

Chapter 2

Brazil

Evaluation of policy developments

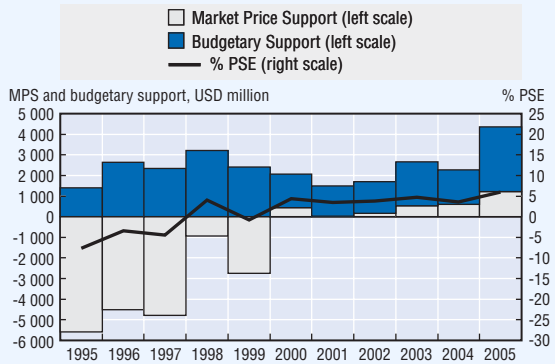
- Following several years of prodigious growth, the agricultural sector was afflicted in 2005 by a price-cost squeeze that resulted from a combination of falling international prices for important export commodities, rising input costs (notably for fuel) and an appreciating exchange rate. Policy initiatives in 2005/06 were primarily designed to mitigate this development.
- The interest charges associated with official credit were held constant. With market rates rising, this resulted in an increase in the implied subsidy. In addition, the government announced, for the second year running, a package of emergency assistance that included fresh credit at reduced interest rates, further deferral of debt repayments and a range of drought assistance measures.
- Brazil's delivery of credit subsidies is heavily managed, while the repayment of debt has become an issue for negotiation with producers. This approach to the problem posed by high real interest rates thwarts the development of a properly functioning credit market.
- Guaranteed prices were mostly held constant. With falling international prices, this led to a rise in market price support. In 2005/06, the volume of crops benefiting from price support doubled, and price guarantees were extended to soybeans for the first time. By limiting the regional coverage of price guarantees, the government has in the past sought to limit the coverage of support to smaller farmers. Recent payments have breached this implicit objective and create a worrying precedent, given that a downturn in market conditions was widely anticipated.
- Despite these changes, the overall level of support provided to producers remains much lower than the average in OECD countries, and much of the recent increase reflects the counter-cyclical nature of existing policies.
- The government maintained its increased level of expenditures on infrastructure and other public investments. Such support offers higher returns to farmers than price support or credit subsidies, yet is only half the value of support to producers.
- Land reform has accelerated under the current government. This programme combines social and economic objectives. On the latter, there is some evidence that the productivity of new settlements has improved, but it is nevertheless questionable how many recipients of land can be transformed into economically viable family farmers.
- A new programme to promote the use of biodiesel includes the specification of a minimum blending ratio in diesel oil and provides incentives for processors to purchase from small scale family farmers.

Description of support

- Support to producers (%PSE) averaged 5% in 2003-05. It increased from 4% in 2004 to 6% in 2005, with both payments based on input use and market price support rising. The rate of support is still much lower than the OECD average of 30%.
- Two-thirds of producer support is provided in the form of credit subsidies and one-third through market price support.
- Market price support increased by 65% to BRL 2.9 billion (USD 1.2 billion) in 2005, as guaranteed prices were maintained for supported commodities in the face of falling market prices, and the exchange rate appreciated.
- Payments based on input use rose by 58% to BRL 7.5 billion (USD 3.2 billion) in 2005, with interest rate subsidies for investment and working capital increasing, as well as the implicit subsidy associated with the deferral of payments on farm debt (the latter accounted for about one-third of payments in this category).
- Prices received by producers were on average 2% higher than those received on world markets in 2003-05 (i.e. the NPC was 1.02), with significantly higher protection for rice, maize, cotton and wheat.
- The effects of price supports on consumers were equivalent to a net tax of 2% in 2003-05 (i.e. a %CSE of -2%).
- Support provided to general services, notably infrastructure and agricultural schools, averaged 31% of total support in 2003-05, with higher allocations in 2004/05 than in previous years, and these rates being maintained in 2005/06.
- Total support to agriculture averaged 0.7% of GDP in 2003-05, which is less than the OECD average of 1.1%, even though agriculture accounts for a much higher share of national income than in most OECD countries.

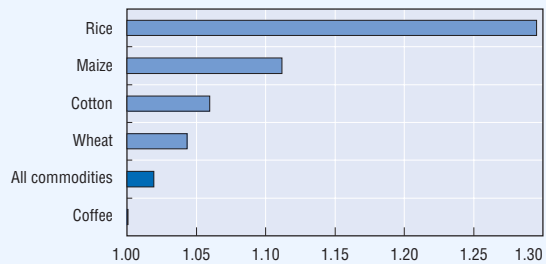
Source: OECD, PSE/CSE database, 2006.

Figure 2.1. PSE level and composition over time



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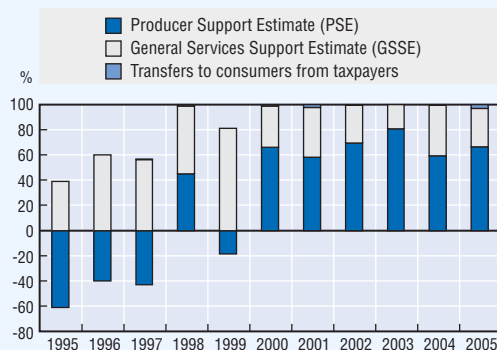
Figure 2.2. Producer NPC by commodity, 2003-05 average



NPC was equal to 1 for coffee, sugar, oilseeds (soybeans), milk, beef and veal, pigmeat and poultry.

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Figure 2.3. TSE composition over time



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Table 2.1. **Brazil: Estimates of support to agriculture**

BRL million

	1995-97	2003-05	2003	2004	2005
Total value of production (at farm gate)	53 149	173 125	166 643	181 765	170 966
<i>of which share of MPS commodities (%)</i>	<i>73</i>	<i>80</i>	<i>80</i>	<i>80</i>	<i>81</i>
Total value of consumption (at farm gate)	50 319	130 820	125 999	138 514	127 946
Producer Support Estimate (PSE)	-2 795	8 495	8 207	6 672	10 607
Market Price Support (MPS)	-4 945	2 110	1 604	1 785	2 941
<i>of which MPS commodities</i>	<i>-3 587</i>	<i>1 692</i>	<i>1 280</i>	<i>1 424</i>	<i>2 373</i>
Payments based on output	74	141	164	119	141
Payments based on area planted/animal numbers	0	0	0	0	0
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	2 076	6 208	6 399	4 739	7 487
Payments based on input constraints	0	0	0	0	0
Payments based on overall farming income	0	36	40	29	39
Miscellaneous payments	0	0	0	0	0
Percentage PSE	-5	5	5	4	6
Producer NPC	0.92	1.02	1.01	1.01	1.04
Producer NAC	0.95	1.05	1.05	1.04	1.06
General Services Support Estimate (GSSE)	2 914	3 782	1 974	4 495	4 878
Research and development	483	762	780	719	787
Agricultural schools	192	991	246	1 233	1 492
Inspection services	109	113	94	106	139
Infrastructure	1 697	1 678	824	2 122	2 088
Marketing and promotion	8	41	11	26	85
Public stockholding	425	146	18	191	227
Miscellaneous	0	52	0	97	59
GSSE as a share of TSE (%)	n.c.	30.4	19.4	40.1	30.5
Consumer Support Estimate (CSE)	3 070	-2 314	-1 801	-1 633	-3 507
Transfers to producers from consumers	3 144	-3 041	-1 680	-1 645	-5 799
Other transfers from consumers	-102	-279	-238	-35	-562
Transfers to consumers from taxpayers	15	180	0	47	493
Excess feed cost	13	826	117	0	2 361
Percentage CSE	6	-2	-1	-1	-3
Consumer NPC	0.94	1.03	1.02	1.01	1.05
Consumer NAC	0.94	1.02	1.01	1.01	1.03
Total Support Estimate (TSE)	135	12 458	10 180	11 214	15 979
Transfers from consumers	-3 042	3 320	1 918	1 680	6 361
Transfers from taxpayers	3 279	9 416	8 500	9 569	10 180
Budget revenues	-102	-279	-238	-35	-562
Percentage TSE (expressed as share of GDP)	0.00	0.69	0.65	0.63	0.79
GDP deflator 1995-97 = 100	100	195	181	196	210

For the definition of OECD indicators of support to agriculture, see Annex A.1. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient. Market price support is net of producer levies and excess feed costs. MPS commodities for Brazil are: wheat, maize, rice, oilseeds, sugar, cotton, coffee, milk, beef and veal, pigmeat and poultry.

Source: OECD, PSE/CSE database, 2006.

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Summary of key policy developments

The basic mechanism for providing market price support to Brazilian farmers consists of regionally announced minimum guaranteed prices. The government made further changes to the operation of this system in the crop years 2004/05 and 2005/06 (which run from July to June) by making greater use of measures under which the private sector is induced to buy from farmers at minimum prices. Brazil's highly directed system of agricultural credit reflects the failure of the commercial system to provide sufficient liquidity to all but a minority of farmers. In 2005/06, credit was used as a means of cushioning the effects of weaker market conditions for many products, and the effects of drought in several regions. Land reform accelerated and is close to meeting the ambitious target set out in the second National Agrarian Reform Plan. However, there are still concerns about the amount and quality of land being allocated, and the degree to which this is accompanied by other necessary investments. Moreover, rising land prices have raised the cost of the programme beyond expectations.

Policy context

Agriculture and its related industries are very important to the Brazilian economy. Primary agriculture accounted for 8% of GDP in 2005 (down from 10% in 2004 due to a cyclical downturn in agricultural markets). With a dualistic farming structure that contains many small scale relatively unproductive producers, the sector accounts for a greater share of employment (19% in 2003). Agricultural and agriculture-based products (including food but also products such as leather) accounted for 37% of all exports in 2005, but just 7% of imports, and were responsible for 86% of the country's balance of trade surplus. Consequently, the sector plays a major role in underpinning macroeconomic stability.

Macroeconomic situation

GDP growth slipped from 4.9% in 2004 to 2.3% in 2005, as a result of sluggish investment growth (linked to very high real interest rates), weak private consumption, and stagnant agricultural output. The latter was a consequence of both deteriorating market conditions and drought in several important producing regions.

Longer term, the foundations for sustained growth are mostly in place. The government has maintained a primary budget surplus, enabling the public debt-to-GDP ratio to trend downwards since 2003, although it remains high at just over 50% of GDP (which results in interest payments equivalent to over 8% of GDP), and the problem of unfunded pension liabilities has not been resolved. The tight budget constraint limits the government's scope for increasing spending on public investments. Consumer price inflation, at 5.7% in 2005, was converging on the official end of year target of 5.1%, with the cost of food and beverages increasing by just 2%.

Brazil's current account surplus widened in 2004 and again in 2005, thanks to a rapid increase in merchandise exports, which reached USD 118 billion, an increase of over 60% in dollar terms over two years. This enabled external debt to halve, from 42% of GDP to 21%, as a result of which the country's sovereign debt has been upgraded and interest premia are at historically low levels. The impressive performance of exports occurred in spite of a 17% appreciation in the nominal exchange rate in 2005.

The government increased the minimum wage from BRL 300 per month in May 2005 to BRL 350 per month in April 2006. In addition, the coverage of Bolsa Familia (a conditional cash transfer programme) was extended to 8 million families, with a near term goal of

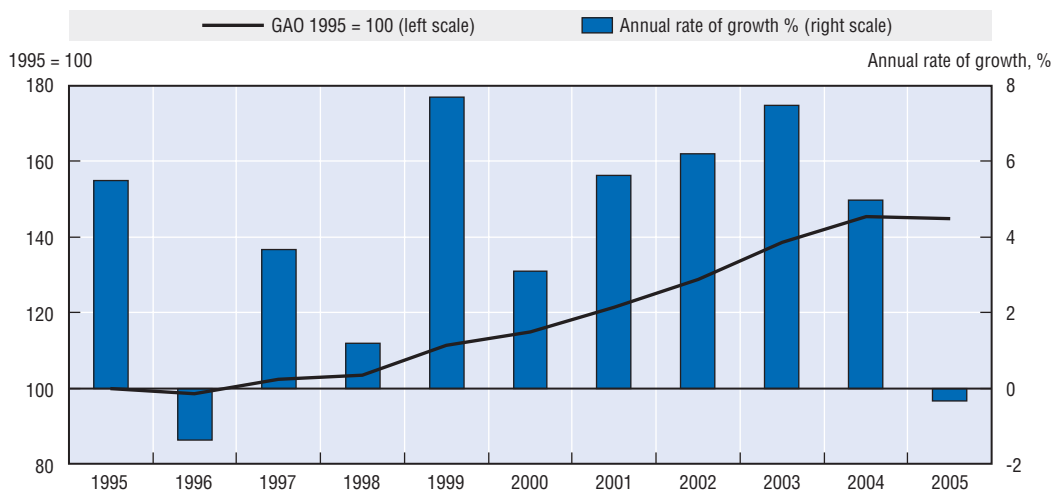
11.2 million families, accounting for nearly a third of the population. The cost of this programme was BRL 6.5 billion (USD 3.0 billion), of which BRL 4.3 billion (USD 2 billion) was provided directly to families. Despite these initiatives, human capital remains weak and there is a complementary need for greater investment in education and the removal of policy disincentives for formal labour employment.

Agriculture and agri-food situation


Output

Having increased by more than 5% a year for four years, GAO declined by 0.3% in 2005 (Figure 2.4). Crops performed worse than livestock, with a 3.8% increase in 2004 followed by a fall of 0.6% in 2005, compared with an increase of 6.5% in 2004 and no change in 2005. On average, agricultural prices increased by 5.1% in 2004 and fell by 2.9% in 2005. With input prices increasing by 10.0% in 2004 and 6.4% in 2005, the sector as a whole has undergone a significant price-cost squeeze in the last two years.

Figure 2.4. **Evolution and annual changes of agricultural output in Brazil, 1995-2005**



Source: OECD Secretariat, 2006.

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This overall picture masks important variations from one commodity to the next. In 2005, soybean prices fell by 26%, cotton prices by 21% wheat by 16%, rice by 23% and maize by 5%. On the other hand, coffee prices strengthened by 24%, sugar cane prices by 14% and oranges by 4%. The prices of all livestock products rose, except for beef and veal, where they fell by 4%. As a result of these movements, the value of crop production fell by 13%, while the value of livestock output increased by 7%.

Rising prices for all inputs, including fuel, fertiliser and machinery, were reflected in reduced demand: domestic sales of agricultural machinery dropped by 39% in 2005, while fertiliser consumption fell by 11%.

Crops

The above changes in producer prices led to a diversity of supply responses. The area planted to soybeans, wheat, cotton and rice fell, while there were increases in the area

devoted to maize, beans and less important crops such as rye, oats and sunflower. These shifts in area were reflected in the direction of output changes, with maize output increasing particularly rapidly (18.4%). A notable exception was soybeans, where the contraction in planted area was more than offset by an improvement in yields and production rose by 3.8%. Coffee and sugar cane output increased by 18.8% and 7.6% respectively. In the case of coffee, the increase was purely due to improved yields, while for sugar cane the growth came exclusively from increases in area. The production of oranges and tobacco was essentially unchanged.

Livestock

According to official sources, production of pigmeat increased by 8.8% in 2005, that of beef and veal by 9.0% and poultry by 14.7%. Private sector sources suggest slightly lower numbers, but nevertheless report significant increases for all types of meat, including beef and veal (where prices fell). Milk production was reported to have increased by 5%, with Brazil emerging for the first time as a net exporter of dairy products in 2004 and 2005.

Structures

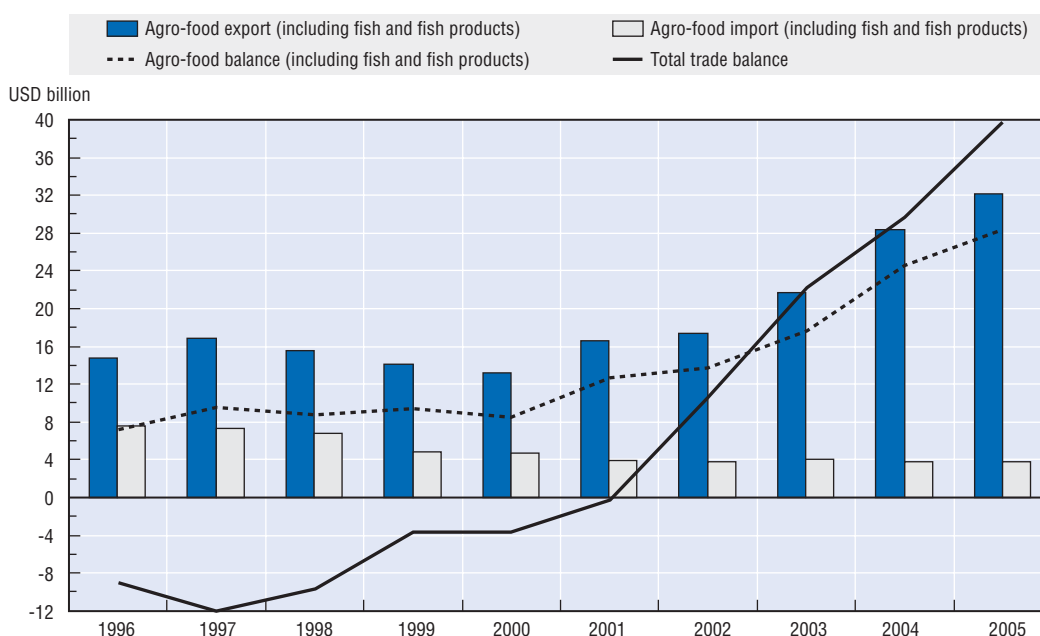
Brazil has an increasingly concentrated production structure that land reform and targeted price and credit policies are unlikely to reverse. The largest 20% of farms in Brazil are responsible for 80% of output, while the smallest 40% comprising traditional, often semi-subsistence farms, account for just 4% of production (FIPE, 2004). This is being matched by increasing concentration of the food industry. Between 1990 and 2000, the share of supermarkets in total food sales climbed from under 20% to 75%. This provides an opportunity for some suppliers, but poses a substantial difficulty for small scale producers who cannot meet the quality and/or volume requirement of large downstream purchasers.

Agro-food trade flows


Despite weak production growth and an appreciating exchange rate, Brazil's exports of agricultural and agro-food products increased by 13.5% in 2005, reaching USD 32.2 billion (Figure 2.5). If other non-food items such as wood and leather goods are included, the total climbs to USD 43.6 billion. With agro-food imports increasing by just 0.2% to USD 3.8 billion, the agro-food trade surplus widened to USD 28.4 billion (USD 3.8 billion higher than the previous year). Non agro-food trade grew even more rapidly, with exports increasing by 25.9% and imports by 18.1%; the surplus reaching USD 11.3 billion. The vast majority of this surplus came from non-food but nevertheless agriculture related products.

The main products responsible for this trade performance were sugar (where exports grew by 49%), coffee (40%) meats (29%) and tobacco (20%). Exports from the soybean complex, which was until recently a major driver of Brazil's export growth, actually declined slightly (although exports of uncrushed soybeans increased). The increase in coffee exports was exclusively due to price improvements (exported volumes declined). For sugar and tobacco, price impacts dominated volume increases, but for meats the improvement was largely attributable to increased export quantities.

The EU remains the principal destination for Brazil's agribusiness exports, but the share of this market declined from 37% in 2004 to 35% in 2005. The share of exports going to the Americas was unchanged, but a greater proportion of exports went to Eastern Europe (8.2%) and Africa (6.5%). The changes, although small, provide further evidence that Brazil

Figure 2.5. **Agro-food trade in Brazil, 1996-2005**

Source: UN, UN Comtrade database, 2006.

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is reducing its reliance on the EU market, which in 2000-03 accounted for 43% of exports, and focusing on economies with lower incomes but possibly greater potential for growth.

Brazil's livestock exports have been afflicted by outbreaks of Foot and Mouth Disease (in June 2004 and October 2005) and Newcastle Disease (in July 2006). In the case of foot and mouth disease, which occurred in Mato Grosso do Sul and Paraná, 58 countries erected full or partial barriers to Brazilian meat trade. In the case of the Newcastle Disease in Rio Grande do Sul, 38 countries imposed restrictions on poultry meat from this State. In addition, in March 2006 the EU stopped purchases of Brazilian honey, alleging a lack of control over residues. In 2005, the EU absorbed 80% of Brazil's honey exports.

Imports of agribusiness products were less than 12% the value of exports in 2005. Twenty-three per cent of these imports were of cereals (mostly wheat), while the other big items were mostly non-food items such as pulp and paper. 43% of imports of these products come from other Mercosur members (mostly wheat from Argentina), with 20% coming from the EU, 14% from Asia and 11% from NAFTA countries.

Domestic agricultural policies

Brazil maintains a complex array of price support and credit instruments. For full details on the functioning of these instruments, the reader is referred to OECD (2005).

Market price support

Several instruments are used to provide guaranteed prices to producers. In each case, the aim is to provide targeted assistance to small and/or medium scale ("family") producers rather than the sector as a whole. This is done by restricting the terms under which price supports are applied, although marginal interventions naturally have market impacts. The overall effect is captured in the calculation of market price support.

The traditional instrument, *Aquisição do Governo Federal* (AGF), consists of direct government purchases from producers and producer cooperatives at announced prices. The scope of the AGF is limited to specific regions and by the amount of budgetary funds allocated. Twelve commodities are covered, including both staple crops (mostly rice, maize and wheat) and non-food crops such as cotton and jute. Minimum guaranteed prices were held constant for most commodities between 2004/05 and 2005/06. With market prices of most products declining, this implied an increase in support per unit. The volume of direct purchases declined to 1.2 million tonnes, compared with 1.7 million tonnes in 2004/05. This is consistent with the government's efforts to disengage from taking physical delivery and managing stocks itself. The government also makes direct acquisitions from small farmers under the Food Acquisition Programme, PAA, but these purchases are made at market prices and accounted for just 2% of all acquisitions in 2005/06. Another similar programme is the Incentive for Milk Consumption (ICL), which buys milk from producers at market prices and distributes it to needy families.

Increasingly, the government has preferred to use instruments through which the private sector effectively operates the price guarantees. The most important of these instruments is the *Prêmio para Escoamento do Produto* (PEP). Here, the government offers a premium to commercial buyers, which covers the difference between the minimum guaranteed price and the price the buyer is willing to pay. Participants in the programme are those buyers who bid for the lowest premium at regional auctions organised by the national supply agency CONAB. Receipt of the premium is contingent on their paying producers the minimum price. In 2005/06, the use of this instrument more than doubled, with 10.9 million tonnes of crops receiving the minimum price, predominantly soybeans and maize. This is the first time that soybeans have benefited from official support.

Until 2005/06, the government used public options contracts. Before each season, CONAB would announce the products for which sell options were to be sold, at a fixed "execution price" (at least the minimum price) and the number of contracts. To purchase an option the buyer would pay an option price established through an auction. The government, through CONAB, could buy back its obligation to purchase the product before the expiration of the contract, in which case the producer would receive a payment equal to the difference between the "execution price" and the market price; alternatively it could transfer the obligation to buy to another party. In 2005/06, use of this instrument was suspended, and replaced with recently introduced privately operated instruments.

The private sell option contract, PROP (*Prêmio de Risco para Aquisição de Produto Agrícola oriundo de Contrato Privado de Opção de Venda*), works in the same way as the public sell option, except that private agents act as the buyer and the government pays these agents a "risk premium" if the market price falls below the "execution" price. A new programme that operates similarly, and has been applied mostly to soybeans is (*Prêmio Equalizador Pago ao Produtor*). Here the government pays a premium to the buyer of output in storage, with buyers identified and the size of the premium established at auction.

Table 2.2 indicates the prices paid and volumes purchased under these various programmes. Maize and soybeans account for the lion's share of support, with more than 4.5 million tonnes purchased in each case. The other commodities to receive significant assistance are rice, cotton and wheat. The share of production purchased increased significantly for maize and for soybeans in 2005/06 (where previously there was no support), but declined for rice, cotton and wheat. Purchases made in 2005/06 have some effect on the 2005 PSE estimates, but will mostly be reflected in the 2006 calculations.

Table 2.2. **Brazil: Volume of purchases of agricultural commodities, by instrument, 2003-06**

1 000 tonnes

Support Instrument	2002-03	2003-04	2004-05	2005-06
PEP	0	399	2 150	5 054
Cotton	0	28	198	2
Rice	0	0	0	460
Manioc	0	0	0	0
Maize	0	184	760	1 782
Soybeans	0	0	0	2 570
Wheat	0	186	1 192	240
PROP	0	0	924	3 046
Cotton	0	0	272	0
Rice	0	0	328	239
Manioc	0	0	76	161
Maize	0	0	94	2 059
Soybeans	0	0	0	587
Wheat	0	0	153	0
PEPRO	0	0	0	1 635
Cotton	0	0	0	311
Rice	0	0	0	0
Manioc	0	0	0	0
Maize	0	0	0	0
Soybeans	0	0	0	1 324
Wheat	0	0	0	0
AGF-Total	0	282	1 690	1 176
Cotton	0	0	4	0
Rice	0	0	567	236
Manioc	0	0	0	0
Maize	0	100	637	908
Soybeans	0	0	0	0
Wheat	0	183	481	32
Public Option	2 253	1 417	352	0
Cotton	0	0	0	0
Rice	0	0	350	0
Manioc	0	0	0	0
Maize	1 735	767	0	0
Soybeans	0	0	0	0
Wheat	518	650	2	0
Total	2 253	2 098	5 115	10 911
Maize	1 735	1 051	1 491	4 749
% of production	4%	2%	4%	11%
Soybeans	0	0	0	4 481
% of production	0%	0%	0%	8%
Rice	0	0	1 244	935
% of production	0%	0%	9%	8%
Cotton	0	28	474	313
% of production	0%	1%	22%	19%
Wheat	518	1 019	1 829	271
% of production	9%	17%	31%	6%
Manioc	0	0	76	161
% of production	0%	0%	0%	1%

Source: MAPA/SPA, 2006.

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In 2006/07 a new programme will be introduced, providing price insurance to family farmers enrolled in PRONAF. The programme aims to reduce the need for emergency assistance and so provide a more predictable policy environment. Reference prices under the programme will be at least equal to the guaranteed minimum prices established for CONAB operations.

Credit

The provision of bank credit to agriculture in Brazil is dominated by the national rural credit system, *Sistema Nacional do Crédito Rural* (SNCR). The majority of lending to the sector comes from non-bank sources such as domestic agribusiness and international lenders. Non-bank credit is typically unavailable for smaller agricultural producers without established links to markets, so the government uses a wide array of instruments under the SNCR to increase the flow of lending to the sector. As with price policies, these measures are designed primarily to benefit those producers without access to commercial credit, although they inevitably affect the overall allocation of credit, both within agriculture and beyond.

In 2005/06 the availability of official agricultural credit increased by 15% to BRL 53.35 billion (USD 21.9 billion), with BRL 60 billion (USD 27.7 billion) announced for 2006/07. However, actual allocations fell slightly from BRL 44.1 billion in 2004/05 to BRL 42.6 billion (USD 17.5 billion) in 2005/06, due to reduced profitability and liquidity within the sector. The interest rate subsidy on this credit comprises more than half the “payments based on input use” in Table 2.1.

The biggest source of funds was compulsory resources, under which banks are forced to choose between either a) holding 25% of their sight deposits as obligatory reserves (*exigibilidades*) at the central bank at zero interest, or b) lending to agricultural borrowers at controlled (lower than market) interest rates. These resources accounted for 39.5% of financings to producers in 2005/06. Other important sources of credit are the rural savings of cooperative banks (a share of 25.1% in 2005/06), constitutional (state) funds (9.6%), the unemployment insurance fund FAT (9.3%) and the national development bank BNDES (8.1%).

The SNCR provides directed credit at controlled interest rates under a range of programmes that fall into three categories: i) marketing and storage credit; ii) working capital; and iii) investment credit. Working capital accounted for 57% of this credit in 2005/06, with investment taking a share of 22% and marketing and storage 21%.

BNDES is the main financier of investments in Brazil, yet agriculture accounted for just 10% of its investments in 2005/06, compared with 18% in 2004/05. The share of the Treasury’s own resources, which was once a major source of agricultural lending, declined to just 2%. Most of this money goes into the national programme to strengthen family farming, PRONAF, accounting for one-third of the programme’s total resources (PRONAF).

The allocation of marketing and storage credit, and of investment credit, is heavily managed, whereas most working capital is obtained directly by the producers at the set interest rate. The main form of marketing and storage credit is a federal government loan, the *Empréstimo do Governo Federal* (EGF), under which the farmer’s crop or livestock serve as collateral. A similar instrument exists for processors. In 2003, these programmes were complemented by a special marketing credit line, the *Linha Especial de Comercialização* (LEC). The resources allocated to this mechanism were reduced sharply in 2005/06, with

wheat and maize receiving negligible allocations, and nearly all financings allocated to coffee and apples. Specific initiatives in 2005/06 included a line of credit to assist coffee under the Coffee Economy Defence Fund (Funcafé), and a separate initiative to assist purchasers of coffee (FAC). The interest rates charged under LEC, Funcafé and FAC were, respectively, 8.75%, 9.75% and 9.5%. This contrasts with a short term market interest rate (the SELIC rate) of 19.1%.

In 2005/06 there were significant readjustments in specific programmes for investment credit that are administered by BNDES, including MODERFROTA (which finances tractors and agricultural machinery) and MODERINFRA (which covers irrigation and storage).

Adjustments were also made to the terms of the PRONAF programme, which supports “family farming”, with a greater share of credit going to poorer areas (notably the North East) and the addition of several special credit lines (e.g. for young people and women, and for different ecological areas). Total disbursements for investment and working capital under PRONAF increased by 2% in 2005/06, to BRL 6.2 billion (USD 2.5 billion). PRONAF accounted for 13% of all official credit to agriculture in 2005. A family farm insurance programme (SEAF), which is governed by the general terms of PROAGRO (see below), was also created to serve farmers enrolled in PRONAF.

With market prices for agricultural products declining, the government undertook a range of measures to ease the flow of liquidity into the agricultural sector. The use of CPRs (*Cédula de Produto Rural*) increased to BRL 13.3 billion (USD 5.5 billion), while several new financial securities were issued, with a total disbursement of BRL 490 million (USD 201 million). Emergency measures were adopted to give producers easier access to credit (e.g. under LEC), while further extensions were granted for the repayment of farm debts. The latter required a range of rulings on debts accumulated under different programmes.

Farm insurance programmes

The government operates a range of farm insurance schemes, with recently introduced schemes being used primarily to cushion the effects of drought. The traditional programme, PROAGRO, increased its indemnities from BRL 20 million (USD 6.8 million) in 2004/05 to BRL 40 million (USD 16.4 million) in 2005/06. However, these payments were dwarfed by indemnities paid under a supplementary scheme established in August 2004, PROAGRO MAIS, which pays exclusively to farmers enrolled in the PRONAF programme. Under this programme, farmers are insured for 100% of the credit they receive and 65% of estimated future revenues. Indemnities reached BRL 728 million (USD 249 million) in 2004/05, with an average payment of BRL 3 300 (USD 1 128). This programme was funded in 2005/06 mostly by *ad hoc* extra-budgetary allocations. Federal benefits under a third scheme, the crop guarantee programme *Garantia Safra*, that assists PRONAF enrolled farmers in semi-arid areas, also increased, from BRL 28.5 million (USD 9.7 million) to BRL 39.3 million (USD 16.1 million). Finally, transfers under the Rural Insurance Premium Program reached BRL 561 000 (USD 192 000) in 2004/05.

Structural adjustment policies

The current government’s land reform programme, the Second National Agrarian Reform Plan (PNRA II) was launched in November 2003. This programme seeks to improve the distribution of land in Brazil, which, with a Gini coefficient of 0.81 in 2000, is one of the

most unequal in the world. The extreme concentration of land ownership in Brazil is viewed as a source of social problems and an impediment to broad based development.

PNRA II aims to settle 400 000 families by 2006, provide 130 000 families with access to land via land credit, and ensure security of tenure for another 500 000 families by regularising their legal status. The overall aim, therefore, is to benefit more than one million families directly. The broader aims are even more ambitious, with knock-on benefits anticipated for 3-5 million families with links to agriculture. Beyond the allocation of land, the government also seeks to turn these settlements into economically viable operations through the provision of supporting infrastructure, extension and credit. At the same time the plan aims to tackle a range of social issues such as indigenous rights, gender equality and land conflicts.

According to the Ministry of Agrarian Development, MDA, the settlement of land is on target, with 280 000 families settled between 2003 and 2005, 127 500 of those in 2005 alone. The measurement, which includes settlements based on expropriation lawsuits and land redefinitions has been criticised by some researchers and social organisations. Even so, the pace of land reform has been faster than under previous initiatives. The total expenses of INCRA, the agency responsible for administering PNRA II, increased 2.4 times in the last three years, from BRL 1.4 billion (USD 0.5 billion) in 2003, to BRL 2.4 billion (USD 0.8 billion) in 2004 and BRL 3.4 billion (USD 1.4 billion) in 2005. However, the cost of acquiring land has increased faster than expected, with an average cost of BRL 1 450 (USD 596) per hectare compared with a price of BRL 1 000 (USD 326) per hectare envisaged in 2003. Increased spending on land reform and accompanying investments in rural infrastructure account for much of the increase in the GSSE in 2004 and 2005, as compared with previous years.

Biodiesel policies

In December 2004, the federal government announced a new biodiesel programme. This programme is expected to have a significant effect on producers' incentives, given that in 2005 diesel oil accounted for 55% of the fuel consumption of all vehicles in Brazil, compared with shares of 26% for petrol (gasoline) and 17% for anhydrous and hydrous alcohol (ethanol).

A main element of the new programme is the establishment of a minimum blending ratio (as operated for ethanol), with the share of biodiesel in diesel oil set at 2% from 2008 and 5% from 2013. These ratios are sufficiently low that they will not require alterations in engines powered by diesel.

A second element of the programme is the creation of a Social Fuel Stamp. This certificate is given to biodiesel manufacturers who make a minimum share of their purchases from family farmers enrolled in PRONAF, with those minimum shares set by region, and who meet other requirements, such as providing technical assistance. Biodiesel manufacturers in receipt of the Social Fuel Stamp are eligible for government credit at reduced interest rates and for reduced rates on federal taxes.

At the producer level, financial support in the form of investment credit at reduced interest rates is provided to farmers who invest in biodiesel crops, such as soybeans and castorseed, as well as other oilseeds and several tropical crops. For family farmers, this credit is provided via PRONAF Biodiesel and PRONAF Agro-Industry, which cover planting and machinery costs respectively. For commercial farmers, low interest credit is available from BNDES.

Under the new programme, all biodiesel production purchased by processors from family farmers in conjunction with the Social Fuel Stamp is sold to distributors via public auction. At the moment, the state oil company Petrobras buys nearly all the biodiesel sold at these auctions, but this situation is likely to change as Petrobras develops its own processing capacity.

Agro-food trade policies

The centrepiece of Brazil's import policy is the common external tariff (CET) applied by Mercosur. Brazil's average nominal MFN tariff for agriculture (using the WTO definition) was 10.2% in 2004, compared with an overall average tariff of 10.4%. Brazil is one of the few WTO Members for which the average tariff applied on agricultural products is lower than that applied on industrial goods (South Africa is another).

Brazil has a number of exceptions to the CET. In some cases, including fertiliser and pesticides, zero rates are applied; in others, notably several dairy products and rice, higher rates are levied. In addition, domestic tax exemptions are applied to several agricultural imports. In 2005, zero duties under the PIS/PASEP (Social Integration Programme Tax) and COFINS (Social Security Contribution) were specified for imports of fertiliser, pesticides and other inputs, as well as fluid milk, milk powder for human consumption and certain cheeses.

Brazil applied a total of 50 trade defence measures in 2005, of which 12 pertained to agricultural products. In particular, protective policies were applied to milk powder imported from Argentina, Uruguay, the EU and New Zealand. In the case of the first two countries, this was done via an agreement on prices; in the latter two cases, Brazil instituted anti-dumping measures. In addition, the tariff levied on imported garlic was raised from 14% to 35%.

The federal government allocated BRL 1.8 billion (USD 0.7 billion) to states for the purpose of export promotion. It is not clear how much of this allocation is earmarked for agricultural commodities. Brazil also has three main export financing measures for which exporters (including those of agricultural products) are eligible: BNDES-exim; Proex; and the Exports Guarantee Fund (FGE). Disbursements under BNDES-exim, the largest of these programmes, grew by 54% between 2004 and 2005, from USD 3.9 billion to USD 5.9 billion (this compares with a 23% growth in the dollar value of exports). Under a new initiative (December 2005), BNDES seeks to support the creation of value added by providing financing for processed products but excluding many raw agricultural commodities. In addition to these programmes, a new source of finance was developed in 2004, called Exports Proger, which aims to cater to small companies with annual revenues of less than BRL 5 million.

In the absence of substantive progress in WTO negotiations, Brazil continued to pursue a range of bilateral and regional trade agreements, and, less formally, to promote South-South dialogue on trade policy issues. Specifically, Brazil concluded tariff agreements with India and the South African Customs Union (SACU) – agreements which contain special treatment for a number of agricultural products. In addition, it concluded an economic cooperation agreement with the Gulf Cooperation Board, entered negotiations for a free trade agreement with Israel, and for tariff agreements with Egypt and Morocco.

At the Mercosur level, progress was made on assimilating Venezuela as a full member, and an agreement on agricultural tariffs was concluded with the Andean Community. Within Mercosur, agreements were made on the use of safeguards (a move which is expected

to favour producers of import competing products, such as wheat, rice, milk, garlic, onions and wine) and on automotive policy (the latter is expected to ease trade in tractors).

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