports	Balance	Imports	Balance	
-238,169,640	325,345	269,221,554	-268,896,209	542,884	385,502,566	-384,959,682	2,758,288	483,722,636	-480,964,348
1,528,799,986	2,033,799,722	210,500,597	1,823,299,125	2,483,685,574	214,965,870	2,268,719,704	3,023,187,169	234,445,527	2,788,741,642
3,697,187,011	3,793,612,149	89,037,893	3,704,574,256	3,875,021,158	120,872,459	3,754,148,699	4,090,719,051	,140,187,766	3,950,531,285
622,797,648	1,371,013,337	653,965,436	717,047,901	1,521,350,822	909,656,208	611,694,614	1,703,186,198	1,083,814,398	619,371,800
-213,439,713	52,159,302	323,260,937	-271,101,635	53,435,631	338,675,555	-285,239,924	102,260,834	456,555,598	-354,294,764
-3,513,474	88,241	5,640,779	-5,552,538	104,460	7,456,254	-7,351,794	152,537	6,846,120	-6,693,583
-68,105,096	10,974,207	98,795,830	-87,821,623	10,788,962	113,531,640	-102,742,678	27,162,117	139,103,499	-111,941,382
-97,885,316	37,183,020	146,904,788	-109,721,768	36,091,605	157,384,865	-121,293,260	52,953,116	211,659,007	-158,705,891
-43,935,827	3,913,834	71,919,540	-68,005,706	6,450,604	60,302,796	-53,852,192	21,993,064	98,946,972	-76,953,908
-61,960,362	143,535,952	211,893,081	-68,357,129	98,000,267	288,006,512	-190,006,245	106,982,294	420,680,105	-313,697,811
3,407,901	3,285,089	10,479,455	-7,194,366	283,082	10,940,757	-10,657,675	2,869,881	11,972,745	-9,102,864
-65,368,263	140,250,863	201,413,626	-61,162,763	97,717,185	277,065,755	-179,348,570	104,112,413	408,707,360	-304,594,947
-32,375,369	60,576,496	89,148,509	-28,572,013	73,128,195	109,713,739	-36,585,544	104,217,014	149,455,997	-45,238,983
-32,375,369	60,576,496	89,148,509	-28,572,013	73,128,195	109,713,739	-36,585,544	104,217,014	149,455,997	-45,238,983
1,137,972,891	1,184,886,571	6,224,607	1,178,661,964	1,569,515,301	7,992,866	1,561,522,435	2,374,052,028	11,360,189	2,362,691,839
1,058,086,210	1,110,499,732	25,439	1,110,474,293	1,468,748,466	94,846	1,468,653,620	2,251,789,549	73,704	2,251,715,845
79,886,681	74,386,839	6,199,168	68,187,671	100,766,835	7,898,020	92,868,815	122,262,479	11,286,485	110,975,994

**Detailed Table 10.5**  
**S&T expenditure by Fundo de Defesa da Citricultura (Fundecitrus) – 1999-2007**

Fiscal year	S&T expenditure by Fundecitrus (R\$ 000)		
	Total science	Third-party research	Intramural research
1999/2000	4,228	1,364	2,863
2000/2001	4,731	1,387	3,344
2001/2002	4,013	975	3,038
2002/2003	3,453	965	2,488
2003/2004	3,515	799	2,716
2004/2005	3,251	801	2,449
2005/2006	3,977	1,024	2,954
2006/2007	3,006	535	2,471

**Source:** Fundecitrus.

**Note:** In constant 2006 prices deflated by IPCA (IBGE).

**Detailed Table 10.6**  
**Public expenditure on S&T in agriculture by type of funding and institution – Brazil, 2001-2005**

Type of funding/institution	Public expenditure on S&T in agriculture (R\$)				
	2001	2002	2003	2004	2005
Total	1,667,026,321	1,616,698,340	1,591,468,893	1,670,391,775	1,688,148,801
Embrapa budget	993,445,358	955,282,927	979,652,166	1,038,197,237	995,529,758
SAROs budget	558,369,525	553,033,903	506,532,915	498,231,762	545,716,497
MCT agreements	14,542,316	12,451,149	10,060,408	19,107,614	26,704,443
CNPq & CAPES grants/scholarships	100,669,122	95,930,361	95,223,404	114,855,163	120,198,104

**Source:** Embrapa. Secretaria de Gestão e Estratégia; Gonçalves, Junqueira e Barros Filho (2004); Secretaria de Agricultura e Abastecimento do Estado de São Paulo(SAA); CGEE (2006); Portal da Transparência; FAPESP; CNPq; CAPES

**Notes:** 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).  
 2. APTA and Embrapa include funding from FAPESP.  
 3. MCT agreements include funds transferred to universities, researchers (individuals), research institutions and other institutions but exclude Embrapa, SAROs and grants/scholarships.  
 4. MCT = Ministry of Science & Technology; SAROs = state agricultural research organizations.

**Detailed Table 10.7**  
**Consolidated budget of 17 SAROs by source of funding – Brazil, 2001-2005**

Source of funding	Consolidated budget of 17 SAROs (R\$)				
	2001	2002	2003	2004	2005
Total	563,508,044	538,902,296	476,990,786	485,172,911	538,259,787
State Treasury	450,868,015	442,607,484	394,608,040	386,843,319	439,323,375
Partnerships	112,640,029	96,294,812	82,382,746	98,329,591	98,936,412

**Source:** APTA; Gonçalves, Junqueira e Barros Filho (2004); Secretaria de Agricultura e Abastecimento (SAA) do Estado de São Paulo; CGEE (2006);

**Notes:** 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

2.The 17 SAROs are: Empresa de Pesquisa Agropecuária do Estado do Rio Grande do Norte (Emparn), Empresa Estadual de Pesquisa Agropecuária da Paraíba (Emepa), Empresa Pernambucana de Pesquisa Agropecuária (IPA), Diretoria de Pesquisa Agropecuária e Pesqueira (Dipap), Departamento Estadual de Desenvolvimento Agropecuário de Sergipe (Deagro), Empresa Baiana de Desenvolvimento Agrícola S/A (EBDA), Instituto Capixaba de Pesquisa, Assistência Técnica e Extensão Rural (Incaper), Empresa de Pesquisa Agropecuária de Minas Gerais (Epamig), Empresa de Pesquisa Agropecuária do Estado do Rio de Janeiro (Pesagro-Rio), Agência Paulista de Tecnologia dos Agro-negócios (APTA), Instituto Agronômico do Paraná (Iapar), Empresa Estadual de Pesquisa Agropecuária e Extensão Rural de Santa Catarina S/A (Epagri), Fundação Estadual de Pesquisa Agropecuária do Estado do Rio Grande do Sul (Fepagro), Fundação Universidade do Tocantins – Diretoria de Pesquisa Agropecuária e Desenvolvimento Rural (Unitins Agro), Agência Goiana de Desenvolvimento Rural e Fundiário (Agência Rural), Empresa de Pesquisa e Assistência Técnica e Extensão Rural de Mato Grosso (Empaer), Instituto de Desenvolvimento Agrário, Pesquisa, Assistência Técnica e Extensão Rural (Idaterra).

SAROs = state agricultural research organizations.

**Detailed Table 10.8**  
**S&T expenditure under federal government partnership agreements via MCT by type of partner – Brazil, 1996-2006**

Type of partner	S&T expenditure under federal government partnership agreements via MCT (R\$)						
	Total	1996	1997	1998	1999	2000	2001
<b>Total</b>	<b>259,118,897</b>	<b>8371,893</b>	<b>12,134,927</b>	<b>13,695,134</b>	<b>15,043,882</b>	<b>15,170,126</b>	<b>18,926,280</b>
Embrapa	36,676,093	1,082,118	1,421,425	1,515,366	1,433,865	1,253,372	2,245,901
SAROs	28,938,043	286,127	455,214	168,341	198,449	170,052	3,407,019
Universities	101,693,325	4,059,006	4,930,988	6,993,080	7,191,863	9,523,388	8,262,832
Other	91,811,436	2,944,642	5,327,330	5,018,347	6,219,704	4,223,014	6,279,484

Source: Portal da Transparéncia.

Note: In 2006 constant reais (R\$) deflated by IPCA (IBGE). MCT = Ministry of Science & Technology; SAROs = state agricultural research organizations.

**Detailed Table 10.9**  
Public expenditure on S&T in agriculture by type of funding and institution – São Paulo State, 1996-2006

Type of funding/institution	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Total</b>	<b>279,770,572</b>	<b>274,586,923</b>	<b>278,140,130</b>	<b>322,188,900</b>	<b>332,509,025</b>	<b>366,198,930</b>	<b>334,666,975</b>	<b>304,615,748</b>	<b>314,782,538</b>	<b>334,708,622</b>	<b>329,772,606</b>
Embrapa units in São Paulo	52,590,935	48,136,498	44,426,778	43,295,937	47,202,038	48,518,945	47,332,429	43,918,931	47,234,633	54,138,831	64,383,515
APTA	110,737,018	106,773,856	98,515,951	116,632,001	138,869,520	139,001,408	128,464,333	120,176,724	122,080,173	125,716,940	131,809,420
MCT agreements	2,180,916	2,710,307	2,496,180	2,264,591	2,457,920	2,365,483	1,793,841	1,549,632	3,338,139	3,040,804	4,781,76
Universities in São Paulo State	54,380,498	55,472,412	55,675,136	53,889,026	62,519,933	71,813,490	72,037,104	72,578,006	71,296,169	76,942,649	80,075,040
CNPq & CAPES grants	-	-	-	-	-	27,847,288	25,433,391	24,455,951	29,484,056	29,221,282	-
FAPESP	59,881,204	61,493,850	77,026,086	106,107,444	81,459,572	76,682,315	59,405,778	41,936,504	41,329,348	45,688,115	48,023,454

Source: Embrapa. Secretaria de Gestão e Estratégia; Gonçalves, Junqueira e Barros Filho (2004); Secretaria de Agricultura e Abastecimento (SAA) do Estado de São Paulo; CGEE (2006); Portal da Transparéncia; FAPESP; CNPq; CAPES; Feagni/Unicamp; ESALQ, FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Ulnesp; eCCA/UFGSCar.

Notes: 1. In 2006 constant reais (R\$) deflated by IPCA (IBGE).

2. APTA and Embrapa include funding from FAPESP.

3. MCT agreements include funds transferred to universities, researchers (individuals), research institutions and other institutions but exclude Embrapa, SAROs, scholarships and grants.

**Detailed Table 10.10**  
Embrapa expenditure on agricultural S&T – Brazil & São Paulo State, 1996-2006

Unit	Embrapa's expenditure on agricultural S&T						
	1996	1997	1998	1999	2000	2001	2002
Embrapa – Brazil (R\$)	1,105,500,536	979,996,128	951,959,607	934,185,330	938,834,759	993,445,358	955,282,927
Embrapa units in São Paulo State (R\$)	52,590,935	48,136,498	44,426,778	43,295,937	47,202,058	48,518,945	47,532,429
% units in São Paulo	4.8	4.9	4.7	4.6	4.9	4.9	5.0
						4.5	4.6
							5.4
							6.1

Source: Embrapa. Secretaria de Gestão e Estratégia.

Notes: 1. In 2006 constant reais (R\$), deflated by IPCA (IBGE).

2. These are grants, whereas FINEP makes loans (see Table 10.10).

**Detailed Table 10.11**  
Budget of Agência Paulista de Tecnologia dos Agronegócios (APTA) – São Paulo State, 1996-2006

Item	Budget of APTA (R\$)					
	1996	1997	1998	1999	2000	2001
Total budget (A) + (B) + (C)	110,737,018	106,773,856	98,515,951	116,631,001	138,869,520	139,001,408
Operational partnerships (A)	15,429,022	16,443,447	14,741,836	17,020,727	22,110,938	26,180,018
Treasury operational funds (B)	20,786,022	18,345,417	18,827,224	23,362,942	21,403,776	16,187,292
Treasury personnel funds (C)	74,521,974	71,984,993	64,946,891	80,785,050	93,395,641	91,417,614
<b>Total operational funds (A) + (B)</b>	<b>36,215,045</b>	<b>34,788,864</b>	<b>33,569,059</b>	<b>35,847,951</b>	<b>45,473,880</b>	<b>47,583,793</b>
<b>Total treasury (B) + (C)</b>	<b>95,307,996</b>	<b>92,508,926</b>	<b>83,292,320</b>	<b>99,611,274</b>	<b>116,758,583</b>	<b>112,821,390</b>
	101,972,868					
		91,906,948				
			92,013,223			
				100,665,310		
					105,909,980	

Source: Gonçalves, Junqueira e Barros Filho (2004); Secretaria de Agricultura e Abastecimento do Estado de São Paulo (SAA).

Notes: In 2006 constant reais (R\$) deflated by IPCA (IBGE). APTA = São Paulo State Agency for Agribusiness Technology.

**Detailed Table 10.12**

**Agricultural S&T expenditure under federal government partnership agreements via MCT by type of partner – São Paulo State, 1996-2006**

Year	Agricultural S&T expenditure under federal government partnership agreements by type of partner (R\$)				
	Total	APTA	Universities	Research institutes	Other
1996	3,124,378	929,209	1,645,001	40,285	509,883
1997	3,581,858	858,221	1,819,760	95,936	807,941
1998	3,076,947	580,768	1,663,974	-	832,206
1999	2,971,690	707,098	1,574,177	30,172	660,243
2000	2,999,166	541,245	2,076,231	28,186	353,503
2001	5,666,699	3,301,216	1,914,803	369,258	81,422
2002	4,560,626	2,766,786	1,408,627	340,487	44,727
2003	4,652,145	3,102,513	987,769	296,813	265,051
2004	6,379,767	2,987,330	2,004,763	278,441	1,109,233
2005	6,301,229	3,209,637	1,206,333	605,193	1,280,066
2006	6,274,619	1,444,695	2,228,500	730,891	1,870,533

**Source:** Portal da Transparência.

**Notes:** In 2006 constant *reais* (R\$) deflated by IPCA (IBGE). MCT = Ministry of Science & Technology.

**Detailed Table 10.13**  
**FAPESP disbursements for agrarian sciences by funding group – São Paulo State, 1996-2006**

Funding group	FAPESP disbursements for agrarian sciences (R\$)						
	Total	1996	1997	1998	1999	2000	2001
<b>Total</b>	<b>698,893,669</b>	<b>59,831,204</b>	<b>61,493,850</b>	<b>77,026,086</b>	<b>106,107,444</b>	<b>81,459,572</b>	<b>76,652,315</b>
Grants	240,332,288	12,748,412	15,278,594	23,052,789	30,466,816	31,099,620	31,689,131
Scholarships	236,752,708	7,494,716	13,153,730	20,742,985	31,744,475	35,633,042	35,020,329
Technological Innovation	37,967,362	74,300	275,697	1,237,497	4,030,897	2,332,073	4,051,255
Special Programs	183,841,312	39,513,775	32,785,888	31,992,815	39,865,257	12,394,836	5,891,599

Source: FAPESP.

Notes: 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBCE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology

**Detailed Table 10.14**  
**FAPESP disbursements for agrarian sciences by funding line – São Paulo State, 1996-2006**

FAPESP disbursements for agrarian sciences by funding line (R\$)																	
Year	Total	Scholarships in Brazil	Regular research grants	Support for research infrastructure	Thematic project	Young Investigators	Pipe	Multicenter Equipment	Pite	Genome	Technical Training	PPP	BIO TA	Pappe/ Pipe	Pape/ CNPq	Pape/ Nupitec	Other (1)
Total	686,893,669	236,752,708	202,457,082	144,385,199	37,875,206	23,264,243	14,670,172	7,528,004	7,008,592	7,527,596	6,105,336	3,419,864	2,582,884	1,901,061	837,786	165,238	2,322,700
1996	59,831,204	7,494,716	12,182,572	39,153,809	565,841	309,946			74,300		12,896						37,124
1997	61,493,850	13,153,730	13,769,485	29,999,845	1,509,109	2,192,486	0		275,697		355,191						238,306
1998	77,026,086	20,742,985	20,231,066	28,771,326	2,821,723	2,519,184	458,892		778,605		630,834						71,471
1999	106,107,444	31,744,475	24,181,905	36,134,715	6,284,911	2,824,137	516,764		568,221	2,945,911	732,455						173,951
2000	81,459,572	35,633,042	24,685,144	7,575,068	6,114,476	3,732,393	1,044,829		271,161	950,206	1,066,111	0					0
2001	76,632,315	35,020,329	25,920,685	2,559,458	5,168,446	2,530,242	1,103,179		89,732	1,797,936	791,342	178,99					3474
2002	59,405,778	26,750,809	21,586,002	140,985	4,305,702	1,880,513	1,249,938		521,505	1,348,486	668,582	340,764	405,806				10,558
2003	41,936,504	19,381,322	13,855,364	48,116	2,684,388	1,229,001	2,144,190		1,021,526	319,520	427,993	606,466	122,224				37,202
2004	41,329,348	16,971,217	13,916,336	613	1,943,459	1,532,346	1,722,899		2948,141	114,638	386,458	577,490	395,415				458,814
2005	45,628,115	13,639,937	14,668,199	609	2,408,562	1,815,018	2,704,655	5,525,351	380,141	50,897	390,687	956,137	519,301	1,812,204	296,721	12,921	446,775
2006	48,023,454	16,220,145	17,460,324	654	3,168,589	2,698,978	3,724,827	2,002,653	79,563	732,787	760,209	196,127	88,857	237,270	5,625	646,847	

Source: FAPESP.

Notes: 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.

(1) Others: Scholarships abroad, FAP-Books, Public Education Improvement, Sectoral Consortia for Technological Innovation (ConSITEc), São Paulo State Integrated Hydrometeorology System (Sihesp), First Projects (PPP/CNPq Total), Pro-Science, New Frontiers, MediaScience, Junior Scientific Initiation (ICI/CNPq).

Pipe = Innovative Research in Small Business; Pite = Partnership for Technological Innovation; Genome = Molecular Biotechnology.

**Detailed Table 10.15**  
**FAPESP disbursements for agrarian sciences by discipline and funding group – São Paulo State, 1996-2006 (cumulative)**

Funding group	Total		Agronomy (R\$)	Veterinary medicine (R\$)	Food science & technology (R\$)	Animal sci- ence (R\$)	Agricultural engineering (R\$)	Forest resources & forest enginee- ring (R\$)	Genetics (R\$)	Fishery resources & fishery engine- ering (R\$)	Botany (R\$)	Economics (R\$)	Sociology (R\$)
	R\$	%											
<b>Total</b>	<b>698,893,669</b>	<b>100,0</b>	<b>222,642,756</b>	<b>176,948,202</b>	<b>108,242,482</b>	<b>74,834,994</b>	<b>34,942,015</b>	<b>25,126,805</b>	<b>20,109,987</b>	<b>14,882,810</b>	<b>11,193,834</b>	<b>6,583,538</b>	<b>3,386,248</b>
Grants	240,332,288	34,4	58,019,769	74,700,844	45,315,268	29,897,464	12,425,271	5,730,390	5,933,364	4,650,031	3,640,623	3,003,937	953,326
Scholarships	236,752,708	33,9	65,781,103	64,205,467	36,503,518	29,740,963	13,321,060	6,683,974	7,480,705	6,477,837	1,115,754	3,200,205	2,182,121
Technological Inno- vation	37,967,362	5,4	14,467,337	3,816,808	4,014,975	1,340,446	2,793,962	7,075,516	3,160,104	543,163	427,112	194,468	133,471
Special Programs	183,841,312	26,3	84,374,546	34,105,083	22,408,722	17,856,121	6,401,721	5,636,925	3,535,814	3,211,778	6,001,345	184,928	115,330

Source: FAPESP.

Notes: 1. In 2006 constant reais (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.





**Detailed Table 10.17B**  
FAPESP disbursements for agrarian sciences and subareas of agronomy by funding lines – São Paulo State, 1996-2006 (cumulative)

Funding line	Agrarian sciences		FAPESP disbursements, cumulative (R\$)						
	Grand total	Total	Agrometeorology	Soil science	Rural extension	Plant health	Plant science	Floriculture, parks & gardens	Other subareas
<b>Grand total</b>	698,893,669	222,642,756	4,144,931	38,106,439	1,582,740	50,443,493	48,663,234	1,489,889	78,212,032
<b>Grants</b>									
Regular research grants	240,332,288	58,019,769	1,340,094	12,978,694	282,984	16,614,989	14,802,337	171,591	11,829,081
Thematic projects	202,457,082	43,676,010	1,340,094	10,433,903	282,984	11,037,614	12,631,986	171,591	7,777,837
	37,873,206	14,343,760	-	2,544,791	-	5,577,374	2,170,351	-	4,051,244
<b>Scholarships</b>									
Scholarships	236,752,708	65,781,103	2,420,647	16,587,586	571,858	18,955,414	18,896,179	623,007	7,726,413
	236,752,708	65,781,103	2,420,647	16,587,586	571,858	18,955,414	18,896,179	623,007	7,726,413
<b>Technological Innovation</b>									
Intellectual Property Support Program (Papi-Nuplitech)	37,967,362	14,467,337	,326,252	548,129	-	5,141,712	1418,557	353,763	6,678,925
Molecular Biotechnology: Genome	165,238	1,647	-	-	-	1,647	-	-	-
Biotechnology/Biodiversity: BIOTA	7,527,596	6,536,446	-	-	-	1,924,202	-	-	4,632,243
Other	2,382,884	292,232	-	-	-	-	-	-	292,232
Partnership for Technological Innovation (Pite)	691,955	326,252	-	-	-	-	-	-	-
Public Policy Research	7,008,592	1,339,981	-	-	-	311,937	678,671	-	349,373
Innovative Research in Small Business (Pipe)	3,419,864	1,188,114	-	367,496	-	321,985	223,065	180,286	95,283
Pipe Phase 3: Papple/FINEP	14,670,172	4,271,946	-	180,633	-	2,091,241	516,821	173,478	1,309,774
	1,901,061	490,699	-	-	-	490,699	-	-	-
<b>Special Programs</b>									
Support for Research Infrastructure	183,841,312	84,374,546	57,939	7,992,030	727,888	9,731,378	13,546,161	341,528	51,977,613
Technical Training	144,385,199	75,545,931	18,855	6,469,845	587,076	6,556,226	10,812,451	329,707	50,771,761
Young Investigators	6,195,336	1,769,683	12,969	219,877	8,834	285,967	771,262	11,821	458,953
Other	23,264,243	4,308,403	26,115	294,609	-	2,321,753	1,487,483	-	178,443
Multicenter Equipment	1,630,744	405,043	-	31,135	131,988	49,022	51,631	-	141,267
Pronex/CNPq	7,529,004	1,936,325	-	976,564	-	249,058	283,514	-	427,189
	837,786	409,162	-	-	-	269,342	139,820	-	-

Source: FAPESP.

Notes: 1. In 2006 constant reais (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.

**Detailed Table 10.17C**  
**FAPESP disbursements for agrarian sciences and veterinary medicine by subarea and funding line – São Paulo State, 1996-2006 (cumulative)**

	Funding line		FAPESP disbursements, cumulative (R\$)					
	Agrarian sciences Grand total	Total	Veterinary clinical & surgery	Animal product inspection	Preventive veterinary medicine	Other subareas	Animal pathology	Animal reproduction
<b>Grand total</b>	<b>698,893,669</b>	<b>176,948,202</b>	<b>38,554,603</b>	<b>1,814,475</b>	<b>31,877,186</b>	<b>22,491,710</b>	<b>34,573,233</b>	<b>47,636,995</b>
<b>Grants</b>	<b>240,332,288</b>	<b>74,760,844</b>	<b>19,742,820</b>	<b>778,646</b>	<b>14,319,860</b>	<b>7,841,391</b>	<b>15,387,233</b>	<b>16,690,894</b>
Regular research grants	202,457,082	67,231,759	19,742,820	778,646	12,92,028	6,657,723	13,270,976	13,789,565
Thematic projects	37,875,206	7,529,055	-	-	1,527,832	983,667	2,116,257	2,901,329
<b>Scholarships</b>	<b>236,732,708</b>	<b>64,265,467</b>	<b>14,708,993</b>	<b>1,002,636</b>	<b>12,373,943</b>	<b>6,046,591</b>	<b>10,904,309</b>	<b>18,864,995</b>
Scholarships	236,732,708	64,265,467	14,708,993	1,002,636	12,737,943	6,046,591	10,904,309	18,864,995
<b>Technological Innovation</b>	<b>37,967,362</b>	<b>3,816,808</b>	<b>161,820</b>	<b>-</b>	<b>1,745,088</b>	<b>573,281</b>	<b>511,857</b>	<b>824,762</b>
Intellectual Property Support Program (Papi-Nuplitech)	65,238	23,665	-	-	-	-	-	23,695
Molecular Biotechnology: Genome	7,527,596	-	-	-	-	-	-	-
Biotechnology/Biodiversity: BIOTA	2,582,884	103,950	-	-	-	103,930	-	-
Other	691,955	-	-	-	-	-	-	-
Partnership for Technological Innovation (Pite)	7,008,592	255,345	-	-	-	-	-	255,345
Public Policy Research	3,419,864	812,583	-	-	781,795	-	30,788	-
Innovative Research in Small Business (Pipe)	14,670,172	2,621,255	161,820	-	963,292	469,351	481,069	545,722
Pipe Phase 3: Papple/FINEP	1,901,061	-	-	-	-	-	-	-
<b>Special Programs</b>	<b>183,841,312</b>	<b>34,105,083</b>	<b>3,940,971</b>	<b>33,192</b>	<b>3,074,295</b>	<b>8,030,448</b>	<b>7,769,834</b>	<b>11,256,343</b>
Support for Research Infrastructure	144,385,199	18,098,964	3,100,585	-	1,579,467	5,183,166	4,924,681	3,301,065
Technical Training	6,195,336	1,510,612	171,210	33,192	297,903	189,025	363,038	455,344
Young Investigators	23,264,243	11,019,465	-	-	877,304	1,956,080	1,885,715	6,290,366
Other	1,630,744	81,228	-	-	17,431	-	39,595	24,202
Multiuser Equipment	7,528,004	3,278,381	669,176	-	302,191	701,277	536,804	1,068,934
Pronex/CNPq	837,786	116,433	-	-	-	-	116,433	-

Source: FAPESP.

Notes: 1. In 2006 constant reais (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.

**Detailed Table 10.17D**  
**FAPESP disbursements for agrarian sciences and food science and technology by subarea and funding line**  
– São Paulo State, 1996-2006 (cumulative)

Funding line	Agrarian sciences Grand total	FAPESP disbursements, cumulative (R\$)				
		Food science & technology by subarea				
		Total	Food science	Food engineering	Other subareas	Food technology
<b>Grant total</b>	<b>698,893,669</b>	<b>108,242,482</b>	<b>33,632,025</b>	<b>22,252,131</b>	<b>24,969,569</b>	<b>27,388,757</b>
<b>Grants</b>	<b>240,332,288</b>	<b>45,315,268</b>	<b>15,989,793</b>	<b>9,177,155</b>	<b>8,168,678</b>	<b>11,979,642</b>
Regular research grants	202,457,082	40,580,903	13,502,665	8,144,594	7,761,955	11,171,688
Thematic projects	37,875,206	4,734,365	2,487,128	1,032,560	406,722	807,954
<b>Scholarships</b>	<b>236,752,708</b>	<b>36,503,518</b>	<b>10,718,393</b>	<b>10,291,078</b>	<b>5,811,904</b>	<b>9,682,143</b>
Scholarships	236,752,708	36,503,518	10,718,393	10,291,078	5,811,904	9,682,143
<b>Technological Innovation</b>	<b>37,967,362</b>	<b>4,014,975</b>	<b>656,871</b>	<b>78,928</b>	<b>1,441,647</b>	<b>1,837,529</b>
Intellectual Property Support Program (Papi-Nuplitech)	165,238	-	-	-	-	-
Molecular Biotechnology: Genome	7,527,596	-	-	-	-	-
Biotechnology/Biodiversity: BIOTA	2,582,884	-	-	-	-	-
Other	691,955	365,704	-	-	365,704	-
Partnership for Technological Innovation (Pite)	7,008,592	214,140	-	155	150,494	63,491
Public Policy Research	3,419,864	954,384	656,871	-	-	297,514
Innovative Research in Small Business (Pipe)	14,670,172	2,010,669	-	78,773	925,449	1,006,447
Pipe Phase 3: Pappe/FINEP	1,901,061	470,078	-	-	-	470,078
<b>Special Programs</b>	<b>183,841,312</b>	<b>22,408,722</b>	<b>6,266,967</b>	<b>2,704,970</b>	<b>9,547,340</b>	<b>3,889,444</b>
Support for Research Infrastructure	144,385,199	16,320,237	3,655,219	1,212,161	8,087,921	3,364,935
Technical Training	6,195,336	1,033,039	302,123	90,334	204,982	435,601
Young Investigators	23,264,243	2,378,299	449,651	1,008,562	920,086	-
Other	1,630,744	436,954	324,814	-	23,233	88,908
Multiuser Equipment	7,528,004	1,929,075	1,535,162	393,913	-	-
Pronex/CNPq	837,786	311,118	-	-	311,118	-

**Source:** Fapesp.

**Notas:** 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.

**Detailed Table 10.17E**  
Includes plant genetics, botany, agricultural & resource economics, rural sociology, rural anthropology.

	Funding line	FAPESP disbursements, cumulative (R\$)						
		Agrarian sciences Grand total	Total	Animal ecology & ethology	Genetic improvement of livestock	Animal feeding & nutrition	Other subareas	Pasture & forage cultivation
<b>Grand total</b>	698,893,669	74,834,994	1,385,538	8,435,449	26,472,338	8,471,524	8,685,726	21,384,218
<b>Grants</b>								
Regular research grants	240,332,288	25,897,464	771,239	1,582,827	10,058,521	2,945,755	3,836,893	6,702,229
Thematic projects	202,457,082	20,799,880	771,239	1,582,827	9,205,979	2,945,755	2,993,612	3,300,468
<b>Scholarships</b>								
Scholarships	37,875,206	5,097,384	-	-	852,543	-	843,281	3,401,761
Scholarships	236,752,708	29,740,963	581,011	5,881,246	12,021,585	1,329,457	3,603,148	6,324,516
Scholarships	236,752,708	29,740,963	581,011	5,881,246	12,021,585	1,329,457	3,603,148	6,324,516
<b>Technological Innovation</b>								
Intellectual Property Support Program (Papi-Nuplitech)	165,238	124,384	-	-	254,214	228,429	-	857,804
Molecular Biotechnology: Genome	7,527,596	-	-	-	-	124,384	-	-
Biotechnology/Biodiversity: BIOTA	2,582,884	-	-	-	-	-	-	-
Other	691,955	-	-	-	-	-	-	-
Partnership for Technological Innovation (Pite)	7,008,592	194,598	-	-	194,598	-	-	-
Public Policy Research	3,419,864	0	-	-	-	-	-	-
Innovative Research in Small Business (Pipe)	14,670,172	575,331	-	-	59,615	104,045	-	411,671
Pipe Phase 3: Papple/FINEP	1,901,161	446,133	-	-	-	-	-	446,133
<b>Special Programs</b>								
Support for Research Infrastructure	183,841,312	17,856,121	33,289	717,163	4,163,803	4,196,312	1,245,885	7,499,669
Technical Training	144,385,99	15,829,503	-	634,998	3,895,908	4,143,171	301,147	6,554,80
Young Investigators	6,195,336	443,221	-	25,074	148,923	35,258	90,748	143,218
Other	23,264,243	1,147,665	33,289	28,032	35,366	-	853,989	196,988
Multiuser Equipment	1,630,744	50,437	-	29,059	3,183	17,883	-	311
Pronex/CNPq	7,528,004	384,222	-	-	80,423	-	-	303,799
	837,786	1,073	-	-	-	-	-	1,073

Source: FAPESP.

Notes: 1. In 2006 constant reais (R\$) deflated by IPCA (IBGE).

2. Includes plant genetics, botany, agricultural &amp; resource economics, rural sociology, rural anthropology.

**Detailed Table 10.18**

CNPq and CAPES disbursements for master's, doctoral, development (short-term) and post-doctoral scholarships in agrarian sciences and total - Brazil & São Paulo State, 2001-2005

Agency	CNPq and CAPES disbursements for master's, doctoral, development (short-term) and post-doctoral scholarships											
	2001		2002		2003		2004		2005			
	São Paulo State	Brazil	SP / Brazil (%)	São Paulo State	Brazil	SP / Brazil (%)	São Paulo State	Brazil	SP / Brazil (%)	São Paulo State	Brazil	SP / Brazil (%)
<b>CNPq</b>												
Agrarian sciences												
– Total (R\$) (A)	17,818	72,415	24.6	15,611	65,020	24.0	15,990	62,681	25.5	19,756	74,812	26.4
All areas												
– Total (R\$) (B)	155,052	503,958	30.8	141,503	469,126	30.2	150,148	471,753	31.8	180,472	560,005	32.2
A / B (%)	11.5	14.4		11.0	13.9		10.6	13.3		10.9	13.4	
<b>CAPES</b>												
Agrarian sciences												
– Total (R\$) (A)	10,029	40,058	25.0	9,822	40,408	24.3	8,466	37,224	22.7	9,729	43,528	22.3
All areas												
– Total (R\$) (B)	81,926	298,002	27.5	83,902	282,885	29.7	80,193	260,482	30.8	93,689	294,908	31.8
A / B (%)	12.2	13.4		11.7	14.3		10.6	14.3		10.4	14.8	

Source: CNPq; CAPES.

Notes: 1. In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

2. See Methodological Annex for post-graduate programs included.

**Detailed Table 10.19**

Percentage of budgets of public universities located in São Paulo transferred to schools of agrarian sciences – São Paulo State, 1996-2006

Year	Percentage of budgets of public universities located in São Paulo transferred to schools of agrarian sciences
1996	5.9
1997	5.7
1998	6.7
1999	6.5
2000	6.3
2001	6.6
2002	6.6
2003	6.8
2004	6.7
2005	6.5
2006	6.5

Source: Feagri/Unicamp; ESALQ; FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Unesp; and CCA/UFSCAR.

**Detailed Table 10.20**  
**Budgets of public universities and schools of agrarian sciences – São Paulo State, 1996-2006**

Year	Budget (R\$)	
	Public universities	Schools of agrarian sciences
1996	3,039,957,527	180,149,873
1997	3,165,813,397	178,993,015
1998	3,115,710,808	209,058,332
1999	3,143,460,461	204,343,852
2000	3,550,987,901	223,278,366
2001	3,724,821,838	244,696,539
2002	3,781,187,428	250,203,829
2003	3,619,217,339	246,635,506
2004	3,925,873,898	263,466,881
2005	4,063,825,366	266,026,580
2006	4,229,286,116	276,220,175

**Source:** Feagri/Unicamp; ESALQ; FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Unesp; and CCA/UFSCar.

**Note:** In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

**Detailed Table 10.21**

**Budgets of schools of agrarian sciences at public universities, estimated active faculty pay and estimated share of faculty pay allocated to research – São Paulo State, 1996-2006**

Year	Budgets of schools of agrarian sciences at public universities (R\$) (1)	Estimated active faculty pay (R\$) (1) (A)	Estimated faculty pay allocated to research (R\$) (1) (B)	B / A (%)
1996	178,437,676	72,782,848	48,340,520	66.4
1997	177,212,269	73,268,435	48,959,394	66.8
1998	207,217,086	74,013,597	48,875,357	66.0
1999	202,472,349	72,411,245	47,486,420	65.6
2000	222,090,476	80,529,461	53,331,898	66.2
2001	243,153,798	89,328,266	59,634,519	66.8
2002	248,531,179	90,082,824	59,717,994	66.3
2003	244,910,896	89,768,793	59,363,076	66.1
2004	262,014,883	90,432,908	59,255,045	65.5
2005	264,318,949	93,174,630	62,078,926	66.6
2006	274,564,145	95,433,365	64,707,125	67.8

**Source:** Feagri/Unicamp; ESALQ; FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Unesp; and CCA/UFSCar.

**Note:** FMVZ/USP not included.

(1) In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

**Detailed Table 10.22**  
**Faculty of schools of agrarian sciences at public universities – São Paulo State, 1996-2006**

Year	Faculty of schools of agrarian sciences
1996	944
1997	919
1998	905
1999	894
2000	884
2001	890
2002	891
2003	883
2004	895
2005	919
2006	937

**Source:** Feagri/Unicamp; ESALQ; FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Unesp; and CCA/UFSCar.

**Detailed Table 10.23**

**Active faculty of schools of agrarian sciences at public universities and budget for faculty pay – São Paulo State, 1996-2006**

Year	Active faculty of schools of agrarian sciences at public universities	
	Absolute nos.	Budget for faculty pay (R\$) (1)
1996	858	72,782,848
1997	839	73,268,435
1998	826	74,013,597
1999	814	72,411,245
2000	803	80,529,461
2001	810	89,328,266
2002	809	90,082,824
2003	798	89,768,793
2004	807	90,432,908
2005	827	93,174,630
2006	844	95,433,365

**Source:** Feagri/Unicamp; ESALQ; FZEA and FMVZ/USP; FOA; FMVZ; FCA; FEIS; FCAV/Unesp; and CCA/UFSCar.

**Note:** Excludes FMVZ/USP, which participated in the survey and supplied some data, but not these numbers.

(1) In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

**Detailed Table 10.24****FINEP loans to firms in all sectors and agricultural sector – Brazil & São Paulo State, 1996-2006**

Year	FINEP loans to firms					
	All sectors			Agricultural sector		
	São Paulo State (R\$) (1) (A)	Brazil (R\$) (1) (B)	A / B (%)	São Paulo State (R\$) (1) (A)	Brazil (R\$) (1) (B)	A / B (%)
Total	1,274,882,588	3,943,062,869	32.3	311,691,764	782,130,247	39.9
1996	132,773,291	464,235,288	28.6	26,246,083	104,364,945	25.1
1997	276,246,864	787,893,595	35.1	70,135,497	198,249,519	35.4
1998	170,626,234	654,180,410	26.1	26,417,770	99,948,995	26.4
1999	113,177,872	317,374,370	35.7	21,401,054	50,522,304	42.4
2000	49,039,960	205,389,321	23.9	18,838,599	34,726,252	54.2
2001	58,519,709	124,938,512	46.8	10,326,336	19,208,686	53.8
2002	106,755,423	158,583,895	67.3	52,606,965	53,619,970	98.1
2003	80,433,300	176,070,179	45.7	39,377,090	61,384,904	64.1
2004	78,345,346	170,249,086	46.0	9,397,523	29,585,560	31.8
2005	72,360,672	326,050,287	22.2	31,987,673	55,814,434	57.3
2006	136,603,918	558,097,925	24.5	4,957,174	74,704,679	6.6

Source: FINEP.

(1) In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

**Detailed Table 10.25**  
**FINEP loans to agribusiness firms by state and CNAE class – Brazil, 1996-2006**

CNAE class	Total		Alagoas (R\$) (1)	Amazonas (R\$) (1)	Bahia (R\$) (1)	Ceará (R\$) (1)	Espírito Santo (R\$) (1)	Goiás (R\$) (1)
	R\$ (1)	%						
<b>Total</b>	<b>782,130,247</b>	<b>100.0</b>	8,287,103	8,666,663	47,556,742	21,032,682	2,444,005	29,627,910
<b>% do total</b>	<b>100.0</b>		1.1	1.1	6.1	2.7	0.3	3.8
Cattle slaughtering, preparation of meat products	173,939,947	22.2	-	-	-	-	-	-
Manufacturing of malt, beer & draught lager	141,013,160	18.0	-	-	2,174,292	-	-	-
Cattle ranching	70,379,979	9.0	-	-	1,110,216	1,418,545	-	29,627,910
Sugar refining & crushing	51,416,166	6.6	-	-	-	-	-	-
Sugar & alcohol factories	35,572,441	4.5	8,287,103	-	25,584,388	-	-	-
Poultry raising	25,803,416	3.3	-	-	-	-	-	-
Paper manufacturing	23,420,241	3.0	-	-	11,996,680	-	-	-
Soft drink manufacturing	23,397,529	3.0	-	8,666,663	-	-	-	-
Agricultural service activities	22,309,151	2.9	-	-	1,182,531	-	-	-
Processing, preservation & production of fruit products	16,575,841	2.1	-	-	-	10,094,304	-	-
Farm machinery & equipment manufacturing	16,254,587	2.1	-	-	-	-	-	-
Tanning & dressing of leather	15,832,179	2.0	-	-	-	-	-	-
Crude vegetable oil manufacturing	13,780,342	1.8	-	-	-	-	-	-
Instant coffee manufacturing	13,072,418	1.7	-	-	-	-	-	-
Mixed production: crop & livestock farming	9,992,648	1.3	-	-	-	-	-	-
Manufacturing of cocoa and cocoa products, chocolate, candy & chewing gum	9,909,006	1.3	-	-	-	-	-	-
Wheat milling & wheat product manufacturing	9,344,578	1.2	-	-	-	-	-	-
Cotton spinning	9,232,972	1.2	-	-	-	9,232,972	-	-
Wineries	8,157,476	1.0	-	-	-	-	-	-
Condiments & other prepared sauces, spice & concentrates manufacturing	7,815,672	1.0	-	-	-	-	-	-
Growing of other permanent crops	7,693,157	1.0	-	-	-	-	1,852,324	-
Phosphate, nitrogen & potassium fertilizer manufacturing	7,112,118	0.9	-	-	-	-	-	-
Fruit & vegetable juice manufacturing	7,015,821	0.9	-	-	-	-	-	-
Manufacturing of machinery for food, beverage & tobacco processing	6,681,418	0.9	-	-	-	-	-	-
Grape growing	6,044,424	0.8	-	-	-	-	-	-
Growing of food grain crops	5,979,840	0.8	-	-	5,508,634	-	-	-
Other large animal production	5,963,170	0.8	-	-	-	-	-	-
Dairy product manufacturing	5,243,963	0.7	-	-	-	-	-	-
Manufacturing of prepared animal feeds	5,128,912	0.7	-	-	-	-	-	-
Processing, preservation & production of vegetable products	4,278,129	0.5	-	-	-	-	-	-
Forestry, logging & related activities	3,688,766	0.5	-	-	-	-	-	-

DETAILED TABLE 10.25 [ CONTINUED ]

## FINEP loans to agribusiness firms by state

Maranhão (R\$) (1)	Mato Grosso (R\$) (1)	Minas Gerais (R\$) (1)	Pará (R\$) (1)	Paraíba (R\$) (1)	Paraná (R\$) (1)	Pernambuco (R\$) (1)	Piauí (R\$) (1)	Rio de Janeiro (R\$) (1)	Rio Grande do Sul (R\$) (1)	Santa Catarina (R\$) (1)	São Paulo (R\$) (1)	Tocantins (R\$) (1)
9,143,555	5,946,277	46,189,904	3,276,865	2,844,041	37,933,879	40,186,770	703,230	56,799,947	29,692,379	105,152,259	311,691,764	14,954,273
1.2	0.8	5.9	0.4	0.4	4.9	5.1	0.1	7.3	3.8	13.4	39.9	1,9
-	-	7,035,237	-	-	-	-	-	11,076,266	5,064,289	84,458,201	66,305,953	-
-	-	-	-	2,844,041	-	-	703,230	12,939,861	-	-	122,351,735	-
9,143,555	5,408,485	4,760,687	-	-	-	-	-	3,956,309	-	-	-	14,954,273
-	-	-	-	-	9,604,602	-	-	-	-	-	41,811,564	-
-	-	-	-	-	-	-	-	-	-	-	1,700,950	-
-	-	19,246,368	-	-	4,644,357	1,912,690	-	-	-	-	-	-
-	-	-	-	-	1,481,536	-	-	-	-	5,035,199	4,906,826	-
-	-	-	-	-	-	-	-	14,730,866	-	-	-	-
-	-	-	-	18,759,813	-	-	-	-	-	-	2,366,808	-
-	-	-	-	-	6,481,537	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	1,099,341	5,214,540	9,940,706	-
537,792	10,822,029	-	-	-	-	-	4,472,357	-	-	-	-	-
-	-	-	-	-	9,278,584	-	-	4,501,758	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	13,072,418	-
-	-	-	-	-	5,021,569	-	35,617	-	-	-	4,935,462	-
-	-	-	-	-	-	-	-	-	-	-	9,909,006	-
-	-	-	-	-	5,993,159	-	-	-	3,351,419	-	-	-
-	-	-	-	-	-	-	-	-	-	-	8,157,476	-
-	-	-	-	-	-	-	-	-	-	-	7,815,672	-
-	-	-	-	-	-	-	229,488	-	5,611,345	-	-	-
-	-	-	-	-	-	-	-	-	-	-	7,112,118	-
-	-	-	-	-	-	-	7,015,821	-	-	-	-	-
-	-	-	-	-	-	-	-	2,397,805	4,283,613	-	-	-
-	-	-	-	-	6,044,424	-	-	-	-	471,205	-	-
-	-	-	-	-	-	-	-	-	-	-	5,963,170	-
-	-	-	-	-	1,575,901	-	-	-	-	-	3,668,063	-
3,486,414	-	-	-	-	-	-	-	1,642,499	-	-	-	-
-	-	565,867	-	234,470	-	-	-	3,477,791	-	-	-	-
-	-	-	-	3,688,766	-	-	-	-	-	-	-	-

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.25**  
**FINEP loans to agribusiness firms by state and CNAE class – Brazil, 1996-2006**

CNAE class	Total		Alagoas (R\$) (1)	Amazonas (R\$) (1)	Bahia (R\$) (1)	Ceará (R\$) (1)	Espírito Santo (R\$) (1)	Goiás (R\$) (1)
	R\$ (1)	%						
Growing of other temporary crops	2,980,969	0.4	-	-	-	-	-	-
Coffee roasting & grinding	2,524,700	0.3	-	-	-	-	-	-
Nursery, flower & ornamental plant production	2,395,308	0.3	-	-	-	-	-	-
Fluid milk manufacturing	2,069,444	0.3	-	-	-	-	591,681	-
Citrus fruit production	2,057,281	0.3	-	-	-	-	-	-
Alcohol production	1,670,830	0.2	-	-	-	-	-	-
Manufacturing of other food products	1,159,485	0.1	-	-	-	-	-	-
Processing, grinding & preparing other vegetable products	1,130,514	0.1	-	-	-	-	-	-
Manufacturing of biscuits, rusks & crackers	1,128,225	0.1	-	-	-	-	-	-
Vegetable starch & corn oil manufacturing	671,631	0.1	-	-	-	-	-	-
Pulp, paper & paper product machinery & equipment manufacturing	611,546	0.1	-	-	-	-	-	-
Bakery, confectionery & pastry product manufacturing	468,212	0.1	-	-	-	-	-	-
Seafood product preparation & preserving	390,784	0.0	-	-	-	-	-	-
Aquaculture & related services	286,861	0.0	-	-	-	286,861	-	-
Raising of other animals	234,232	0.0	-	-	-	-	-	-
Pasta manufacturing	155,392	0.0	-	-	-	-	-	-
Manufacturing, distilling, rectifying, homogenizing & blending of distilled alcoholic beverages	145,366	0.0	-	-	-	-	-	-

**Source:** FINEP.

**Note:** Data are available only for the states shown in the table.

(1) In 2006 constant *reais* (R\$) deflated by IPCA (IBGE).

**DETAILED TABLE 10.25 [ CONTINUED ]**

**Detailed Table 10.26**  
**Technical courses at agricultural colleges by type of course – São Paulo State, 2006**

Course	No. of technical courses at agricultural colleges
Total	72
Animal husbandry	12
Crop farming	12
Information technology	6
Forestry	5
Agroindustry	4
Environment	4
Rural business management	4
Tourism	3
Nursing	3
Pisciculture	3
Sugar & alcohol	3
Hotellery	2
Food	2
Administration	1
Tanning	1
Agricultural production, esp. fruit growing	1
Agricultural production, esp. plasticulture	1
Occupational safety	1
Surveying	1
Analysis & production of sugar & alcohol	1
Museology	1
Environmental management	1

Source: INEP/MEC.

**Detailed Table 10.27**  
**Undergraduate courses in agrarian sciences and related areas by administrative region – São Paulo State, 2006**

Administrative region	Undergraduate courses in agrarian sciences and related areas	
	Absolute nos.	%
Total	123	100.0
Campinas	22	17.9
São Paulo (metropolitan area)	19	15.4
Marília	12	9.8
São José do Rio Preto	12	9.8
Ribeirão Preto	10	8.1
Presidente Prudente	10	8.1
Sorocaba	8	6.5
Central	7	5.7
Franca	5	4.1
Barretos	4	3.3
Araçatuba	4	3.3
São José dos Campos	4	3.3
Baixada Santista (metropolitan area)	3	2.4
Bauru	2	1.6
Registro	1	0.8

Source: MEC.

**Detailed Table 10.28**  
**Undergraduate courses in agrarian sciences and related areas by municipality – São Paulo State, 2006**

Municipality	Undergraduate courses in agrarian sciences and related areas	
	Absolute nos.	%
<b>Total</b>	<b>123</b>	<b>100.0</b>
São Paulo	12	9.8
Fernandópolis	6	4.9
Campinas	5	4.1
Jaboticabal	5	4.1
Presidente Prudente	5	4.1
São José do Rio Preto	5	4.1
Marília	5	4.1
Adamantina	4	3.3
Ribeirão Preto	4	3.3
Botucatu	3	2.4
Ituverava	3	2.4
Avaré	3	2.4
Santos	3	2.4
Paraguaçu Paulista	3	2.4
Espírito Santo do Pinhal	3	2.4
Pirassununga	3	2.4
Jaguariúna	3	2.4
São Bernardo do Campo	3	2.4
Descalvado	3	2.4
Taubaté	2	1.6
Ourinhos	2	1.6
Garça	2	1.6
Ilha Solteira	2	1.6
São José dos Campos	2	1.6
Barretos	2	1.6
Piracicaba	2	1.6
Araras	2	1.6
Taquaritinga	2	1.6
São João da Boa Vista	1	0.8
Araçatuba	1	0.8
Sertãozinho	1	0.8
Braçaná Paulista	1	0.8
São Caetano do Sul	1	0.8
Guarulhos	1	0.8
Mogi das Cruzes	1	0.8
Dracena	1	0.8
Santo André	1	0.8

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.28**  
**Undergraduate courses in agrarian sciences and related areas by municipality – São Paulo State, 2006**

Municipality	Undergraduate courses in agrarian sciences and related areas	
	Absolute nos.	%
Itararé	1	0.8
Votuporanga	1	0.8
Andradina	1	0.8
São Carlos	1	0.8
Araraquara	1	0.8
Franca	1	0.8
Registro	1	0.8
Bauru	1	0.8
Barra Bonita	1	0.8
Sorocaba	1	0.8
Santa Bárbara d'Oeste	1	0.8
Olímpia	1	0.8
Bebedouro	1	0.8
Orlândia	1	0.8
Leme	1	0.8

Source: MEC.

**Detailed Table 10.29**  
**Undergraduate courses in agrarian sciences by higher education institution (HEI) and discipline – São Paulo State, 2006**

HEI	No. of undergraduate courses in agrarian sciences
<b>Universidade Estadual Paulista Júlio de Mesquita Filho – Unesp</b>	
Agronomy	4
Food engineering	1
Veterinary medicine	3
Animal science	4
<b>Universidade Camilo Castelo Branco – Unicastelo</b>	
Agronomy	3
Agribusiness management technology	2
Veterinary medicine	2
<b>Universidade de São Paulo – USP</b>	
Agricultural engineering	1
Food engineering	1
Licentiate degree (licenciatura) in agrarian sciences	1
Veterinary medicine	1
Animal health	1
Animal science	1
<b>Universidade de Marília – Unimar</b>	
Food technology	1
Agricultural engineering	1
Food engineering	1
Veterinary medicine	1
Animal science	1
<b>Universidade do Oeste Paulista – Unoeste</b>	
Agronomy	1
Sugar & alcohol production technology (professional areas: mfg, chemicals, mining)	1
Veterinary medicine	1
Animal science	1
<b>Universidade Paulista – Unip</b>	
Veterinary medicine	4
<b>Faculdades Adamantinenses Integradas – FAI</b>	
Agroindustrial management	1
Agronomy	1
Food engineering	1
Veterinary medicine	1
<b>Centro Regional Universitário de Espírito Santo do Pinhal – Unipinhal</b>	
Agricultural engineering	1
Food engineering	1
Veterinary medicine	1

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.29**  
**Undergraduate courses in agrarian sciences by higher education institution (HEI) and discipline –**  
**São Paulo State, 2006**

HEI	No. of undergraduate courses in agrarian sciences
<b>Faculdade de Jaguariúna – FAJ</b>	
Rural management	1
Food engineering	1
Veterinary medicine	1
<b>Escola Superior de Agronomia de Paraguaçu Paulista – Esapp</b>	
Agronomy	1
Agricultural engineering	1
Animal science	1
<b>Universidade Estadual de Campinas – Unicamp</b>	
Agricultural engineering	1
Food engineering (full time)	1
Food engineering (evening)	1
<b>Universidade Federal de São Carlos – UFSCAR</b>	
Agricultural engineering	1
Agroindustrial production engineering	1
<b>Centro Universitário do Norte Paulista – Unorp</b>	
Agribusiness	1
Sugar & alcohol production technology	1
<b>Universidade de Santo Amaro – Unisa</b>	
Veterinary medicine	2
<b>Universidade Anhembi Morumbi – UAM</b>	
Animal reproduction & artificial insemination technology (professional area: agriculture)	1
Veterinary medicine	1
<b>Universidade de Taubaté – Unitau</b>	
Agronomy	1
Food engineering	1
<b>Centro Universitário Moura Lacerda – CUML</b>	
Agronomy	1
Veterinary medicine	1
<b>Faculdade Doutor Francisco Maeda – Fafram</b>	
Agronomy	1
Veterinary medicine	1
<b>Faculdades Integradas de Fernandópolis – Fife</b>	
Sugar & alcohol production technology (professional areas: mfg, chemicals, mining)	1
Food engineering	1

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.29**  
**Undergraduate courses in agrarian sciences by higher education institution (HEI) and discipline –**  
**São Paulo State, 2006**

HEI	No. of undergraduate courses in agrarian sciences
Universidade Metropolitana de Santos – Unimes	
Food engineering	1
Veterinary medicine	1
<b>Faculdades Integradas de Ourinhos – FIO</b>	
Agronomy	1
Veterinary medicine	1
<b>Faculdades Unificadas da Fundação Educacional de Barretos – Unificadas FEB</b>	
Food engineering	1
Animal science	1
<b>Faculdade Eduvale de Avaré – Eduvale</b>	
Agribusiness	1
Agronomy	1
<b>Universities/colleges with 1 course</b>	<b>45</b>

Source: MEC.

**Detailed Table 10.30**  
**Post-graduate courses in agrarian sciences and related areas by administrative region –**  
**São Paulo State, 2006**

Administrative region	No. of post-graduate courses in agrarian sciences and related areas
Total	59
Campinas	21
São Paulo (metropolitan area)	12
Ribeirão Preto	11
Sorocaba	7
Araçatuba	2
Central	2
Presidente Prudente	2
São José do Rio Preto	1
Marília	1
Franca	-
Barretos	-
São José dos Campos	-
Baixada Santista (metropolitan area)	-
Bauru	-
Registro	-

Source: CAPES/CNPq.

**Detailed Table 10.31**  
**Estimated number of people employed in agriculture – São Paulo State, 1996-2006**

Survey months (1)	Estimated number of people employed in agriculture in SP			
	Residents (2)	Non-residents (2)	Mobile	Total
Change 2006/1996 (annual averages)	-32.7	2.4	7.8	-14.5
<b>1996</b>				
February	701,160	373,770	202,394	1,277,324
April	645,733	309,667	215,635	1,171,035
June	785,114	352,352	213,365	1,350,831
September	-	427,754	241,789	-
November	701,451	340,603	240,823	1,282,877
Average	708,365	360,829	222,801	1,270,517
<b>1997</b>				
February	624,451	354,362	168,645	1,147,458
April	606,773	311,206	157,416	1,075,395
June	725,254	343,537	294,286	1,363,077
September	-	389,220	229,405	-
November	605,307	358,086	190,513	1,153,906
Average	640,446	351,282	208,053	1,184,959
<b>1998</b>				
February	608,254	428,016	183,889	1,220,159
April	623,895	333,488	144,752	1,102,135
June	777,006	403,107	258,708	1,438,821
September	-	482,571	295,497	-
November	698,954	425,238	245,336	1,369,528
Average	677,027	414,484	25,636	1,282,661
<b>1999</b>				
February	659,076	423,212	154,353	1,236,641
April	585,884	362,423	174,497	1,122,804
June	736,889	404,043	212,662	1,353,594
September	-	278,977	305,237	-
November	674,016	435,796	269,190	1,379,002
Average	663,966	380,890	223,188	1,273,010
<b>2000</b>				
November	565,782	476,186	268,473	1,051,438
<b>2001</b>				
June	529,679	458,569	195,720	1,183,968
November	509,781	407,536	229,536	1,146,853
Average	519,730	433,053	212,628	1,165,411

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.31**  
**Estimated number of people employed in agriculture – São Paulo State, 1996-2006**

Survey months (1)	Estimated number of people employed in agriculture in SP			
	Residents (2)	Non-residents (2)	Mobile	Total
<b>2002</b>				
June	541,307	365,751	251,904	1,158,962
Novembro	572,872	430,695	256,880	1,260,447
<b>Average</b>	<b>557,090</b>	<b>398,223</b>	<b>254,392</b>	<b>1,209,705</b>
<b>2003</b>				
June	485,732	333,593	232,113	1,051,438
November	477,156	394,255	234,511	1,105,922
<b>Average</b>	<b>481,444</b>	<b>363,924</b>	<b>233,312</b>	<b>1,078,680</b>
<b>2004</b>				
June	476,736	392,093	181,307	1,050,135
November	432,362	420,350	205,825	1,058,537
<b>Average</b>	<b>454,549</b>	<b>406,221</b>	<b>193,566</b>	<b>1,054,336</b>
<b>2005</b>				
June	475,578	352,910	242,859	1,071,347
November	441,158	364,790	246,031	1,051,979
<b>Average</b>	<b>458,368</b>	<b>358,850</b>	<b>244,445</b>	<b>1,061,663</b>
<b>2006</b>				
June	465,015	346,090	244,688	1,055,793
November	488,370	392,973	235,750	1,117,093
<b>Average</b>	<b>476,693</b>	<b>369,531</b>	<b>240,219</b>	<b>1,086,443</b>

**Source:** Instituto de Economia Agrícola (IEA/APTA); Coordenadoria de Assistência Técnica Integral (Cati).

(1) Survey conducted by IEA only in June and November from 2001.

(2) Includes owner and family, sharecroppers, tenants, wage workers, jobbers etc.

**Detailed Table 10.32**  
**Main crop areas, production volumes and yields – São Paulo State, 1996-2006**

Main crops	1996			1997			1998			1999			2000			
	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area
Grand total (total area)	20,377	20,987			20,739			20,320			20,462			20,847		
Total (area planted)	6,174	6,203			6,329			6,272			6,295			6,440		
Sugarcane	2,816	186,824	78,332	2,872	194,799	79,493	2,886	199,683	78,515	2,756	193,374	78,123	2,829	189,391	76,040	3,009
Oranges	714	15,153	25,096	702	15,655	25,992	702	15,463	25,053	713	16,323	25,993	673	14,538	23,826	643
Maize	1,091	3,287	3,025	1,089	3,277	3,009	1,083	3,653	3,374	1,126	3,712	3,298	1,111	3,264	3,122	1,132
Coffee	195	193	1,112	202	165	947	230	246	1,353	245	224	1,173	268	217	1,025	250
Soybeans	490	1,029	2,099	480	1,087	2,267	526	1,026	1,950	516	1,326	2,569	539	1,202	2,231	529
Potatoes	28	530	19,146	29	592	20,433	29	640	22,100	31	677	21,574	30	680	22,952	29
Bananas	5	852	21,922	55	764	19,873	55	943	22,557	59	952	21,492	64	873	18,108	62
Limes	29	679	32,561	29	706	32,458	32	795	33,023	33	870	33,296	32	854	32,994	32
Tomatoes	14.85	823	55,398	14	760	52,780	15	807	54,892	13	749	57,386	12	755	62,053	11
Dry beans	191	196	1,032	216	246	1,137	209	264	1,262	255	317	1,239	198	243	1,226	209
Tangerines	20	570	34,574	25	714	37,631	26	721	34,553	26.83	789	35,672	27	820	35,677	25
Other crops (2)	535	3,042	6,127	488	3,439	7,625	536	3,717	7,434	496	3,739	8,210	514	3,652	7,787	509
Beef		793			973			986			1,004			1,010		
Chicken		832			1,006			1,023			1,009			1,000		
Milk (million liters)		2,231			2,041			1,885			1,832			1,914		
Eggs (million dozen)		650			736			761			779			695		
Pork		130			109			117			103			134		
Natural & cultivated pasture (3)	10,377	10,967			10,589			10,250			10,169			10,402		
Plantation forest (eucalyptus and pine)	915	881			881			868			891			898		
Natural forest, open/dense wooded savanna (cerrado/cerradão)	2,911	2,936			2,940			2,931			3,107			3,107		

Source: Instituto de Economia Agrícola (IEA/APTA).

(1) Production in metric tons. Yield calculated on the basis of area harvested.

(2) Includes 30 other crops covered by IEA for the purposes of calculating production by value. .

## Area, production &amp; yield

2001		2002		2003		2004		2005		2006		Change in area 2006/1996					
Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield				
20,836		21,189		21,585		21,720		21,804				7.00					
6,548		6,872		7,155		7,427		7,712				4.91					
201,683	78,509	3,118	212,707	79,937	3,313	227,981	80,913	3,414	241,725	81,885	3,673	254,810	81,654	4,258	284,917	82,903	51.2
13,391	23,169	661	14,761	25,150	664	13,347	22,777	673	14,719	25,034	672	14,369	25,006	660	14,215	25,410	-7.6
4,187	3,763	1,082	4,080	3,884	1,120	4,632	4,299	1,104	4,629	4,191	1,088	4,114	3,779	1,034	4,389	4,243	-5.2
175	828	250	280	1,246	249	170	749	241	249	1,103	238	201	907	234	283	1,300	20.2
1,364	2,583	584	1,578	2,736	635	1,669	2,659	788	1,878	2,383	820	1,676	2,044	692	1,578	2,281	41.0
644	22,262	31	727	23,049	34	791	23,518	32	748	23,192	34	784	23,025	32	751	23,848	14.0
940	20,479	63	979	20,649	59	971	20,766	57	986	21,698	54	958	22,247	58	986	21,719	14.8
875	33,771	31	916	36,015	30	924	35,928	31	967	35,938	31	973	35,962	31	1,005	35,915	7.3
653	58,991	12	766	64,241	12	765	63,158	12	703	59,184	13	803	61,941	13	833	62,883	-10.9
295	1,412	216	302	1,396	221	310	1,404	200	299	1,493	165	247	1,492	183	291	1,586	-3.9
794	35,293	23	789	37,996	23	745	36,624	22	756	36,449	22	743	36,841	21	699	36,521	2.3
3,913	8,234	477	3,686	8,223	512	3,494	7,354	580	3,987	7,438	616	4,104	7,173	496	3,736	8,218	-7.3
1,032			1,077			1,109			1,112			1,109			1,102		
1,244			1,029			1,053			1,125			1,188			1,129		
1,942			1,965			1,894			1,962			2,099			2,092		
800			759			780			825			879			928		
149			137			134			139			146			137		
10,148		10,163		10,180		10,086		9,777				-5.8					
928		945		1,045		1,089		1,120				22.5					
3,211		3,208.75		3,205		3,118		3,194				9.8					

**Detailed Table 10.33**  
**USPTO agricultural patents granted to and applications filed by Brazilian institutions and individuals by applicant – Brazil, 1996-2006**

Applicant	State of Brazil/ Country	Patents issued	Applica- tions filed
<b>Grand total</b>		138	43
<b>Subtotal Residents</b>		25	11
<b>Subtotal Non-residents</b>		103	12
<b>Individuals</b>		12	22
Unknown	-	12	22
<b>Research institutions &amp; universities</b>		14	9
Cornell Research Foundation; Embrapa	USA; DF	1	-
Embrapa; Ecole Nationale du Genie Rural des Eaux et des Forets-Engref	DF; France	1	-
North Carolina State University	USA	2	-
Queen's University at Kingston	Canada	2	-
Regents of the University of Minnesota	USA	1	-
Rutgers, The State University of New Jersey	USA	1	-
University of Florida	USA	2	-
CropDesign N.V.; Federal University of Rio de Janeiro (UFRJ)	Belgium; RJ	-	1
Embrapa	DF	4	3
Fundação Oswaldo Cruz - Fiocruz	RJ	-	2
Fundação Zerbini	SP	-	1
Federal University of Rio de Janeiro (UFRJ)	RJ	-	1
University of California; Secretary of Agriculture of USA	USA; USA	-	1
<b>Private institutions</b>		112	12
Advanta Seeds, B.V. (Kapelle, NL)	Netherlands	1	-
American Cyanamid Company (Madison, NJ)	USA	2	-
Annes Participações (Portão RS, BR)	RS	1	-
Arvesta Corporation (San Francisco, CA)	USA	1	-
Athena Mudas Ltda., A Brazilian Corporation (São José do Rio Preto, BR)	SP	6	-
BASF Aktiengesellschaft (Ludwigshafen, DE)	Germany	7	2
Bayer Aktiengesellschaft (Leverkusen, DE)	Germany	47	1
Bayer Aktiengesellschaft (Leverkusen, DE); Nihon Bayer Agrochem, K.K. (Tokyo, JP)	Germany; Japan	4	-
Bayer Aktiengesellschaft (Leverkusen, DE); Forschungszentrum Juelich GmbH (Juelich, DE)	Germany; Germany	1	-
Case Corporation (Racine, WI)	USA	1	-
Cornell Research Foundation, Inc. (Ithaca, NY)	USA	2	-
Justino de Moraes Irmãos S/A	SP	1	-
Deere & Company (Moline, IL)	USA	1	-
Dow AgroSciences LLC (Indianapolis, IN)	USA	1	-
Eli Lilly and Company (Indianapolis, IN)	USA	1	-
Johnson & Johnson Vision Care, Inc. (Jacksonville, FL)	USA	1	-
J-Star Industries, Inc. (Ft. Atkinson, WI)	USA	1	-

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.33**  
**USPTO agricultural patents granted to and applications filed by Brazilian institutions and individuals by applicant – Brazil, 1996-2006**

Applicant	State of Brazil/ Country	Patents issued	Applica- tions filed
Lever Brothers Company (New York, NY)	USA	1	-
Máquinas Agrícolas Jacto S.A. (Pompéia, BR)	SP	7	-
Marchesan Implementos e Máquinas Agrícolas Tat S/A (São Paulo, BR)	SP	1	-
Nestec S.A. (Vevey, CH)	Switzerland	1	-
Novartis AG (Basel, CH)	Switzerland	2	-
Pioneer Hi-Bred International, Inc. (Johnson, IA)	USA	4	-
Quinta das Flores AgroExportadora Ltda. (Fortaleza, CE, BR)	CE	1	-
Rhone-Poulenc Agriculture Ltda. (Ongar, GB)	U.K.	1	-
S. C. Johnson & Son, Inc (Racine, WI)	USA	1	-
Sandoz Ltd. (Basel, CH)	Switzerland	8	-
Sod Solutions, Inc. (Mt. Pleasant, SC)	USA	2	-
Suzano Bahia Sul Papel e Celulose S.A. (Bahia, BR)	BA	1	-
Syngenta Participations AG (Basel, CH)	Switzerland	2	-
Twyford International (Santa Paula, CA)	USA	1	-
Arvesta Corporation	USA	-	1
Cheminova A/S	Denmark	-	2
CropDesign N.V	Belgium	-	2
Ostrolenk Faber	USA	-	1
Rota Indústria de Máquinas Agrícolas Ltda.	PR	-	2
Sayyou Brasil Indústria e Comércio Ltda.	SP	-	1

**Source:** USPTO.

**Note:** The existence of co-patentees leads to some repetitions, which have been excluded from the above figures.

**Detailed Table 10.34**  
**INPI agricultural patent applications, patents granted, dismissals and other decisions – Brazil, 1996-2006**

Simplified decision	INPI agricultural patent applications, patents granted, dismissals & other decisions										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Dismissals (1)	106	79	85	59	50	37	35	24	8	-	-
Applications (2)	11	18	37	81	124	150	278	341	409	383	200
Patents granted (3)	77	72	43	46	61	59	15	-	-	1	-
Other (4)	5	15	1	2	1	-	-	-	1	-	-

**Source:** INPI.

**Note:** Dates refer to application filing.

(1) Decision codes: 3.5; 3.6; 6.1; 8.6; 9.2; 10.1; 11.1; 11.1.1; 11.2; 11.3; 11.4; 11.5; 11.6; 11.14; 11.5; 15.7 e 23.6.

(2) Decision codes: 1.3; 1.3.1; 2.1; 2.4; 3.1; 3.2; 3.8; 6.7; 7.1; 8.7; 8.8; 12.2; 12.6; 15.11; 15.12; 15.14; 15.21; 19.1; 25.1 e 25.11.

(3) Decision codess: 9.1; 16.1; 23.9; 24.4 e 25.7.

(4) Decision codes 1.2.1; 17.1; 22.15; 24.5 other.

**Detailed Table 10.35**  
**INPI agricultural patents and applications by type – Brazil, 1996-2006**

Patents & applications	INPI agricultural patents and applications by type			
	Invention patents	Utility models	Certificates of addition	Total
<b>Patents – Total</b>	327	44	3	374
1996	72	5	-	77
1997	67	5	-	72
1998	39	3	1	43
1999	36	10	-	46
2000	54	6	1	61
2001	52	7	-	59
2002	7	8	-	15
2003	-	-	-	-
2004	-	-	-	-
2005	-	-	1	1
2006	-	-	-	-
<b>Applications – Total</b>	1,758	260	14	2,032
1996	7	4	-	11
1997	17	1	-	18
1998	37	-	-	37
1999	80	1	-	81
2000	121	3	-	124
2001	144	6	-	150
2002	253	24	1	278
2003	293	48	-	341
2004	340	65	4	409
2005	317	62	4	383
2006	149	46	5	200

**Source:** INPI.

**Note:** Dates refer to application filing.

**Detailed Table 10.36**  
**INPI agricultural patent applications and patents granted by origin of applicant – Brazil, 1996-2006 (1)**

Year	INPI agricultural patent applications and patents granted by origin of applicant													
	Total		Brazil		USA		Germany		Japan		Other developed economies (2)		Other developing economies (3)	
	Applica-tions	Patents	Applica-tions	Patents	Applica-tions	Patents	Applica-tions	Patents	Applica-tions	Patents	Applica-tions	Patents	Applica-tions	Patents
<b>Total</b>	1,888	374	739	118	526	187	253	38	50	4	291	26	29	1
<b>% do total</b>	100.0	100.0	39.1	31.6	27.9	50.0	13.4	10.2	2.6	1.1	15.4	7.0	1.5	0.3
1996	11	77	4	11	6	33	1	20	-	3	-	10	-	-
1997	17	72	5	15	12	40	-	6	-	1	-	9	-	1
1998	37	43	2	16	13	20	9	3	4	-	8	4	1	-
1999	80	46	10	25	24	16	17	5	2	-	26	-	1	-
2000	123	61	23	26	45	32	17	2	12	-	23	1	3	-
2001	149	59	25	16	51	39	25	2	5	-	38	2	5	-
2002	275	15	88	8	85	7	47	-	11	-	42	-	2	-
2003	338	0	109	-	100	-	65	-	11	-	48	-	5	-
2004	384	0	185	-	89	-	58	-	4	-	41	-	7	-
2005	337	1	195	1	62	-	13	-	1	-	63	-	3	-
2006	137	0	93	-	39	-	1	-	-	-	2	-	2	-

**Source:** INPI.

(1) Individual applicants and assignees not included (no location identified).

(2) Other developed economies: Australia, Belgium, Canada, Denmark, Finland, France, Hungary, Israel, Italy, Netherlands, New Zealand, Spain, Sweden, Switzerland, United Kingdom.

(3) Other developing economies: Angola, Argentina, Bahamas, Chile, China, Colombia, Cuba, Cayman Islands, Malaysia, Mexico, Panama, Russia, South Africa, South Korea, Uruguay.

**Detailed Table 10.37**  
**INPI agricultural resident patents by state – Brazil, 1996-2006**

State	Share of total (%)	INPI agricultural resident patents by state											
		Total	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Total</b>	<b>100.0</b>	<b>1,006</b>	<b>57</b>	<b>54</b>	<b>48</b>	<b>54</b>	<b>61</b>	<b>44</b>	<b>99</b>	<b>114</b>	<b>187</b>	<b>196</b>	<b>92</b>
São Paulo (SP)	40.0	402	26	25	23	26	24	13	52	34	69	76	34
Rio Grande do Sul (RS)	28.4	286	9	5	4	16	16	18	20	54	65	57	22
Federal District (DF)	9.1	92	5	10	6	6	14	9	9	9	4	9	11
Paraná (PR)	6.0	60	6	4	3	1	3	-	6	5	12	14	6
Minas Gerais (MG)	5.1	51	3	3	5	1	2	1	3	3	13	11	6
Santa Catarina (SC)	5.0	50	4	3	-	1	-	2	4	5	12	15	4
Rio de Janeiro (RJ)	1.5	15	1	-	1	1	-	1	1	1	2	4	3
Goiás (GO)	1.1	11	1	-	-	-	-	-	-	-	3	4	3
Ceará (CE)	0.9	9	-	1	2	1	-	-	1	1	3	-	-
Bahia (BA)	0.5	5	-	-	1	-	-	-	-	1	1	-	2
Pernambuco (PE)	0.5	5	-	-	1	1	1	-	-	1	1	-	-
Mato Grosso (MT)	0.4	4	-	-	-	-	-	-	2	-	-	2	-
Mato Grosso do Sul (MS)	0.3	3	-	2	-	-	-	-	-	-	-	1	-
Paraíba (PB)	0.3	3	-	-	-	-	-	-	-	-	2	-	1
Espírito Santo (ES)	0.2	2	1	1	-	-	-	-	-	-	-	-	-
Pará (PA)	0.2	2	1	-	1	-	-	-	-	-	-	-	-
Rio Grande do Norte (RN)	0.2	2	-	-	-	-	-	-	-	-	-	2	-
Tocantins (TO)	0.2	2	-	-	-	-	1	-	1	-	-	-	-
Alagoas (AL)	0.1	1	-	-	1	-	-	-	-	-	-	-	-
Amazonas (AM)	0.1	1	-	-	-	-	-	-	-	-	-	1	-

Source: INPI.

Note: Individual applicants and assignees not included (no location identified).

**Detailed Table 10.38**  
**Protected plant varieties by first-named applicant – Brazil, 1998-2007**

Rank	No. of protected plant varieties by first-named applicant	
	Applicant	No.
<b>Total</b>		<b>1,073</b>
1	Embrapa (1)	292
2	Monsoy Ltda.	105
3	Coodetec	50
4	Copersucar	29
5	Naturalle Agromercantil S/A	22
6	Fundacep Fecotrigo	21
7	Du Pont do Brasil S.A. - Divisão Pioneer Sementes	20
8	Federal University of Viçosa	18
9	Fgb B.V. Fides Goldstock Breeding	17
10	Lux Riviera S.R.L.	17
11	D & PI Technology Holding Company, Llc.	15
12	Instituto Agronômico do Paraná (Iapar)	15
13	OR Melhoramento de Sementes Ltda.	14
14	Rosen Tantau, Mathias Tantau Nachfolger	14
15	Federal University of São Carlos	14
16	Hzpc Holland B.V.	13
17	Bretagne-Plants	12
18	Centro de Tecnologia Canavieira (CTC)	12
19	Fundação MT	11
20	Koppe Royalty B.V.	11
21	Preesman Royalty B.V.	11
22	Seminis Vegetable Seeds Inc.	11
23	Sakata Seed Sudamerica Ltda.	10
24	Agrico/Castrolanda	9
25	Agro Norte Pesquisas Ltda.	9
26	Francisco Terasawa	9
27	Nidera S. A.	9
28	Syngenta Seeds Ltda.	9
29	Mak't Zand B. V.	8
30	Rijnplant B. V.	8
31	Anglo Netherlands Grains B.V.	7
32	CM Sementes Biotecnologia e Comércio Ltda.	7
33	Epagri	7
34	Instituto Rio Grandense do Arroz (Irga)	7
35	Könst Breeding B.V.	7
36	Pioneer Overseas Corporation	7
37	Federal University of Alagoas	7

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.38**  
**Protected plant varieties by first-named applicant – Brazil, 1998-2007**

Rank	No. of protected plant varieties by first-named applicant	
	Applicant	No
38	Germicopa S/A	6
39	IAC/APTA	6
40	Meiland International S.A.	6
41	The Regents of The University of California – Office of Technology Transfer, University of California	6
42	Agência Rural	5
43	Aracruz Celulose S.A.	5
44	Epamig/Ufv/Fapemig	5
45	FT - Pesquisa e Sementes Ltda.	5
46	Fundação Mt/Unisoja	5
47	International Paper do Brasil Ltda.	5
48	Knud Jepsen A/S	5
49	Lex Voorn Rozenveredeling Bv	5
50	Nascente Empreendimentos e Participações Ltda.	5
51	Sande B.V.	5
52	Votorantim Celulose e Papel S/A	5
53	Yoder Brothers, Inc.	5
54	Alexander Jozef Voorn	4
55	Associados don Mario S.A.	4
56	Coopadap	4
57	Corn Bak B.V.	4
58	De Ruiter`S Nieuwe Rozen B. V.	4
59	Piet Schreurs Holding B.V.	4
60	Ricetec Ag	4
61	Agropalha Ltda.	3
62	Anthura B.V.	3
63	Comércio e Indústria Matsuda Importadora e Exportadora Ltda.	3
64	Dow Agrosciences Industrial Ltda.	3
65	Gie - Station de Recherche Du Comite Nord	3
66	Grocep	3
67	Sun World International, Llc.	3
68	Suzano Papel e Celulose S.A.	3
69	The Horticulture and Food Institute of New Zealand Limited	3
70	The United States of America, Secretary of Agriculture	3
71	Ademir dos Santos Amaral	2
72	Bayer Cropscience Gmbh	2
73	Bs - Genética e Melhoramento Ltda.	2
74	C. Meijer Bv	2

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.38**  
**Protected plant varieties by first-named applicant – Brazil, 1998-2007**

Rank	No. of protected plant varieties by first-named applicant	
	Applicant	No.
75	Centro Internacional de Agricultura Tropical	2
76	Epagri/Embrapa	2
77	Fundação Estadual de Pesquisa Agropecuária (Fepagro)	2
78	Grannar Sementes e Pesquisas Ltda.	2
79	Itograss Agrícola Ltda.	2
80	Kiku Srl Gmbh	2
81	L D Melhoramento de Plantas Ltda.	2
82	Odílio Balbinotti	2
83	Seed Source Incorporated	2
84	Stora Enso Arapoti Empreendimentos Agrícolas Ltda.	2
85	Terra Nigra Holding B.V.	2
86	The State Of Western Australia/Grains Research Development Corporation	2
87	Federal University of Uberlândia	2
88	W. Kordes' Söhne Rosenschule Gmbh & Co. Kg	2
89	Agropav Agropecuária Ltda.	1
90	Astee Flowers Bv	1
91	Bayer Cotton Seed International	1
92	Bramixe, S.A. de C.V.	1
93	Brookfield New Zealand Ltd.	1
94	C.I.V. Consorzio Italiano Vivaisti	1
95	CDB - Consortium Deutscher Baumschulen Gmbh	1
96	Commonwealth Scientific And Industrial Research Organization	1
97	Coodetec/Fundacep Fecotrigó	1
98	de Ruiter Intellectual Property Bv	1
99	Dekker Breeding B. V.	1
100	Del Monte Fresh Produce International Inc.	1
101	Dole Food Company, Inc.	1
102	Epamig/Ufv/Coopadap	1
103	Epamig/Ufv/Fepamig/Coopadap	1
104	Escola Superior de Agricultura Luiz de Queiroz	1
105	Fundação Agrária de Pesquisa Agropecuária - Fapa	1
106	Fundacep Fecotrigó/Fapa	1
107	Genvar Vitro B.V.	1
108	Harleigh Cecil Mason e Ashley Graham Mason	1
109	Jânio José Seccón	1
110	José Fernando Martins Borges	1
111	Kapteyn Breeding Bv	1

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.38**  
**Protected plant varieties by first-named applicant – Brazil, 1998-2007**

Rank	No. of protected plant varieties by first-named applicant	
	Applicant	No.
112	Olij Innovation Bv	1
113	Pépinières et Roseraies Georges Delbard S.A.	1
114	Saka-Ragis Pflanzenzucht Gba	1
115	Santa Helena Sementes Ltda.	1
116	The China National Hybrid Rice Ressearch & Development Center - Hhrrc	1
117	Federal University of Rio Grande do Sul	1
118	Usina da Barra S/A Açúcar e Álcool	1
119	World Breeding B. V.	1

**Source:** Ministry of Agriculture, Serviço Nacional de Proteção de Cultivares (SNPC).

**Note:** Includes provisional certificates. Data without repetition.

(1) Embrapa is co-grantee for 11 varieties with Empaer-MS; 8 varieties with Agência Rural de Goiás; 6 varieties with Epamig and Agropecuária Boa Fé; 5 varieties with Agência Rural and CTPA; 4 varieties with Emater-GO/Agrosem; 4 varieties with Epamig; 4 varieties with Fundação MT; 1 variety with EBDA; 1 variety with Fepagro; 1 variety with Fundação MT/CTPA; 1 variety with UFLA/EPAMIG; and 1 variety with UFLA.

**Detailed Table 10.39**  
**Origin of owners of rights to protected plant varieties – Brazil, 1998-2007**

Grantee's origin	Protected plant varieties	
	Absolute nos.	%
<b>Total</b>	<b>1.073</b>	<b>100.0</b>
Federal District (DF, Brazil)	294	27.4
Other countries (1)	278	25.9
São Paulo (SP)	209	19.5
Rio Grande do Sul (RS)	83	7.7
Paraná (PR)	82	7.6
Minas Gerais (MG)	66	6.2
Mato Grosso (MT)	31	2.9
Santa Catarina (SC)	10	0.9
Alagoas (AL)	7	0.7
Espírito Santo (ES)	5	0.5
Goiás (GO)	5	0.5
Bahia (BA)	3	0.3

**Source:** Ministry of Agriculture, Serviço Nacional de Proteção de Cultivares (SNPC).

**Note:** Includes provisional certificates.

(1) Netherlands (131), USA (48), France (31), Italy (20), Germany (17), Argentina (13), Denmark (5), New Zealand (4), Australia (4), Colombia (2), China (1), Mexico (1).

**Detailed Table 10.40**  
**Protected plant varieties by crop – São Paulo State, 1998-2007**

Crop	No. of protected varieties										
	Total	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Total</b>	<b>209</b>	<b>18</b>	<b>23</b>	<b>17</b>	<b>15</b>	<b>23</b>	<b>27</b>	<b>14</b>	<b>9</b>	<b>37</b>	<b>26</b>
Soya	113	10	6	16	12	10	14	12	1	23	9
Sugarcane	63	7	17	1	3	7	7	1	5	7	8
Eucalyptus	10	-	-	-	-	2	3	-	-	-	5
Lettuce	9	-	-	-	-	1	1	-	1	4	2
Maize	3	-	-	-	-	-	-	-	-	3	-
Emerald zoysia	2	-	-	-	-	2	-	-	-	-	-
Rice	2	1	-	-	-	1	-	-	-	-	-
Guinea grass	2	-	-	-	-	-	2	-	-	-	-
Pea	2	-	-	-	-	-	-	-	-	-	2
Cotton	1	-	-	-	-	-	-	-	1	-	-
Sorghum	1	-	-	-	-	-	-	-	1	-	-
Macrotyloma	1	-	-	-	-	-	-	1	-	-	-

Source: Ministry of Agriculture, Serviço Nacional de Proteção de Cultivares (SNPC).

**Detailed Table 10.41**  
**Owners of rights to protected plant varieties by crop – São Paulo State, 1998-2007**

Grantee & crop	Absolute nos.
Total	209
Monsoy Ltda.	
Soya	105
Copersucar	
Sugarcane	29
Federal University of São Carlos	
Sugarcane	14
Centro de Tecnologia Canavieira (CTC)	
Sugarcane	12
Sakata Seed Sudamerica Ltda.	
Lettuce	8
Pea	2
Syngenta Seeds Ltda.	
Soya	8
Cotton	1
IAC/APTA	
Sugarcane	6
International Paper do Brasil Ltda.	
Eucalyptus	5
Votorantim Celulose e Papel S/A	
Eucalyptus	5
Dow AgroSciences Industrial Ltda.	
Maize	3
Bayer Cropscience GmbH	
Rice	2
Comércio e Indústria Matsuda Importadora e Exportadora Ltda.	
Guinea grass	2
Macrotyloma	1
Itograss Agrícola Ltda.	
Emerald zoysia	2
Agropav Agropecuária Ltda.	
Sugarcane	1
Escola Superior de Agricultura Luiz de Queiroz	

( CONTINUES ON NEXT PAGE )

**Detailed Table 10.41**  
**Owners of rights to protected plant varieties by crop – São Paulo State, 1998-2007**

Grantee & crop	Absolute nos.
Lettuce	1
José Fernando Martins Borges	
Sorghum	1
Usina da Barra S/A Açúcar e Álcool	
Sugarcane	1

Source: Ministry of Agriculture, Serviço Nacional de Proteção de Cultivares (SNPC).

**Detailed Table 10.42**  
**Protected plant varieties by state and legal representative – Brazil, 1998-2007**

Grantee's legal representative	No. of protected plant varieties by state						
	Total	São Paulo	Minas Gerais	Rio de Janeiro	Rio Grande do Sul	Paraná	Unidentified
<b>Total</b>	<b>278</b>	<b>164</b>	<b>49</b>	<b>29</b>	<b>27</b>	<b>8</b>	<b>1</b>
Cultivar Protection Ltda.	53	53	-	-	-	-	-
Gerardus W.A. van der Spek	22	22	-	-	-	-	-
Sílvia Regina Patrício Sartorelli Van Rooijen	20	20	-	-	-	-	-
Tácio Godoy Feldner	16	-	16	-	-	-	-
Paulo Cesar Canci	15	-	15	-	-	-	-
Andreatata Sementes Ltda.	13	13	-	-	-	-	-
Cesar Mauricio Torres Martinez	12	12	-	-	-	-	-
Márcio de Assis - Multiplanta	12	-	12	-	-	-	-
Clarke Modet Propriedade Intelectual Ltda.	12	-	-	12	-	-	-
Clarice Bocchese da Cunha Simm	11	-	-	-	11	-	-
Alessandra Maria Elias	11	11	-	-	-	-	-
Abraham Margossian	9	9	-	-	-	-	-
Paulo Popp Consultoria Agrícola Ltda.	8	-	-	-	-	8	-
Dannemann, Siemsen, Bigler & Ipanema Moreira	7	-	-	7	-	-	-
Márcio Ferreira Pelegrini	6	-	6	-	-	-	-
Flávia Maria Vasconcelos Pereira	6	-	-	6	-	-	-
Ricardo de Santo	5	-	-	-	-	5	-
Flora Brasiliæ Ltda.	5	-	-	-	-	5	-
Brasmax Genética Ltda.	4	-	-	-	-	4	-
Johannes Jacobus Maria Zuijderwijk	4	4	-	-	-	-	-
Araripe & Associados	3	-	-	3	-	-	-
Felipe Moraes Gallardo	2	2	-	-	-	-	-
Adriano Antonio Gervásio van Vliet	2	2	-	-	-	-	-
Regina Duarte Perez	2	2	-	-	-	-	-
Syngenta Seeds Ltda.	2	2	-	-	-	-	-
Antonio Adalberto Kaupert Junio	2	2	-	-	-	-	-
Mario Edson Franca Barros	2	2	-	-	-	-	-
Símbolo Marcas e Patentes Ltda.	1	1	-	-	-	-	-
Rice Tec Sementes Ltda.	1	-	-	-	-	1	-
Tinoco Soares & Filho Ltda.	1	1	-	-	-	-	-
Agro Industrial Lazzeri Ltda.	1	-	-	-	-	1	-
Eduardo Alfred Taleb Boulos	1	1	-	-	-	-	-
Carlos de Lena	1	1	-	-	-	-	-
Lucimar Aparecida Roque	1	1	-	-	-	-	-
Marcos Barbosa Pinto	1	1	-	-	-	-	-
Denis Lima	1	1	-	-	-	-	-
Wolf Seeds do Brasil S/A	1	1	-	-	-	-	-
Momsem, Leonards & Cia.	1	-	-	1	-	-	-
Antonio Carlos de Almeida	1	-	-	-	-	-	1

Source: Ministry of Agriculture, Serviço Nacional de Proteção de Cultivares (SNPC).

**Detailed Table 10.43**  
**Publications in agrarian sciences indexed by Web of Science – São Paulo State, 1996-2006**

Year	Publications in agrarian sciences indexed by Web of Science			
	Absolute nos.	Total	% cumulative	Increase on 1996 (%)
Total	890	100.0	-	-
1996	34	3.8	3.8	
1997	43	4.8	8.7	26.5
1998	51	5.7	14.4	50.0
1999	56	6.3	20.7	64.7
2000	60	6.7	27.4	76.5
2001	63	7.1	34.5	85.3
2002	81	9.1	43.6	138.2
2003	90	10.1	53.7	164.7
2004	136	15.3	69.0	300.0
2005	144	16.2	85.2	323.5
2006	132	14.8	100.0	288.2

Source: *Web of Science*.

**Detailed Table 10.44**

São Paulo researcher co-authorship of articles in agrarian sciences indexed by *Web of Science* with foreign researchers by main country – São Paulo State, 1996–2006

Main co-author country	São Paulo researcher co-authorship of articles in agrarian sciences indexed by <i>Web of Science</i>	
	Absolute nos.	% articles (1)
Brazil (2)	1,625	-
USA	123	13.8
France	35	3.9
Spain	24	2.7
Germany	23	2.6
U.K.	21	2.4
Italy	16	1.8
Canada	11	1.2
Australia	11	1.2
Argentina	11	1.2
Senegal	7	0.8
Portugal	7	0.8
Netherlands	5	0.6
Belgium	4	0.4
Kenya	4	0.4
South Africa	4	0.4
Indonesia	3	0.3
Congo	3	0.3
Venezuela	3	0.3
Chile	3	0.3
Sweden	2	0.2
Cuba	2	0.2
New Zealand	2	0.2
Japan	2	0.2
Burkina Faso	2	0.2
Nigeria	2	0.2
India	1	0.1
Austria	1	0.1
Croatia	1	0.1
Peru	1	0.1
Israel	1	0.1
Tunisia	1	0.1
Bulgaria	1	0.1
French Guiana	1	0.1
Switzerland	1	0.1
Greece	1	0.1
Uruguay	1	0.1
Benin	1	0.1
Blank	34	3.8
Other	17	1.9

Source: *Web of Science*.

Note: See Detailed Table 10.45.

(1) Percentage calculated on basis of total number of articles by São Paulo researchers without repetition (890).

(2) Articles co-authored by researchers at Brazilian institutions.

**Detailed Table 10.45**

São Paulo researcher articles indexed by *Web of Science* and published domestically or internationally by Qualis journal classification – São Paulo State, 1996-2006

Qualis classification	São Paulo researcher articles indexed by <i>Web of Science</i> and published domestically or internationally					
	Total		Published			
	Absolute nos.	%	Internationally	Nationally	Locally	Not classified
Total (absolute nos.)	890	100.0	635	131	1	123
Total (%)	100.0		71.3	14.7	0.1	13.8
A	761	85.5	634	126	1	-
B	5	0.6	-	5	-	-
C	1	0.1	1	-	-	-
Not classified	123	13.8	-	-	-	123

Source: *Web of Science*.

**Detailed Table 10.46**

São Paulo research groups, researchers, students, technicians and lines of research in agrarian sciences as share of national total for same knowledge area – São Paulo State, 2000-2006 (1)

Year (1)	São Paulo's share of national research in agrarian sciences (%)				
	Groups	Research lines	Researchers	Students	Technicians
2000	26.8	25.8	28.3	27.1	35.9
2002	28.7	30.3	30.8	38.3	32.6
2004	23.8	13.7	40.7	24.0	27.9
2006	22.6	13.3	41.9	21.3	27.3

**Source:** CNPq (Research Group Directory Censuses 2000, 2002, 2004, 2006).

**Note:** Double counting occurred in general with regard to numbers of researchers, students and technicians, as individuals participating in more than one research group were computed more than once.

(1) Census years.

**Detailed Table 10.47**  
**São Paulo research groups, researchers, students, technicians and lines of research in agrarian sciences by group's predominant knowledge subarea – São Paulo State, 2000-2006 (1)**

Knowledge subarea	2000					2002					2004					2006				
	Groups	Research lines	Researchers	Students	Technicians	Groups	Research lines	Researchers	Students	Technicians	Groups	Research lines	Researchers	Students	Technicians	Groups	Research lines	Researchers	Students	Technicians
<b>Total</b>	362	1,468	2,951	1,687	1,313	475	2,217	3,781	2,642	1,154	475	2,217	3,781	2,642	1,154	462	2,321	4,160	2,889	1,120
Agronomy	118	588	1,408	642	607	153	829	1,594	852	522	153	829	1,594	852	522	163	924	1,847	1,012	556
Food science & technology	74	273	383	405	180	101	417	571	563	201	101	417	571	563	201	93	400	583	534	189
Agricultural engineering	20	62	137	176	39	26	94	214	184	49	26	94	214	184	49	25	95	213	178	42
Veterinary medicine	71	239	462	296	154	95	343	591	489	169	95	343	591	489	169	88	352	616	568	158
Forest resources & forest engineering	23	65	96	30	64	23	99	109	96	44	23	99	109	96	44	19	111	127	106	41
Fishery resources & fishery engineering	19	80	157	31	57	21	111	243	158	35	21	111	243	158	35	19	97	234	204	33
Animal science	37	161	308	107	212	56	324	459	300	134	56	324	459	300	134	55	342	540	287	101

Source: CNPq (Research Group Directory Censuses 2000, 2002, 2004, 2006).

Note: Double counting occurred in general with regard to numbers of researchers, students and technicians, as individuals participating in more than one research group were computed more than once..

(1) Census years.

**Detailed Table 10.48**  
**Researchers and other staff at state agricultural research organizations (SAROs) and Embrapa by category – Brazil, 2001-2003**

Employee category	No. of active employees		
	2001	2002	2003
<b>Grand total</b>	12,337	12,348	12,109
Researchers	3,086	3,158	3,127
Staff	9,251	9,190	8,982
<b>Embrapa</b>	7,268	7,439	7,339
Researchers	1,870	1,968	1,963
Staff	5,398	5,471	5,376
<b>APTA + other SAROs</b>	5,069	4,909	4,770
<b>APTA</b>	2,755	2,553	2,397
Researchers	651	639	592
Staff	2,104	1,914	1,805
<b>Other SAROs</b>	2,314	2,356	2,373
Researchers	565	551	572
Staff	1,749	1,805	1,801

Source: Embrapa (Dept. of Management & Strategy); Gonçalves, Junqueira & Barros Filho (2004); CGEE (2006).

SAROs = state agricultural research organizations.

APTA: São Paulo State Agency for Agribusiness Technology..

**Detailed Table 10.49**  
**Embrapa and APTA staff in active service by category – São Paulo State, 1996-2003**

Employee category	No. of active employees							
	1996	1997	1998	1999	2000	2001	2002	2003
<b>Grand total</b>	<b>3,832</b>	<b>3,494</b>	<b>3,391</b>	<b>3,349</b>	<b>3,296</b>	<b>3,170</b>	<b>3,012</b>	<b>2,856</b>
Researchers	954	862	845	827	820	806	799	750
Other staff	2,878	2,632	2,546	2,522	2,476	2,364	2,213	2,106
Ratio of other staff to researchers	3.0	3.1	3.0	3.0	3.0	2.9	2.8	2.8
<b>APTA</b>	<b>3,413</b>	<b>3,078</b>	<b>2,979</b>	<b>2,939</b>	<b>2,883</b>	<b>2,755</b>	<b>2,553</b>	<b>2,397</b>
Researchers	791	706	697	682	675	651	639	592
Other staff	2,622	2,372	2,282	2,257	2,208	2,104	1,914	1,805
Ratio of other staff to researchers	3.3	3.4	3.3	3.3	3.3	3.2	3.0	3.0
<b>Embrapa (Unidades de SP)</b>	<b>419</b>	<b>416</b>	<b>412</b>	<b>410</b>	<b>413</b>	<b>415</b>	<b>459</b>	<b>459</b>
Researchers	163	156	148	145	145	155	160	158
Other staff	256	260	264	265	268	260	299	301
Ratio of other staff to researchers	1.6	1.7	1.8	1.8	1.8	1.7	1.9	1.9

Source: Embrapa (Dept. of Management & Strategy); Gonçalves, Junqueira & Barros Filho (2004); CGEE (2006).

APTA = São Paulo State Agency for Agribusiness Technology.

**Detailed Table 10.50**  
**APTA staff in active service by category – São Paulo State, 1996-2007**

Employee category	No. of APTA employees in active service											
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total	3,413	3,078	2,979	2,939	2,883	2,755	2,553	2,397	620	879	2,507	2,431
Researchers	791	706	697	682	675	651	639	592	620	879	853	852
Other staff	2,622	2,372	2,282	2,257	2,208	2,104	1,914	1,805	-	-	1,654	1,579

Source: Gonçalves, Junqueira e Barros Filho (2004); Secretaria de Agricultura e Abastecimento do Estado de São Paulo (SAA).

APTA = São Paulo State Agency for Agribusiness Technology.