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Soybean Transportation Guide: Brazil 2010

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SOYBEAN TRANSPORTATION GUIDE: BRAZIL

Introduction

Brazil is the second largest soybean exporter after the United States and one of the most important U.S. competitors in the world oilseeds market. Brazil's competitiveness in the world market depends largely on its transportation infrastructure and cost. The Soybean Transportation Guide is a visual snapshot of Brazilian soybean transportation in 2010. It provides data on the cost of shipping soybeans via highways and ships to Shanghai, China, and Hamburg, Germany, and gives information about soybean production, exports, railways, ports, and infrastructural developments.

Brazilian soybean transportation costs to Hamburg and Shanghai as a percentage of total landed costs increased 6–19 percent in Mato Grosso (MT), Paraná (PR), Rio Grande do Sul (RS) and South Goiás (GO) from a year earlier as a result of an increase in truck rates which more than offset lower farm prices. Brazilian soybean prices are quoted in U.S. dollars, based on the Chicago Board of Trade, and producers are paid in reais. Consequently, even though international soybean prices increased, the strengthening of the real against the U.S. dollar resulted in a drop in Brazilian farm price. However, producers benefit from lower imported production inputs, such as chemicals, fertilizers, and farm equipment, as well as low ocean rates. Brazilian shippers also benefit from economies of scale lowering their average production cost, which partially shields against currency appreciation.

The cost of shipping a metric ton of soybeans 100 miles by truck increased nearly 23 percent last year, from \$8.74 in 2009 to \$10.74 in 2010. Truck rates began low at the beginning of the year but increased during the 2nd and 3rd quarter, surpassing the record quarter high of \$11.15/mt/100 miles set in the 3rd quarter 2008, but were lower than the July 2008 peak of \$12.05/mt/100 miles. Typically, the peak of Brazilian soybean exports occurs in May. By the end of June, almost two thirds of the year's soybeans are exported.

According to the Confederação Nacional do Transporte (CNT), the best Brazilian highways are located in the Southeast, followed by the South and Midwest regions. The Midwest and South regions are the most important soybean production and exporting areas. Almost half of Brazilian soybean production comes from the Midwest region and 37 percent from the South. Soybean producers in the south region have lower marketing costs than the Midwest due to its proximity to ports, more choices of transportation mode, and better road conditions. For example, routes located in Rio Grande do Sul showed smaller increases in truck rates because of shorter distances to the port of Rio Grande, about 288 miles. These selected routes saw proportionally greater increases in transportation costs in terms of the U.S. dollar because of the 12 percent appreciation of the real against the dollar, from 1.9977 reais per US\$ to 1.7595.

In 2010, ocean rates from the Port of Santos to Shanghai, China, steadily increased throughout the year, reaching a peak in the 3rd quarter, but still remaining 5 percent below 2009 rates, averaging \$55.84/mt. Ocean rates to Hamburg hit a peak of \$36.17/mt in the 2nd quarter and steadily declined in the 3rd and 4th quarter, ranging from \$31–\$36/mt.

According to Drewry, China's tight monetary policy, India's iron ore export ban, Russia's grain export ban, and massive floods at the end of the year in Australia contributed to volatility in the 2010 dry bulk rates. For example, in 2010, the cost to ship 1 mt of soybeans from Brazil to Shanghai by ocean vessel fell on average 2 percent from \$59.07/mt to \$57.66/mt. At the same time, the cost to ship 1 mt of soybeans from Brazil to Hamburg by ocean-going vessel increased on average almost 4 percent from \$33.21/mt to \$34.91/mt.

Ocean freight spreads between North America and South America to Asia can be at premium or discount depending on current market conditions, vessel availability, port loading conditions, ship size, distance, Panama Canal toll charges and delays, as well as fuel costs. For example, last year U.S. soybeans ocean rates to China were at premium because the United States shipped a significant amount of soybeans to China. Brazil ocean rates to Hamburg can be higher than the rates to China because carriers serving the Brazil–Hamburg route do not have the flexibility to reduce capacity in the same way as the Brazil–Shanghai route due to the shorter voyage distance and lack of markets caused by the slow economic recovery. The distance from Santos to Hamburg is 5,683 nautical miles; from Santos to Shanghai it is almost twice that—11,056 nautical miles. Santos was the most important soybean export port.

U.S. transportation as a percentage of total landed costs for soybeans to Hamburg and Shanghai was up 20–26 percent in 2010 because of higher ocean and barge rates, but still below Brazil's. Larger crops increased barge demand in the northernmost portion of the upper Mississippi River, resulting in an 8-11 percent increase in barge rates from Minneapolis, MN, and Davenport, IA, to New Orleans, LA.

The Confederação Nacional do Transporte (CNT) estimates that because of the poor conditions of the paved roads, Brazilian operational costs of cargo trucks are 28 percent higher than they would be on paved roads under optimal conditions. The Brazilian government has instituted the Growth Acceleration Program (PAC 1) 2007–2010 and the National Plan of Logistics and Transportation (PNLT) 2008–2023 to improve infrastructure and aid Brazil's competitiveness in the world market. In March 2010, the Brazilian government announced the Growth Acceleration Program (PAC 2), 2011-2014, with a planned investment of US\$ 60 billion allocated to the logistic sector.

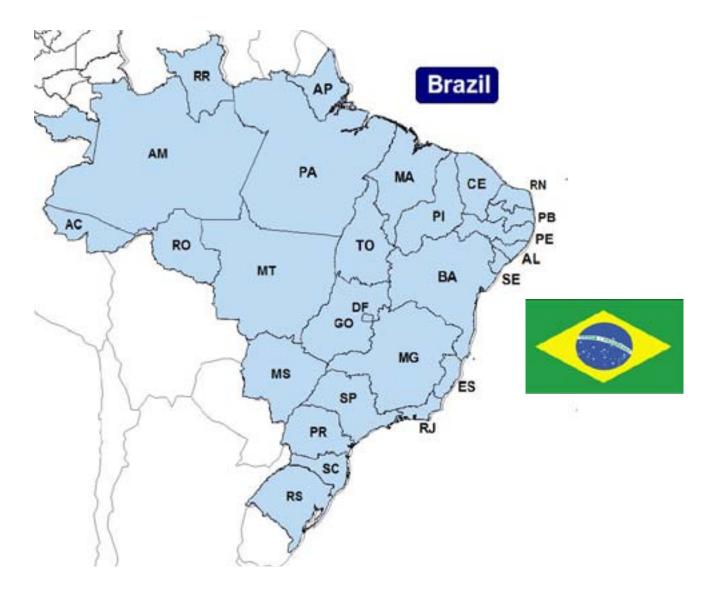
In Sorriso, North MT (the largest Brazilian soybean-producing State, Midwest region) transportation costs represented 39 percent of the 2010 total landed costs of shipping soybeans to Shanghai through Santos and Paranaguá, compared with 45 percent in 2006. However, paving BR 163 (Part of PAC 1) would transform Brazil's Midwest region by increasing efficiency in an agricultural sector which for years has not been able to materialize the benefits of its large economies of scale in soybean production. BR-163 is a major highway connecting Brazil's Midwest to the Amazon River. If BR-163 pavement is realized, because of the shorter distance, the cost of shipping a metric ton (mt) of soybeans 100 miles from Sorriso, North Mato Grosso (MT) to Santarém, Pará (PA), would range from \$7.77-\$9.70¹ compared to \$8.75 to Santos, \$7.24 to Paranaguá, and the 2009 Brazil average truck rate of \$8.74. The cost of shipping soybeans from Sorriso to Santarém per metric ton would be reduced 34 percent to \$61.81 compared with the average cost of shipping to Santos and Paranaguá of \$94.18.² Rates might decline 27-42 percent, ranging from \$55.00 to \$68.63 per metric ton. Sorriso, North MT, is located about 707 miles from Santarem, 1,190 from Santos, and 1,262 miles from Paranaguá. This improvement in the infrastructure will enhance Brazil's market share in the world agricultural market. Mato Grosso's agricultural competitiveness will improve considerably when the paving of BR-163 is completed in 2012 and soybean exports are shifted from the Southern ports of Santos and Paranaguá to the north port of Santarém on the Amazon River.

¹ Accounting for average rate variability, assuming there are no delays caused by the lack of port export terminal capacity.

^{2 \$94/}mt = average 2009 truck rates (\$97/mt from Sorriso to Santos + \$91.36/mt from Sorriso to Paranaguá).

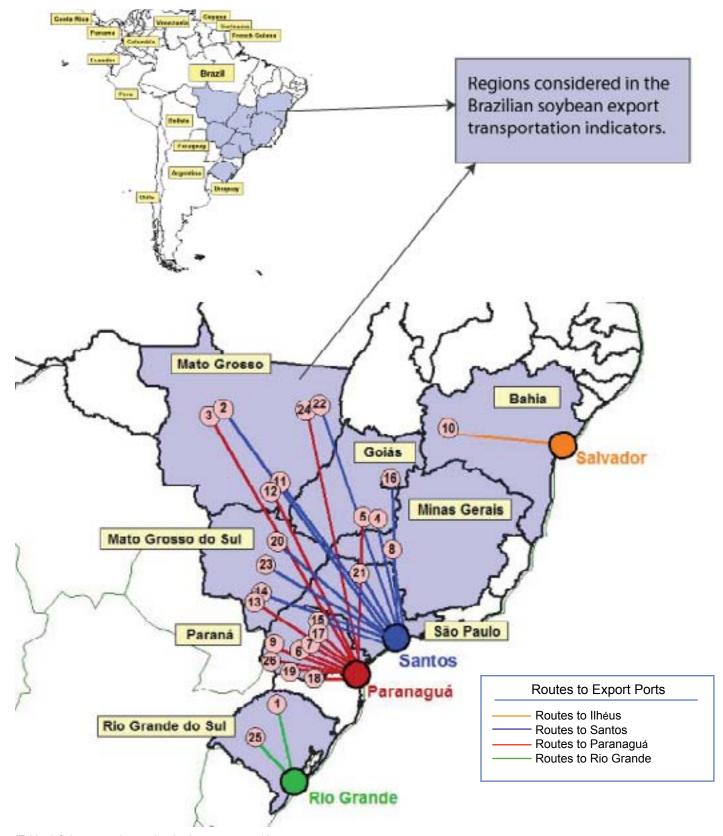
Acknowledgments

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| State and A | bbreviation | Population: | 190,755,799 |
|---|---|---|---|
| Acre (AC) Alagoas (AL) Amapá (AP) Amazonas (AM) Bahia (BA) Ceará (CE) Distrito Federal (DF) Espírito Santo (ES) Goiás (GO) Maranhão (MA) Mato Grosso (MT) Mato Grosso do Sul (MS) Minas Gerais (MG) | Paraíba (PB) Paraná (PR) Pernambuco (PE) Piauí (PI) Rio de Janeiro (RJ) Rio Grande do Norte (RN) Rio Grande do Sul (RS) Rondônia (RO) Roraima (RR) Santa Catarina (SC) São Paulo (SP) Sergipe (SE) Tocantins (TO) | Urban: Rural: Area: Languages: | (2010 Census, Instituto Brasileiro de Geografia e Estatística (IBGE)) 160,925,792 29,830,007 8,514,877 sq km Portuguese (official), Spanish, English, French |

Pará (PA)



Routes¹ and regions considered in the Brazilian soybean export transportation indicators²

¹Table defining routes by number is shown on page 16 ²Regions comprised about 81 percent of Brazilian soybean production, 2009 Source: USDA/AMS & ESALQ - University of São Paulo (USP), Brazil

2010 Summary

In 2010, Brazilian soybean transportation costs to Shanghai, China, as a percentage of total landed costs increased 16-18 percent compared with 2009 due to an increase in truck rates which more than offset lower farm prices. In Sorriso, North MT (the largest Brazilian soybean-producing state) transportation costs represented 39 percent of the total landed costs of shipping soybeans to Shanghai through Santos and Paranaguá, compared with 45 percent in 2006.

| | | Cost of | transpo | orting s | oybeans | s from E | Brazil to | Shangh | nai, Chir | na | | | |
|-------------------------------|--------|---------|------------|------------------------------------|---------|-----------------|---|--------|-----------------|--------|--------|---------|--|
| | 2006 | 2007 | 2008 | 2009 | 2010 | Percent | 2006 | 2007 | 2008 | 2009 | 2010 | Percent | |
| | | | US\$/mt | | | change 09-10 | | | change 09-10 | | | | |
| | | | North MT | ¹ - Santos ² | | | Northwest RS ¹ - Rio Grande ² | | | | | | |
| Truck | 79.46 | 97.67 | 115.74 | 97.00 | 116.78 | 20.4 | 16.16 | 21.82 | 22.29 | 24.50 | 28.18 | 15.0 | |
| Ocean | 57.31 | 82.83 | 70.38 | 58.78 | 55.84 | -5.0 | 55.81 | 81.56 | 72.08 | 59.42 | 58.21 | -2.0 | |
| Total transportation | 136.77 | 180.51 | 186.12 | 155.78 | 172.62 | 10.8 | 71.97 | 103.37 | 94.37 | 83.92 | 86.39 | 2.9 | |
| Farm price 3 | 164.88 | 233.82 | 358.99 | 324.34 | 318.15 | -1.9 | 210.34 | 267.06 | 394.66 | 359.51 | 344.90 | -4.1 | |
| Landed cost | 301.65 | 414.33 | 545.11 | 480.12 | 490.77 | 2.2 | 282.31 | 370.43 | 489.03 | 443.43 | 431.29 | -2.7 | |
| Transport % of landed cost | 45.4 | 43.9 | 34.1 | 32.6 | 38.6 | 18.4 | 25.2 | 28.1 | 19.4 | 19.0 | 20.1 | 6.1 | |
| | | Nort | h Center P | R¹ - Parana | agua² | | South GO ¹ - Santos ² | | | | | | |
| Truck | 21.31 | 32.36 | 33.60 | 27.37 | 34.51 | 26.1 | 43.56 | 50.47 | 55.33 | 50.83 | 64.71 | 27.3 | |
| Ocean | 56.31 | 80.81 | 71.66 | 59.00 | 58.92 | -0.1 | 57.31 | 82.83 | 70.38 | 58.78 | 55.84 | -5.0 | |
| Total transportation | 77.62 | 113.18 | 105.26 | 86.37 | 93.43 | 8.2 | 100.87 | 133.30 | 125.71 | 109.62 | 120.56 | 10.0 | |
| Farm price 3 | 213.81 | 281.14 | 399.31 | 372.46 | 350.44 | -5.9 | 189.63 | 268.65 | 373.13 | 338.31 | 324.27 | -4.2 | |
| Landed cost | 291.43 | 394.32 | 504.56 | 458.83 | 443.87 | -3.3 | 290.50 | 401.95 | 498.84 | 447.93 | 444.82 | -0.7 | |
| Transport % of landed cost | 26.5 | 28.9 | 21.0 | 18.9 | 21.2 | 12.2 | 34.6 | 33.5 | 25.4 | 24.6 | 27.4 | 11.4 | |

¹Producing regions: RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná ²Export ports

³Source: Companhia Nacional de Abastecimento (CONAB) www.conab.gov.br

2010 Summary

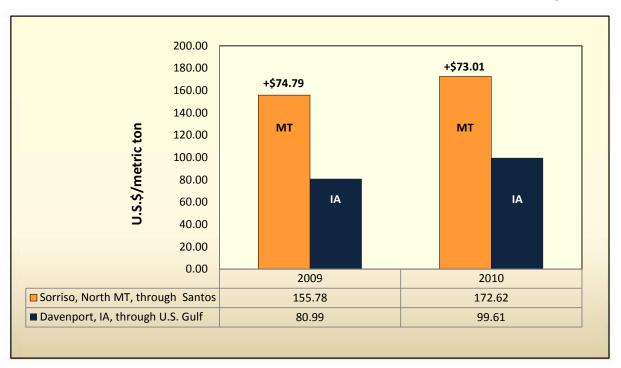
In 2010, Brazilian soybean transportation costs from South Goiás (GO), Mato Grosso (MT), Paraná (PR) and Rio Grande do Sul (RS) to Hamburg, Germany, as a percentage of total landed costs increased 13-19 percent from a year earlier.

| | | Cost of | transpo | rting so | ybeans | from B | razil to I | lambur | g, Germ | any | | |
|-------------------------------|--------|---------|------------|-------------------------|--------|-----------------|---|--------|-----------------|------------|--------|---------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | Percent | 2006 | 2007 | 2008 | 2009 | 2010 | Percent |
| | | | US\$/mt | | | change 09-10 | | | change 09-10 | | | |
| | | | North MT | - Santos ² | | | | Nor | thwest RS | - Rio Grai | nde² | |
| Truck | 79.46 | 97.67 | 115.74 | 97.00 | 116.78 | 20.4 | 16.16 | 21.82 | 22.29 | 24.50 | 28.18 | 15.0 |
| Ocean | 46.76 | 73.01 | 52.36 | 32.48 | 33.63 | 3.5 | 45.03 | 71.73 | 54.30 | 33.79 | 36.03 | 6.6 |
| Total transportation | 126.22 | 170.68 | 168.10 | 129.48 | 150.40 | 16.2 | 61.18 | 93.55 | 76.60 | 58.30 | 64.21 | 10.1 |
| Farm price 3 | 164.88 | 233.82 | 358.99 | 324.34 | 318.15 | -1.9 | 210.34 | 267.06 | 394.66 | 359.51 | 344.90 | -4.1 |
| Landed cost | 291.11 | 404.50 | 527.09 | 453.82 | 468.55 | 3.2 | 271.53 | 360.61 | 471.26 | 417.80 | 409.11 | -2.1 |
| Transport % of landed cost | 43.4 | 42.5 | 31.6 | 28.7 | 32.6 | 13.7 | 22.3 | 26.1 | 16.1 | 14.0 | 15.8 | 13.1 |
| | | Nort | h Center P | R ¹ - Parana | agua² | | South GO ¹ - Santos ² | | | | | |
| Truck | 21.31 | 32.36 | 33.60 | 27.37 | 34.51 | 26.1 | 43.56 | 50.47 | 80.61 | 50.83 | 64.71 | 27.3 |
| Ocean | 45.76 | 71.05 | 53.81 | 33.34 | 35.08 | 5.2 | 46.76 | 73.01 | 52.36 | 32.48 | 33.63 | 3.5 |
| Total transportation | 67.07 | 103.42 | 87.41 | 60.71 | 69.59 | 14.6 | 90.32 | 123.48 | 132.97 | 83.32 | 98.34 | 18.0 |
| Farm price 3 | 213.81 | 281.14 | 399.30 | 372.46 | 350.44 | -5.9 | 189.63 | 268.65 | 358.99 | 338.31 | 324.27 | -4.2 |
| Landed cost | 280.88 | 384.56 | 486.71 | 433.17 | 420.03 | -3.0 | 279.96 | 392.12 | 491.97 | 421.63 | 422.61 | 0.2 |
| Transport % of landed cost | 23.8 | 27.0 | 17.9 | 14.1 | 16.8 | 19.1 | 32.2 | 31.8 | 26.9 | 19.8 | 23.6 | 18.9 |

¹Producing regions: RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná ²Export ports

³Source: Companhia Nacional de Abastecimento (CONAB) www.conab.gov.br

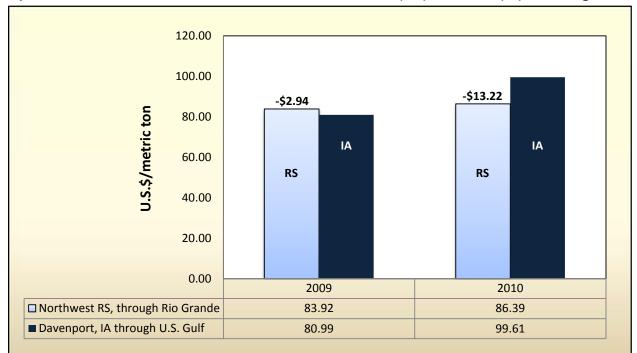
In 2010, it cost \$73.01 more per metric ton to ship soybeans from Sorriso, North Mato Grosso (MT) to Shanghai, China, than from Davenport, IA. Sorriso is located 1,190 miles from the port of Santos. Davenport is about 900, 908, and 1,343 miles from the Port of New Orleans by truck, rail, and barge, respectively.





In 2010, the cost of shipping a metric ton of soybeans from Cruz Alta, Northwest Rio Grande do Sul (RS), to Shanghai, China, cost \$13.22 less than from Davenport, IA. The distance from Cruz Alta to the port of Rio Grande is 288 miles.

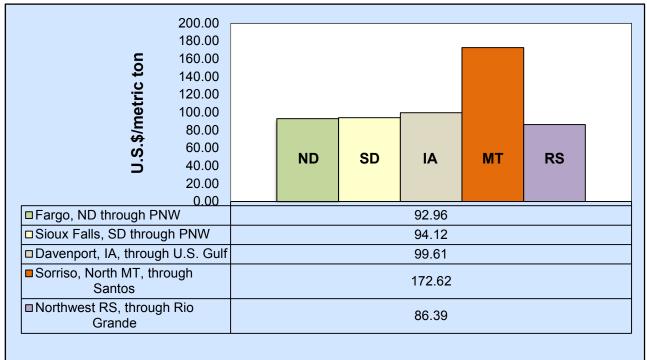
Transportation cost differences between Rio Grande do Sul (RS) and Iowa (IA) to Shanghai, China



2010 Summary

During 2010, Sorriso, North MT, soybean shippers to Shanghai paid \$73-\$80 more than selected U.S. shippers and almost double the transportation cost paid by Cruz Alta, RS, shippers.

Transportation cost differences between selected Brazil-United States Routes to Shanghai, China, 2010



Source: USDA/AMS

In 2010, truck rates (valued in reais) from Sorriso, North Mato Grosso (MT), to Santos and Paranaguá increased 7 and 8 percent, respectively. Truck rates from Cruz Alta, Rio Grande do Sul (RS) to Rio Grande increased about 3 percent.

| Truck rates for selected Brazilian soybean export routes, 2005-2010 | | | | | | | | | | | | |
|---|----------------------------------|-------------|----------------------|--------|--------|--------|-----------------|--------|--------|---------|--|--|
| Route | Origin ¹ | Destination | Distance | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Percent | | |
| # | (reference city) | Destination | (miles) ² | | F | | Change 09-10 | | | | | |
| 1 | Northwest RS3(Cruz Alta) | Rio Grande | 288 | 31.25 | 35.09 | 42.83 | 39.75 | 48.32 | 49.58 | 2.61 | | |
| 2 | North MT(Sorriso) | Santos | 1190 | 191.83 | 172.90 | 190.37 | 206.25 | 191.73 | 205.40 | 7.13 | | |
| 3 | North MT(Sorriso) | Paranaguá | 1262 | 188.40 | 169.84 | 171.59 | 196.05 | 180.30 | 195.09 | 8.20 | | |
| 4 | South GO(Rio Verde) | Santos | 587 | 90.56 | 94.74 | 98.45 | 99.16 | 100.36 | 113.85 | 13.45 | | |
| 6 | North Center PR(Londrina) | Paranaguá | 268 | 52.26 | 46.35 | 62.89 | 60.78 | 54.50 | 60.70 | 11.36 | | |
| 11 | Southeast MT(Primavera do Leste) | Santos | 901 | 143.14 | 125.29 | 135.70 | 144.86 | 147.22 | 164.18 | 11.52 | | |

¹Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price.

²Distance from the main city of the considered region to the mentioned ports.

³RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso do Sul,

SP = São Paulo

In 2010, selected Brazilian export truck routes saw proportionally higher increases in transportation costs in U.S. dollars due to the appreciation of the Brazilian Real (R\$) against the U.S. dollar. In 2010, the real appreciated about 12 percent against the dollar, from R\$1.9977 per US\$1.00 to R\$1.7595. This is the largest annual gain in the value of the real against the U.S. dollar from the dollar peak of 2005 of R& 2.4352 per U.S. dollar.

| Truck rates for selected Brazilian soybean export routes, 2005-2010 | | | | | | | | | | | | |
|---|---------------------------------------|-------------|----------|-------|-------|---------|-----------------|-------|--------|---------|--|--|
| Route | Origin ¹ | Destination | Distance | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Percent | | |
| # | (reference city) | Destination | (miles)² | | | US\$/me | Change 09-10 | | | | | |
| 1 | Northwest RS ³ (Cruz Alta) | Rio Grande | 288 | 12.84 | 16.16 | 21.82 | 22.29 | 24.50 | 28.18 | 15.00 | | |
| 2 | North MT (Sorriso) | Santos | 1190 | 79.10 | 79.46 | 97.67 | 115.74 | 97.00 | 116.78 | 20.39 | | |
| 3 | North MT (Sorriso) | Paranaguá | 1262 | 77.64 | 78.05 | 88.05 | 109.90 | 91.36 | 110.94 | 21.44 | | |
| 4 | South GO (Rio Verde) | Santos | 587 | 37.59 | 43.56 | 50.47 | 55.33 | 50.83 | 64.71 | 27.30 | | |
| 6 | North Center PR (Londrina) | Paranaguá | 268 | 21.52 | 21.31 | 32.36 | 33.60 | 27.37 | 34.51 | 26.11 | | |
| 11 | Southeast MT (Primavera do Leste) | Santos | 901 | 58.95 | 57.56 | 69.58 | 80.61 | 74.39 | 93.41 | 25.56 | | |

¹Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price.

²Distance from the main city of the considered region to the mentioned ports.

³RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso do Sul, SP = São Paulo

Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

The Brazilian soybean export transportation cost index increased nearly 23 percent in 2010. The cost of shipping a metric ton (mt) of soybeans 100 miles by truck increased from \$8.74 in 2009 to \$10.74 in 2010.

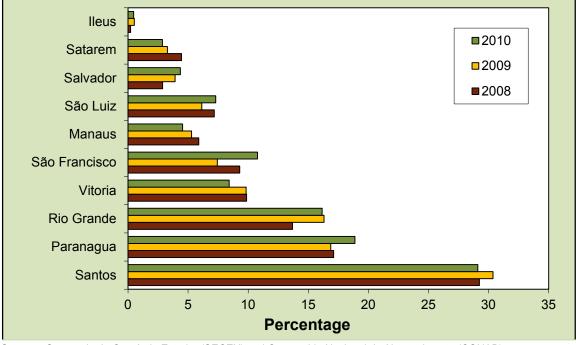


Brazilian soybean export truck cost index

Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

2010 Summary

Brazil is the second largest soybean export country after the United States. In 2010, Santos was the largest Brazilian soybean export port followed by Paranaguá and Rio Grande.



Brazil soybean exports by port

In 2010, ocean rates from the Port of Santos to Shanghai, China, steadily increased throughout the year but still remained 5 percent below 2009 rates, averaging \$55.84/mt. Ocean rates to Hamburg hit a peak of \$36.17/mt in the 2nd quarter and steadily declined in the 3rd and 4th quarter, ranging from \$31-\$36/mt.

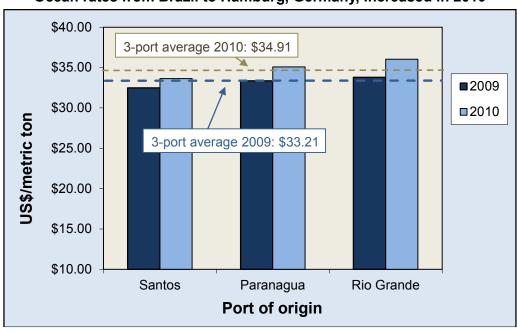




Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

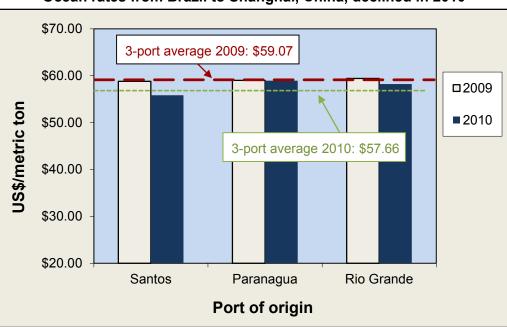
Sources: Secretaria de Comércio Exterior (SECEX) and Companhia Nacional de Abastecimento (CONAB)

The cost to ship 1 mt of soybeans from Brazil to Hamburg by ocean-going vessel increased on average 5 percent from \$33.21/mt to \$34.91/mt.



Ocean rates from Brazil to Hamburg, Germany, increased in 2010

In 2010, the cost to ship 1 mt of soybeans from Brazil to Shanghai by ocean vessel fell on average 2 percent from \$59.07/mt to \$57.66/mt.

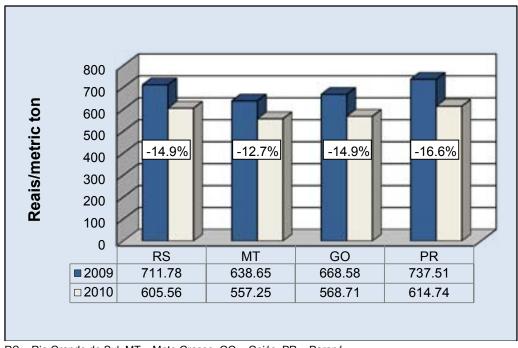


Ocean rates from Brazil to Shanghai, China, declined in 2010

Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

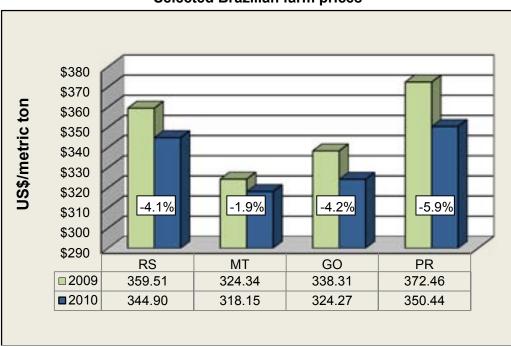
2010 Summary

Farm prices in the Brazilian Real (R\$) decreased 16.6 percent in Paraná (PR) in 2010. However, when farm prices are measured in U.S. dollar, they decreased proportionally less, 5.9 percent, from a year earlier, due to the appreciation of the real against the U.S. dollar.



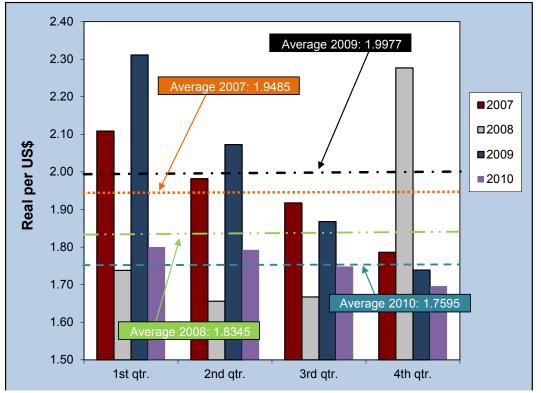


RS = Rio Grande do Sul, MT = Mato Grosso, GO = Goiás, PR = Paraná Source: Companhia Nacional de Abastecimento (CONAB)



Selected Brazilian farm prices

RS = Rio Grande do Sul, MT = Mato Grosso, GO = Goiás, PR = Paraná Source: Companhia Nacional de Abastecimento (CONAB) In 2010, the Brazilian Real (R\$) appreciated 11.9 percent against the US\$ compared with 2009, from R\$1.9977 per US\$1.00 to R\$1.7595.

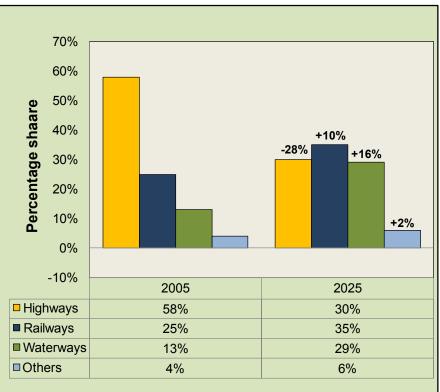




Source: Banco Central do Brasil

Transportation Infrastructural Developments

The Brazilian government plans to change the current cargo transportation matrix by developing an integrated intermodal system. The intention is that within 15 to 20 years, railways' participation will increase from 25 to 35 percent; waterways from 13 to 29 percent; and truck shipments will be reduced by 28 percent, from 58 to 30 percent. To modify the transportation matrix, in January 2007, the Brazilian government created the Growth Acceleration Plan (PAC) to promote sustainable social and economic development by generating employment, income, and reducing regional inequalities. During the same year, the PAC was integrated into the National Plan of Logistic and Transportation (PNLT). The PNLT is executed through the Ministry of Transportation and Defense allocating funds in 3 phases from 2008 to 2023.

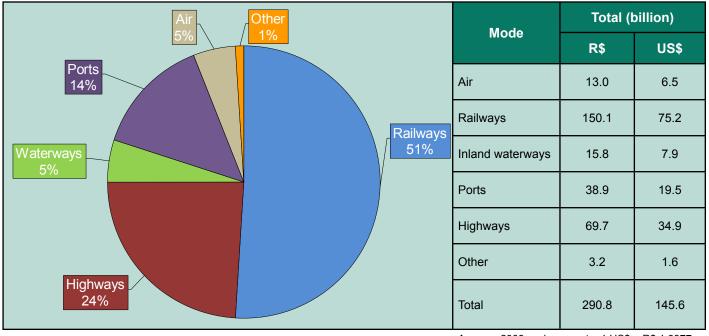


Brazil modal share for general cargo, 2005-2025

Source: Brazil Ministry of Transportation, National Plan of Logistic & Transportation (PNLT)

| National Logistics and Transportation Program (PNLT), timeframe 2008 — after 2015, billions | | | | | | | | | | | |
|---|----------|---------|----------|--|--|--|--|--|--|--|--|
| Phases | Total (k | % share | | | | | | | | | |
| r nases | R\$ | US\$ | 70 share | | | | | | | | |
| I: 2008-2011 | 109.2 | 54.7 | 37.55 | | | | | | | | |
| II: 2012-2015 | 84.3 | 42.2 | 28.99 | | | | | | | | |
| III: 2015-2023 | 97.3 | 48.7 | 33.46 | | | | | | | | |
| Total | 290.8 | 145.6 | 100 | | | | | | | | |

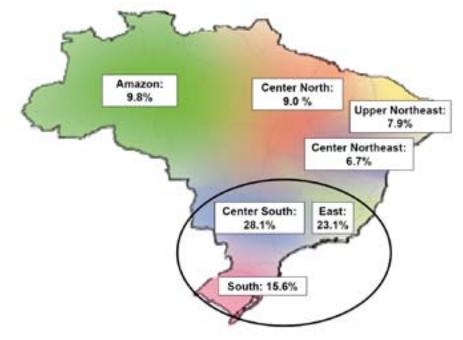
*Average 2009 exchange rate: 1 US\$ = R\$ 1.9977 Source: Brazilian Ministry of Transportation Of the US\$ 145.6 billion to be allocated to the logistic sector, about 51 percent of the funds will be allocated to the railway system, totaling about US\$ 75.2 billion.



National Logistics and Transportation Program (PNLT), allocations by mode, 2008-2023

Average 2009 exchange rate: 1 US\$ = R\$ 1.9977 Source: Brazil Ministry of Transportation

Two-thirds of the funds will be allocated in the Center-South, East, and South regions.



PNLT allocation by logistic vectors

Source: Brazil Ministry of Transportation

Transportation Infrastructural Developments

US\$ 7.8 billion are assigned to improve the inland waterways: 61 percent of the funds will be allocated to improve the inland waterways in the Amazon and Center North regions; 62 percent of the port funds will be allocated to improve the ports in the East and Center South; and 34 percent of highway funds will be allocated to improve the highway system of the Amazon and South regions.

| | PNLT — Transportation mode investments by logistic vectors, and % of total | | | | | | | | | | | | |
|---------------------|--|------------------|------------------|-------|---------------------|--------------------|-------|-------|--|--|--|--|--|
| Mode | Amazon | Center- North | Center- South | East | Center Northeast | Upper Northeast | South | Total | | | | | |
| Air | 5.27 | 6.56 | 28.20 | 20.81 | 2.76 | 25.04 | 11.35 | 100 | | | | | |
| Railways | 6.82 | 6.24 | 37.42 | 24.18 | 5.89 | 4.54 | 14.92 | 100 | | | | | |
| Inland waterways | 31.34 | 29.67 | 12.98 | 9.57 | 1.73 | 1.02 | 13.69 | 100 | | | | | |
| Ports | 2.61 | 8.69 | 20.84 | 41.50 | 4.03 | 5.33 | 17.00 | 100 | | | | | |
| Highways | 16.50 | 9.11 | 15.47 | 14.55 | 12.01 | 14.40 | 17.96 | 100 | | | | | |
| Other | - | 49.30 | 24.33 | 7.18 | 0.45 | 16.50 | 2.50 | 100 | | | | | |
| % of Brazil | 9.9 | 9.2 | 11.3 | 9.6 | 20.4 | 22.7 | 16.9 | 100 | | | | | |

*Average 2009 exchange rate: 1 US\$ = R\$ 1.9977

Source: Brazilian Ministry of Transportation

| | Quarterly costs of transporting soybeans from Brazil to Shanghai, China | | | | | | | | | | | |
|-------------------------------|--|---|------------------------------------|-------------------|--------|--|---------|-------------------------------------|---------------------|--------|--|--|
| | | | 2010 | | | | | 2010 | | | | |
| | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | | |
| | | Nort | h MT ¹ - San US\$/mt | itos ² | | | North | MT ¹ - Parar US\$/mt | nagua² | | | |
| Truck | 113.10 | 113.73 | 120.16 | 120.12 | 116.78 | 104.43 | 109.74 | 114.64 | 114.64 114.96 | | | |
| Ocean | 52.33 | 55.08 | 58.17 | 57.79 | 55.84 | 52.50 | 58.58 | 63.10 | 61.50 | 58.92 | | |
| Total transportation | 165.43 | 168.81 | 178.33 | 177.91 | 172.62 | 156.93 | 168.32 | 177.74 | 176.46 | 169.86 | | |
| Farm price ³ | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | | |
| Landed cost | 426.48 | 438.39 | 506.83 | 591.37 | 490.77 | 417.98 | 437.90 | 506.25 | 589.92 | 488.01 | | |
| Transport % of landed cost | 38.8 | 38.5 35.2 30.1 38.6 37.5 38.4 35.1 29.9 | | | | | | | | 35.3 | | |
| | | Southe | east MT¹ - S US\$/mt | antos² | | North Center PR ¹ - Paranagua ² US\$/mt | | | | | | |
| Truck | 88.63 | 89.42 | 94.35 | 101.24 | 93.41 | 31.87 | 35.11 | 36.53 | 34.53 | 34.51 | | |
| Ocean | 52.33 | 55.08 | 58.17 | 57.79 | 55.84 | 52.50 | 58.58 | 63.10 | 61.50 | 58.92 | | |
| Total transportation | 140.96 | 144.50 | 152.52 | 159.03 | 149.26 | 84.37 | 93.69 | 99.63 | 96.03 | 93.43 | | |
| Farm price ³ | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | 325.22 | 300.32 | 350.41 | 425.79 | 350.44 | | |
| Landed cost | 402.01 | 414.08 | 481.03 | 572.49 | 467.41 | 409.60 | 394.01 | 450.04 | 521.82 | 443.87 | | |
| Transport % of landed cost | 35.1 | 34.9 | 31.7 | 27.8 | 32.4 | 20.6 | 23.8 | 22.1 | 18.4 | 21.2 | | |
| | | Sout | th GO¹ - Sar US\$/mt | ntos² | | | Northwe | st RS ¹ - Rio US\$/mt | Grande ² | | | |
| Truck | 61.87 | 64.80 | 67.86 | 64.32 | 64.71 | 24.84 | 30.14 | 29.24 | 28.50 | 28.18 | | |
| Ocean | 52.33 | 55.08 | 58.17 | 57.79 | 55.84 | 53.00 | 58.75 | 63.27 | 57.83 | 58.21 | | |
| Total transportation | 114.20 | 119.88 | 126.03 | 122.11 | 120.56 | 77.84 | 88.89 | 92.51 | 86.33 | 86.39 | | |
| Farm price ³ | 309.89 | 271.15 | 315.43 | 400.62 | 324.27 | 331.49 | 304.36 | 342.98 | 400.78 | 344.90 | | |
| Landed cost | 424.09 | 391.03 | 441.46 | 522.73 | 444.82 | 409.33 | 393.25 | 435.49 | 487.10 | 431.29 | | |
| Transport % of landed cost | 26.9 | 30.7 | 28.5 | 23.4 | 27.4 | 19.0 | 22.6 | 21.2 | 17.7 | 20.1 | | |

¹Producing regions: RS = Rio Grande do Sul, MT = Mato Grosso, GO = Goiás, PR = Paraná

²Export ports represent 60 percent of total soybean exports; ³Companhia Nacional de Abastecimento (CONAB) Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

| | Quarterly costs of transporting soybeans from Brazil to Hamburg, Germany | | | | | | | | | | | | |
|-------------------------------|---|---------|-------------------------------------|---------|--------|--|---------|-------------------------------------|---------------------|--------|--|--|--|
| | | | 2010 | | | | | 2010 | | | | | |
| | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | | | |
| | | Nort | th MT ¹ - San US\$/mt | | | | North | MT ¹ - Parar US\$/mt | nagua² | | | | |
| Truck | 113.10 | 113.73 | 120.16 | 120.12 | 116.78 | 104.43 | 109.74 | 114.64 | 114.96 | 110.94 | | | |
| Ocean | 32.25 | 36.17 | 34.42 | 31.67 | 33.63 | 31.83 | 38.08 | 36.92 | 33.50 | 35.08 | | | |
| Total transportation | 145.35 | 149.90 | 154.58 | 151.79 | 150.40 | 136.26 | 147.82 | 151.56 | 148.46 | 146.03 | | | |
| Farm price 3 | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | | | |
| Landed cost | 406.40 | 419.48 | 483.08 | 565.25 | 468.55 | 397.31 | 417.40 | 480.07 | 561.92 | 464.18 | | | |
| Transport % of landed cost | 35.8 | 35.7 | 32.0 | 26.9 | 32.6 | 34.3 | 31.9 | | | | | | |
| | | South | east MT¹ - S US\$/mt | antos² | | North Center PR ¹ - Paranagua ² US\$/mt | | | | | | | |
| Truck | 88.63 | 89.42 | 94.35 | 101.24 | 93.41 | 31.87 | 35.11 | 36.53 | 34.53 | 34.51 | | | |
| Ocean | 32.25 | 36.17 | 34.42 | 31.67 | 33.63 | 31.83 | 38.08 | 36.92 | 33.50 | 35.08 | | | |
| Total transportation | 120.88 | 125.59 | 128.77 | 132.91 | 127.04 | 63.70 | 73.19 | 73.45 | 68.03 | 69.59 | | | |
| Farm price 3 | 261.05 | 269.58 | 328.51 | 413.46 | 318.15 | 325.22 | 300.32 | 350.41 | 425.79 | 350.44 | | | |
| Landed cost | 381.93 | 395.17 | 457.28 | 546.37 | 445.19 | 388.93 | 373.51 | 423.86 | 493.82 | 420.03 | | | |
| Transport % of landed cost | 31.7 | 31.8 | 28.2 | 24.3 | 29.0 | 16.4 | 19.6 | 17.3 | 13.8 | 16.8 | | | |
| | | Sout | th GO¹ - Sar US\$/mt | ntos² | | | Northwe | st RS ¹ - Rio US\$/mt | Grande ² | | | | |
| Truck | 61.87 | 64.80 | 67.86 | 64.32 | 64.71 | 24.84 | 30.14 | 29.24 | 28.50 | 28.18 | | | |
| Ocean | 32.25 | 36.17 | 34.42 | 31.67 | 33.63 | 33.50 | 39.00 | 37.08 | 34.54 | 36.03 | | | |
| Total transportation | 94.12 | 100.97 | 102.28 | 95.99 | 98.34 | 58.34 | 69.14 | 66.32 | 63.04 | 64.21 | | | |
| Farm price 3 | 309.89 | 271.15 | 315.43 | 400.62 | 324.27 | 331.49 | 304.36 | 342.98 | 400.78 | 344.90 | | | |
| Landed cost | 404.01 | 372.12 | 417.71 | 496.61 | 422.61 | 389.83 | 373.50 | 409.30 | 463.81 | 409.11 | | | |
| Transport % of landed cost | 23.3 | 27.1 | 24.5 | 19.3 | 23.6 | 15.0 | 18.5 | 16.2 | 13.6 | 15.8 | | | |

¹Producing regions: RS = Rio Grande do Sul, MT = Mato Grosso, GO = Goiás, PR = Paraná

²Export ports represent 60 percent of total soybean exports; ³Companhia Nacional de Abastecimento (CONAB) Source: ESALQ/ USP (University of São Paulo, Brazil) and USDA/AMS

Source: USDA/AMS

| Truck rates for selected Brazilian soybean export transportation routes, 2010 | | | | | | | | | | | | |
|---|---------------------------------------|-------------|----------------------------------|---------------|-------------------|-------|----------------------------|-------|-------------|--|--|--|
| Route # | Origin¹ (reference city) | Destination | Distance (miles) ² | Share (%)³ | Quarte 1st | 2nd | ght Pric 3rd 0 miles | 4th | Avg 2010 | | | |
| 1 | Northwest RS(Cruz Alta) | Rio Grande | 288 | 11.86 | 8.62 | 10.47 | 10.15 | 9.89 | 9.78 | | | |
| 2 | North MT(Sorriso) | Santos | 1190 | 13.45 | 9.50 | 9.56 | 10.10 | 10.09 | 9.81 | | | |
| 3 | North MT(Sorriso) | Paranaguá | 1262 | 12.67 | 8.27 | 8.70 | 9.08 | 9.11 | 8.79 | | | |
| 4 | South GO(Rio Verde) | Santos | 587 | 6.59 | 10.54 | 11.04 | 11.56 | 10.96 | 11.02 | | | |
| 5 | South GO(Rio Verde) | Paranaguá | 726 | 5.32 | 8.52 | 9.07 | 9.16 | 8.87 | 8.90 | | | |
| 6 | North Center PR(Londrina) | Paranaguá | 268 | 3.32 | 11.89 | 13.10 | 13.63 | 12.89 | 12.88 | | | |
| 7 | Western Center PR(Mamborê) | Paranaguá | 311 | 3.14 | 8.38 | 9.99 | 11.54 | 11.51 | 10.36 | | | |
| 8 | Triangle MG(Uberaba) | Santos | 339 | 3.50 | 14.68 | 15.82 | 16.97 | 16.83 | 16.08 | | | |
| 9 | West PR(Assis Chateaubriand) | Paranaguá | 377 | 4.06 | 8.97 | 10.79 | 11.61 | 12.62 | 11.00 | | | |
| 10 | West Extreme BA(São Desidério) | Salvador | 535 | 5.19 | 10.64 | 11.21 | 10.41 | 8.83 | 10.27 | | | |
| 11 | Southeast MT(Primavera do Leste) | Santos | 901 | 3.74 | 9.84 | 9.92 | 10.47 | 11.24 | 10.37 | | | |
| 12 | Southeast MT(Primavera do Leste) | Paranaguá | 975 | 3.46 | 8.96 | 8.71 | 8.91 | 9.38 | 8.99 | | | |
| 13 | Southwest MS(Maracaju) | Paranaguá | 612 | 2.76 | 10.82 | 10.75 | 10.93 | 10.58 | 10.77 | | | |
| 14 | Southwest MS(Maracaju) | Santos | 652 | 2.59 | 10.83 | 10.65 | 11.24 | 11.01 | 10.93 | | | |
| 15 | West PR(Assis Chateaubriand) | Santos | 550 | 0.00 | 11.91 | 11.88 | 12.70 | 13.59 | 12.52 | | | |
| 16 | East GO(Cristalina) | Santos | 585 | 1.93 | 10.71 | 11.42 | 11.46 | 11.28 | 11.22 | | | |
| 17 | North PR(Cornélio Procópio) | Paranaguá | 306 | 1.36 | 9.44 | 10.16 | 11.88 | 10.68 | 10.54 | | | |
| 18 | Eastern Center PR(Castro) | Paranaguá | 130 | 2.34 | 16.71 | 20.11 | 21.17 | 21.66 | 19.91 | | | |
| 19 | South Center PR(Guarapuava) | Paranaguá | 204 | 2.21 | 14.61 | 16.44 | 17.33 | 16.84 | 16.30 | | | |
| 20 | North Center MS(São Gabriel do Oeste) | Santos | 720 | 2.08 | 8.92 | 9.94 | 10.22 | 9.60 | 9.67 | | | |
| 21 | Ribeirão Preto SP(Guairá) | Santos | 314 | 0.00 | 12.74 | 13.15 | 13.65 | 14.20 | 13.44 | | | |
| 22 | Northeast MT(Canarana) | Santos | 950 | 2.27 | 11.31 | 10.65 | 11.10 | 12.30 | 11.34 | | | |
| 23 | East MS(Chapadão do Sul) | Santos | 607 | 0.00 | 9.97 | 10.81 | 11.13 | 10.71 | 10.65 | | | |
| 24 | Northeast MT(Canarana) | Paranaguá | 1075 | 2.01 | 9.95 | 10.35 | 10.91 | 10.71 | 10.48 | | | |
| 25 | Western Center RS(Tupanciretã) | Rio Grande | 273 | 2.36 | 8.44 | 9.44 | 9.32 | 9.04 | 9.06 | | | |
| 26 | Southwest PR(Chopinzinho) | Paranaguá | 291 | 1.79 | 12.20 | 13.31 | 14.03 | 13.95 | 13.37 | | | |
| | Weighted average | | 578 | 100.0 | 9.98 | 10.77 | 11.18 | 11.03 | 10.74 | | | |

¹Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price; na = not available

²Distance from the main city of the considered region to the mentioned ports

³Share is measured as a percentage of total production

⁴US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar) ⁵RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso do Sul, SP = São Paulo

Truck rates for selected Brazilian soybean export transportation routes, 2005-2010

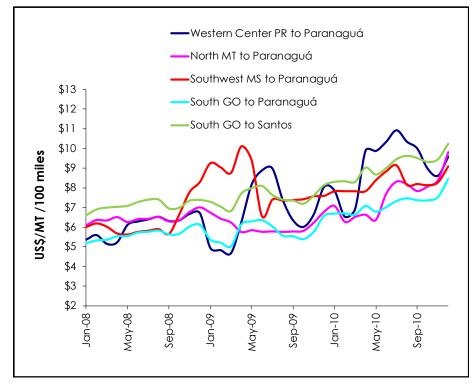
| Route | Origin ¹ | | Distance | Share | | Qualit | y Freigl | ht Price | (US\$) | | Percent | |
|-------|---------------------------------------|-------------|----------------------|------------------|-------|--------|----------|----------|--------|-------|-------------------|--|
| # | (reference city) | Destination | (miles) ² | (%) ³ | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Change 2009-10 | |
| | | | | | | | (per 10 |) miles) | 4 | | 2009-10 | |
| 1 | Northwest RS5(Cruz Alta) | Rio Grande | 288 | 10.81 | 4.46 | 5.61 | 7.58 | 7.74 | 8.51 | 9.78 | 15.00 | |
| 2 | North MT(Sorriso) | Santos | 1190 | 13.02 | 6.65 | 6.68 | 8.21 | 9.73 | 8.15 | 9.81 | 20.39 | |
| 3 | North MT(Sorriso) | Paranaguá | 1262 | 12.27 | 6.15 | 6.18 | 6.98 | 8.71 | 7.24 | 8.79 | 21.44 | |
| 4 | South GO(Rio Verde) | Santos | 587 | 6.26 | 6.40 | 7.42 | 8.60 | 9.43 | 8.66 | 11.02 | 27.30 | |
| 5 | South GO(Rio Verde) | Paranaguá | 726 | 5.06 | 5.11 | 5.78 | 6.73 | 7.65 | 7.00 | 8.90 | 27.22 | |
| 6 | North Center PR(Londrina) | Paranaguá | 268 | 4.08 | 8.03 | 7.95 | 12.08 | 12.54 | 10.21 | 12.88 | 26.11 | |
| 7 | Western Center PR(Mamborê) | Paranaguá | 311 | 3.63 | 5.72 | 6.68 | 8.62 | 9.38 | 9.33 | 10.36 | 10.96 | |
| 8 | Triangle MG(Uberaba) | Santos | 339 | 3.18 | 9.48 | 10.30 | 12.20 | 13.87 | 13.18 | 16.08 | 21.95 | |
| 9 | West PR(Assis Chateaubriand) | Paranaguá | 377 | 6.21 | 5.82 | 6.76 | 7.55 | 8.07 | 8.27 | 11.00 | 33.02 | |
| 10 | West Extreme BA(São Desidério) | llhéus | 544 | 5.69 | 7.28 | 8.08 | 9.78 | 11.52 | 9.75 | 10.27 | 5.32 | |
| 11 | Southeast MT(Primavera do Leste) | Santos | 901 | 2.89 | 6.54 | 6.39 | 7.72 | 8.95 | 8.26 | 10.37 | 25.56 | |
| 12 | Southeast MT(Primavera do Leste) | Paranaguá | 975 | 2.67 | 6.06 | 5.95 | 7.16 | 8.02 | 7.32 | 8.99 | 22.83 | |
| 13 | Southwest MS(Maracaju) | Paranaguá | 612 | 3.34 | 5.83 | 8.16 | 8.05 | 7.94 | 7.91 | 10.77 | 36.18 | |
| 14 | Southwest MS(Maracaju) | Santos | 652 | 3.14 | 6.01 | 8.00 | 7.72 | 8.11 | 8.26 | 10.93 | 32.30 | |
| 15 | West PR(Assis Chateaubriand) | Santos | 550 | 0.00 | 5.84 | 7.20 | 8.32 | 9.87 | 11.02 | 12.52 | 13.61 | |
| 16 | Western Center RS(Tupanciretã) | Rio Grande | 273 | 1.17 | na | na | na | 10.36 | 8.86 | 11.22 | 26.56 | |
| 17 | Southwest PR(Chopinzinho) | Paranaguá | 291 | 1.87 | na | na | na | 9.21 | 9.39 | 10.54 | 12.23 | |
| 18 | Eastern Center PR(Castro) | Paranaguá | 130 | 2.47 | 10.12 | 9.55 | 16.24 | 13.42 | 12.59 | 19.91 | 58.18 | |
| 19 | South Center PR(Guarapuava) | Paranaguá | 204 | 2.23 | 8.33 | 9.56 | 10.98 | 13.66 | 11.27 | 16.30 | 44.70 | |
| 20 | North Center MS(São Gabriel do Oeste) | Santos | 720 | 1.83 | 5.47 | 6.21 | 7.02 | 7.58 | 7.63 | 9.67 | 26.74 | |
| 21 | Ribeirão Preto SP(Guairá) | Santos | 314 | 0.00 | 7.55 | 8.91 | 10.82 | 12.54 | 11.09 | 13.44 | 21.17 | |
| 22 | Northeast MT(Canarana) | Santos | 950 | 2.12 | 7.35 | 7.87 | 8.90 | 10.69 | 8.99 | 11.34 | 26.09 | |
| 23 | Assis SP(Palmital) | Santos | 285 | 0.00 | na | na | na | 8.73 | 8.16 | 10.65 | 30.52 | |
| 24 | Northeast MT(Canarana) | Paranaguá | 1075 | 1.87 | na | na | na | 9.08 | 7.49 | 10.48 | 39.87 | |
| 25 | Western Center RS(Tupanciretã) | Rio Grande | 273 | 2.25 | na | na | na | 11.23 | 8.38 | 9.06 | 8.05 | |
| 26 | Southwest PR(Chopinzinho) | Paranaguá | 291 | 1.98 | na | na | na | 12.38 | 10.51 | 13.37 | 27.21 | |
| | Average | | 626 | 100.0 | na | na | na | 9.75 | 8.74 | 10.74 | 22.91 | |

¹Although each origin region comprises several cities, the main city is considered as a reference to establish the freight price; na = not available ²Distance from the main city of the considered region to the mentioned ports

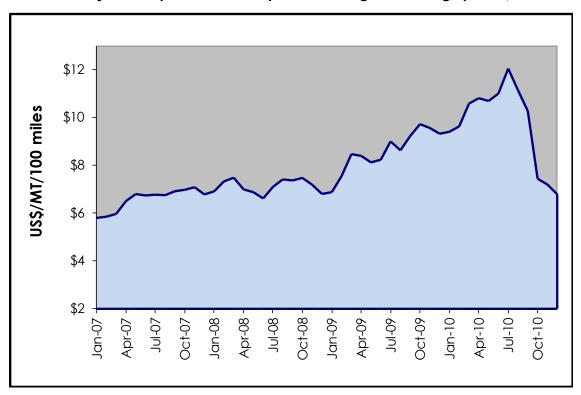
³Share is measured as a percentage of total production

⁴US\$ per metric ton (average monthly exchange rate from "Banco Central do Brasil" was used to convert Brazilian reais to the U.S. dollar) ⁵RS = Rio Grande do Sul, MT= Mato Grosso, GO = Goiás, PR = Paraná, MG = Minas Gerais, BA = Bahia, MS = Mato Grosso do Sul, SP = São Paulo

Truck rates for selected Brazilian soybean export transportation routes



Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS



Brazilian soybean export truck transportation weighted average prices, 2007/10

| Monthly Brazilian soybean export truck transportation cost index | | | | | | | | | |
|--|-----------------------------------|--|--------------------------------------|--------|-----------------------------------|--|--------------------------------------|--|--|
| Month | Freight price* (per 100 miles) | Index variation (%) (Base: prior month) | Index value (Base: Jan. 05 = 100) | Month | Freight price* (per 100 miles) | Index variation (%) (Base: prior month) | Index value (Base: Jan. 05 = 100) | | |
| Jan-05 | 5.80 | 40.8 | 100.00 | Jul-08 | 12.05 | 9.5 | 207.73 | | |
| Feb-05 | 5.85 | 0.9 | 100.90 | Aug-08 | 11.14 | -7.6 | 192.00 | | |
| Mar-05 | 5.97 | 2.0 | 102.92 | Sep-08 | 10.27 | -7.8 | 177.00 | | |
| Apr-05 | 6.51 | 9.0 | 112.14 | Oct-08 | 7.44 | -27.5 | 128.24 | | |
| May-05 | 6.80 | 4.5 | 117.22 | Nov-08 | 7.20 | -3.2 | 124.13 | | |
| Jun-05 | 6.74 | -0.9 | 116.22 | Dec-08 | 6.79 | -5.7 | 117.11 | | |
| Jul-05 | 6.77 | 0.5 | 116.76 | Jan-09 | 6.91 | 1.7 | 119.11 | | |
| Aug-05 | 6.75 | -0.3 | 116.41 | Feb-09 | 7.28 | 5.4 | 125.52 | | |
| Sep-05 | 6.92 | 2.5 | 119.27 | Mar-09 | 7.65 | 5.1 | 131.89 | | |
| Oct-05 | 6.98 | 0.9 | 120.28 | Apr-09 | 8.44 | 10.3 | 145.42 | | |
| Nov-05 | 7.09 | 1.6 | 122.15 | May-09 | 9.56 | 13.3 | 164.72 | | |
| Dec-05 | 6.78 | -4.3 | 116.95 | Jun-09 | 9.74 | 2.0 | 167.97 | | |
| Jan-06 | 6.91 | 1.9 | 119.18 | Jul-09 | 9.28 | 21.3 | 159.94 | | |
| Feb-06 | 7.33 | 6.0 | 126.36 | Aug-09 | 9.29 | 0.1 | 160.16 | | |
| Mar-06 | 7.48 | 2.1 | 129.02 | Sep-09 | 9.14 | -1.6 | 157.62 | | |
| Apr-06 | 6.99 | -6.6 | 120.57 | Oct-09 | 9.32 | 1.9 | 160.66 | | |
| May-06 | 6.88 | -1.7 | 118.56 | Nov-09 | 9.22 | -1.1 | 158.93 | | |
| Jun-06 | 6.62 | -3.8 | 114.05 | Dec-09 | 9.02 | -2.2 | 155.48 | | |
| Jul-06 | 7.10 | 7.3 | 122.41 | Jan-10 | 9.17 | 1.7 | 158.10 | | |
| Aug-06 | 7.41 | 4.4 | 127.79 | Feb-10 | 9.99 | 8.9 | 172.16 | | |
| Sep-06 | 7.37 | -0.6 | 127.02 | Mar-10 | 10.77 | 7.8 | 185.67 | | |
| Oct-06 | 7.48 | 1.5 | 128.88 | Apr-10 | 10.91 | 1.3 | 188.10 | | |
| Nov-06 | 7.19 | -3.8 | 123.92 | May-10 | 10.80 | -1.1 | 186.10 | | |
| Dec-06 | 6.81 | -5.3 | 117.32 | Jun-10 | 10.61 | -1.7 | 182.95 | | |
| Jan-07 | 6.88 | 1.1 | 118.60 | Jul-10 | 10.86 | 2.3 | 187.14 | | |
| Feb-07 | 7.55 | 9.7 | 130.15 | Aug-10 | 11.21 | 3.3 | 193.23 | | |
| Mar-07 | 8.47 | 12.2 | 146.00 | Sep-10 | 11.46 | 2.2 | 197.57 | | |
| Apr-07 | 8.40 | -0.9 | 144.76 | Oct-10 | 11.51 | 0.4 | 198.41 | | |
| May-07 | 8.12 | -3.3 | 140.05 | Nov-10 | 10.86 | -5.6 | 187.20 | | |
| Jun-07 | 8.24 | 1.4 | 141.99 | Dec-10 | 10.72 | -1.3 | 184.79 | | |
| Jul-07 | 9.00 | 9.3 | 155.20 | Jan-10 | 9.17 | 1.7 | 158.10 | | |
| Aug-07 | 8.63 | -4.2 | 148.75 | Feb-10 | 9.99 | 8.9 | 172.16 | | |
| Sep-07 | 9.23 | 6.9 | 159.05 | Mar-10 | 10.77 | 7.8 | 185.67 | | |
| Oct-07 | 9.72 | 5.4 | 167.61 | Apr-10 | 10.91 | 1.3 | 188.10 | | |
| Nov-07 | 9.56 | -1.6 | 164.86 | May-10 | 10.80 | -1.1 | 186.10 | | |
| Dec-07 | 9.32 | -2.5 | 160.71 | Jun-10 | 10.61 | 15.7 | 182.95 | | |
| Jan-08 | 9.40 | 0.9 | 162.12 | Jul-10 | 10.86 | 2.3 | 187.14 | | |
| Feb-08 | 9.63 | 2.4 | 166.02 | Aug-10 | 11.21 | 3.3 | 193.23 | | |
| Mar-08 | 10.59 | 9.9 | 182.46 | Sep-10 | 11.46 | 2.2 | 197.57 | | |
| Apr-08 | 10.81 | 2.1 | 186.35 | Oct-10 | 11.51 | 0.4 | 198.41 | | |
| May-08 | 10.69 | -1.1 | 184.32 | Nov-10 | 10.86 | -5.6 | 187.20 | | |
| Jun-08 | 11.00 | 2.9 | 189.67 | Dec-10 | 10.72 | -1.3 | 184.79 | | |

*Weighted average and quoted in US\$ per metric ton Source: ESALQ/USP (University of São Paulo, Brazil) and USDA/AMS

| Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Shanghai, China (US\$/metric ton)* | | | | | | | | |
|---|--------|-----------|------------|--|--|--|--|--|
| | Ports | | | | | | | |
| | Santos | Paranaguá | Rio Grande | | | | | |
| 2006 | | | | | | | | |
| 1st qtr | 50.13 | 49.13 | 48.63 | | | | | |
| 2nd qtr | 44.80 | 43.80 | 43.30 | | | | | |
| 3rd qtr | 60.98 | 59.98 | 59.48 | | | | | |
| 4th qtr | 73.32 | 72.32 | 71.82 | | | | | |
| 2006 Average | 57.31 | 56.31 | 55.81 | | | | | |
| 2007 | | | | | | | | |
| 1st qtr | 73.32 | 72.32 | 71.82 | | | | | |
| 2nd qtr | 111.20 | 110.20 | 109.70 | | | | | |
| 3rd qtr | 72.00 | 65.50 | 70.50 | | | | | |
| 4th qtr | 74.81 | 75.22 | 74.20 | | | | | |
| 2007 Average | 82.83 | 80.81 | 81.56 | | | | | |
| 2008 | | | | | | | | |
| 1st qtr | 64.81 | 66.53 | 67.01 | | | | | |
| 2nd qtr | 80.27 | 80.79 | 81.27 | | | | | |
| 3rd qtr | 72.43 | 74.03 | 74.23 | | | | | |
| 4th qtr | 64.00 | 65.30 | 65.80 | | | | | |
| 2008 Average | 70.38 | 71.66 | 72.08 | | | | | |
| 2009 | | | | | | | | |
| 1st qtr | 64.50 | 65.70 | 66.87 | | | | | |
| 2nd qtr | 66.00 | 67.30 | 67.80 | | | | | |
| 3rd qtr | 49.00 | 48.78 | 49.50 | | | | | |
| 4th qtr | 55.63 | 54.23 | 53.50 | | | | | |
| 2009 Average | 58.78 | 59.00 | 59.42 | | | | | |
| 2010 | | | | | | | | |
| 1st qtr | 52.33 | 52.50 | 53.00 | | | | | |
| 2nd qtr | 55.08 | 58.58 | 58.75 | | | | | |
| 3rd qtr | 58.17 | 63.10 | 63.27 | | | | | |
| 4th qtr | 57.79 | 61.50 | 57.83 | | | | | |
| 2010 Average | 55.84 | 58.92 | 58.21 | | | | | |

*Correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volume

Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

Transportation Indicators

| Quarterly ocean freight rates for shipping soybeans from selected Brazilian ports to Hamburg, Germany (US\$/metric ton)* | | | | | | | |
|--|--------|-----------|------------|--|--|--|--|
| | Ports | | | | | | |
| | Santos | Paranaguá | Rio Grande | | | | |
| 2005 | | | | | | | |
| 1st qtr | 45.53 | 44.64 | 44.20 | | | | |
| 2nd qtr | 45.84 | 44.84 | 44.39 | | | | |
| 3rd qtr | 44.54 | 43.54 | 43.04 | | | | |
| 4th qtr | 56.73 | 55.73 | 55.23 | | | | |
| 2005 Average | 48.16 | 47.19 | 46.71 | | | | |
| 2006 | | | | | | | |
| 1st qtr | 39.51 | 38.51 | 37.06 | | | | |
| 2nd qtr | 36.91 | 35.91 | 35.41 | | | | |
| 3rd qtr | 50.24 | 49.24 | 48.74 | | | | |
| 4th qtr | 60.40 | 59.40 | 58.90 | | | | |
| 2006 Average | 46.76 | 45.76 | 45.03 | | | | |
| 2007 | | | | | | | |
| 1st qtr | 60.40 | 59.40 | 58.90 | | | | |
| 2nd qtr | 91.61 | 90.61 | 90.11 | | | | |
| 3rd qtr | 59.35 | 53.12 | 57.85 | | | | |
| 4th qtr | 80.67 | 81.08 | 80.06 | | | | |
| 2007 Average | 73.01 | 71.05 | 71.73 | | | | |
| 2008 | | | | | | | |
| 1st qtr | 57.38 | 58.90 | 59.36 | | | | |
| 2nd qtr | 71.08 | 72.68 | 73.18 | | | | |
| 3rd qtr | 48.80 | 50.20 | 50.70 | | | | |
| 4th qtr | 32.18 | 33.48 | 33.98 | | | | |
| 2008 Average | 52.36 | 53.81 | 54.30 | | | | |
| 2009 | | | | | | | |
| 1st qtr | 34.10 | 35.50 | 35.80 | | | | |
| 2nd qtr | 34.75 | 35.79 | 36.20 | | | | |
| 3rd qtr | 30.00 | 31.55 | 32.00 | | | | |
| 4th qtr | 31.08 | 30.53 | 31.17 | | | | |
| 2009 Average | 32.48 | 33.34 | 33.79 | | | | |
| 2010 | | | | | | | |
| 1st qtr | 32.25 | 31.83 | 33.50 | | | | |
| 2nd qtr | 36.17 | 38.08 | 39.00 | | | | |
| 3rd qtr | 34.42 | 36.92 | 37.08 | | | | |
| 4th qtr | 31.67 | 33.50 | 34.54 | | | | |
| 2010 Average | 33.63 | 35.08 | 36.03 | | | | |

*Correspond to the average actual values negotiated between shippers and carriers and weighted according to the magnitude of the shipped volume

Source: Sistema de Informações de Fretes, SIFRECA, ESALQ/USP (University of São Paulo, Brazil)

Soybean Production



Region/State

Production*:

2009-2010

(1,000 mt)

AC

Production*:

2010-2011**

(1,000 mt)

| | RO MT TO BA SE |
|-------------|--|
| % Change | MS SP MG ES |
| 0.0 | PR |
| 35.2 | 2 mm |
| 10.7 | sc |
| 71.8 | RS H |
| 11.7 | P |
| Total: 14.8 | En la companya de la comp |
| | |

| North | | | | | | | | |
|-------------------------|-----------------|-----------------|-------------|--|--|--|--|--|
| Amazonas (AM) | 0.0 | 0.0 | 0.0 | | | | | |
| Pará (PA) | 232.5 | 314.4 | 35.2 | | | | | |
| Rondônia (RO) | 384.3 | 425.3 | 10.7 | | | | | |
| Roraima (RR) | 3.9 | 6.7 | 71.8 | | | | | |
| Tocantins (TO) | 1,071.0 | 1,196.2 | 11.7 | | | | | |
| | Total: 1,691.7 | Total: 1,942.6 | Total: 14.8 | | | | | |
| Northeast | | | | | | | | |
| Bahia (BA) | 3,110.5 | 3,507.5 | 12.8 | | | | | |
| Maranhão (MA) | 1,330.6 | 1,599.7 | 20.2 | | | | | |
| Piauí (PI) | 868.4 | 1,157.0 | 33.2 | | | | | |
| | Total: 5,309.5 | Total: 6,264.2 | Total: 18.0 | | | | | |
| Midwest | | | | | | | | |
| Distrito Federal (DF) | 169.40 | 177.00 | 4.5 | | | | | |
| Goiás (GO) | 7,342.6 | 8,181.6 | 11.4 | | | | | |
| Mato Grosso (MT) | 18,766.90 | 20,412.20 | 8.8 | | | | | |
| Mato Grosso do Sul (MS) | 5,307.8 | 5,033.9 | -5.2 | | | | | |
| | Total: 31,586.7 | Total: 33,804.7 | Total: 7.0 | | | | | |
| Southeast | | | | | | | | |
| Minas Gerais (MG) | 2,871.5 | 2,803.1 | -2.4 | | | | | |
| São Paulo (SP) | 1,586.1 | 1,708.5 | 7.7 | | | | | |
| | Total: 4,457.6 | Total: 4,511.6 | Total: 1.2 | | | | | |
| South | | | | | | | | |
| Paraná (PR) | 14,078.7 | 15,424.1 | 9.6 | | | | | |
| Rio Grande do Sul (RS) | 10,218.8 | 11,621.3 | 13.7 | | | | | |
| Santa Catarina (SC) | 1,345.2 | 1,470.8 | 9.3 | | | | | |
| | Total: 25,642.7 | Total: 28,516.2 | Total: 11.2 | | | | | |
| Total Production: | 68,688.2 | 75,039.3 | 9.25 | | | | | |

*Data based on calendar year, January-December

**Forecast, May 2011

Source: Companhia Nacional de Abastecimento (CONAB)

Soybean Production

| Brazil soybean supply and distribution (1,000 metric tons) | | | | | | | | | |
|---|-------------------|---------------------|------------|---------|-----------------|---------|--------|-------------------------|------------------|
| Year* | Area Harvested | Beginning Stocks | Production | Imports | Total Supply | Exports | Crush | Domestic Consumption | Ending Stocks |
| 1998/99 | 12,900 | 782 | 31,300 | 615 | 32,697 | 8,912 | 21,645 | 23,382 | 403 |
| 1999/00 | 13,600 | 403 | 34,700 | 794 | 35,897 | 11,779 | 21,578 | 23,502 | 616 |
| 2000/01 | 13,934 | 616 | 39,500 | 854 | 40,970 | 15,521 | 22,773 | 24,792 | 657 |
| 2001/02 | 16,350 | 657 | 43,500 | 1,100 | 45,257 | 16,074 | 25,843 | 28,202 | 981 |
| 2002/03 | 18,448 | 981 | 52,000 | 1,124 | 54,105 | 19,987 | 27,796 | 30,320 | 3,798 |
| 2003/04 | 21,520 | 3,798 | 51,000 | 364 | 55,162 | 19,257 | 28,914 | 31,807 | 4,098 |
| 2004/05 | 22,917 | 4,098 | 53,000 | 352 | 57,450 | 22,799 | 29,730 | 32,515 | 2,136 |
| 2005/06 | 22,229 | 2,136 | 57,000 | 40 | 59,176 | 24,770 | 28,754 | 31,654 | 2,752 |
| 2006/07 | 20,700 | 2,752 | 59,000 | 108 | 61,860 | 23,805 | 31,511 | 34,445 | 3,610 |
| 2007/08 | 21,300 | 3,610 | 61,000 | 83 | 64,693 | 24,515 | 31,895 | 34,860 | 5,318 |
| 2008/09 | 21,700 | 5,318 | 57,800 | 124 | 63,242 | 28,041 | 30,778 | 33,545 | 1,656 |
| 2009/10 | 23,500 | 1,656 | 69,000 | 150 | 70,806 | 29,190 | 35,700 | 38,850 | 2,766 |
| 2010/11 | 24,200 | 2,766 | 74,500 | 25 | 77,291 | 31,550 | 36,400 | 39,750 | 5,991 |
| 2011/12** | 25,000 | 5,991 | 72,500 | 50 | 78,541 | 34,000 | 37,150 | 40,600 | 3,941 |

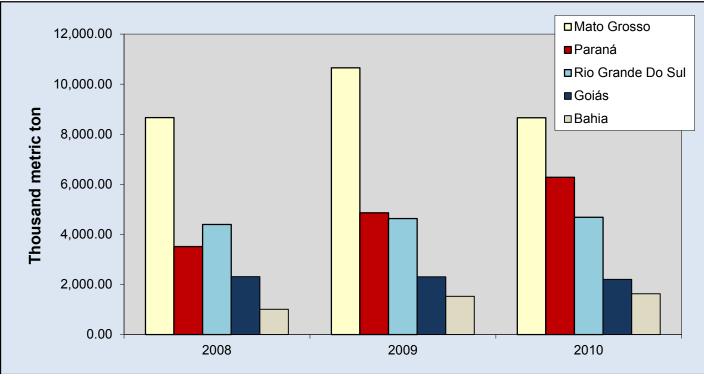
*Data based on Brazil's local February/January Marketing Year (MY) Where February 2006 - January 2007 is the 2005/06 MY **Forecast: July 12, 2011 Source: USDA/Foreign Agricultural Service/Circular Series

Exports

| PA PA MT GO MS SP PR | an 9 states | | | | | | |
|--|--------------------|------------|------------|------------|------------|------------|------|
| sc | State | 2006 | 2007 | 2008 | 2009 | 2010 | Rank |
| RS | | | | metric ton | | | |
| | Mato Grosso | 9,920,599 | 6,822,137 | 8,661,067 | 10,647,884 | 8,654,800 | 1 |
| P | Paraná | 2,891,525 | 3,729,772 | 4,395,927 | 4,631,059 | 6,280,500 | 2 |
| 5 | Rio Grande Do Sul | 3,281,005 | 5,503,371 | 3,516,357 | 4,858,823 | 4,683,900 | 3 |
| | Goiás | 2,800,224 | 2,192,407 | 2,311,912 | 2,308,431 | 2,203,900 | 4 |
| | Bahia | 448,706 | 708,876 | 951,041 | 1,529,468 | 1,632,100 | 5 |
| | Mato Grosso Do Sul | 1,182,096 | 1,065,860 | 1,006,343 | 781,844 | 1,367,500 | 6 |
| | Maranhão | 1,021,543 | 841,944 | 921,861 | 921,349 | 1,040,800 | 7 |
| | São Paulo | 939,202 | 630,970 | 761,981 | 640,583 | 773,100 | 8 |
| | Minas Gerais | 1,179,189 | 379,804 | 370,795 | 780,983 | 677,800 | 9 |
| | Tocantins | 633,956 | 434,541 | 551,883 | 557,836 | 677,100 | 10 |
| | Santa Catarina | 206,735 | 1,057,247 | 424,549 | 259,734 | 375,400 | 12 |
| | Rondônia | 250,120 | 229,107 | 312,364 | 314,403 | 357,100 | 11 |
| | Pará | 81,853 | 67,484 | 129,640 | 124,508 | 167,800 | 14 |
| | Piauí | 24,429 | 9,132 | 131,996 | 150,295 | 119,000 | 13 |
| | Distrito Federal | 57,873 | 30,115 | 38,843 | 47,384 | 33,200 | 15 |
| | Others | 38,918 | 31,008 | 12,931 | 8,113 | 1,200 | |
| | Total | 24,957,973 | 23,733,775 | 24,499,490 | 28,562,697 | 29,045,200 | |

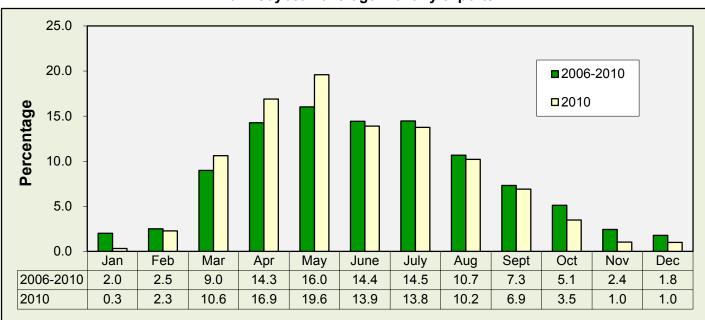
Sources: Secretaria de Comércio Exterior (SECEX) and Companhia Nacional de Abastecimento (CONAB)/Digem/Suinf/Geint

Exports



Top 5 Brazil soybean exporting states

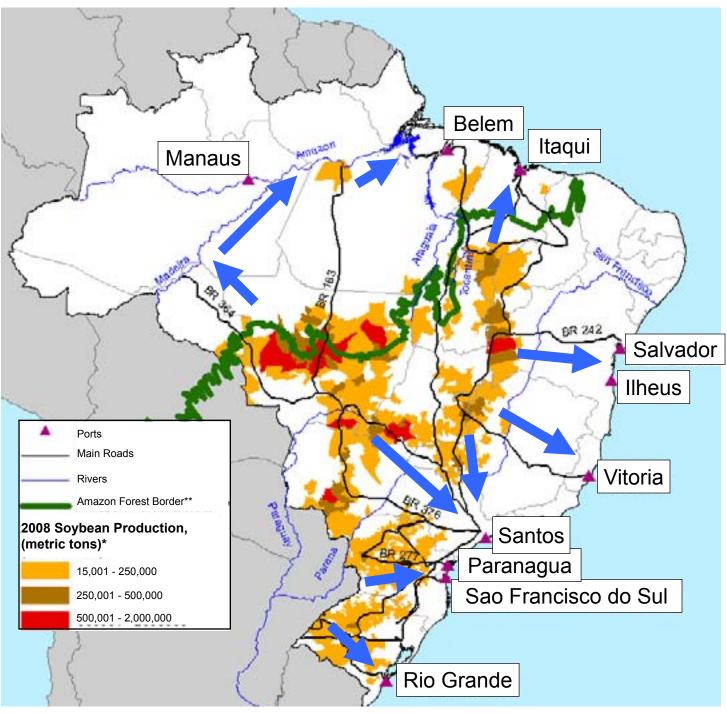
Sources: Secretaria de Comércio Exterior (SECEX) and Companhia Nacional de Abastecimento (CONAB)



Brazil soybean average monthly exports

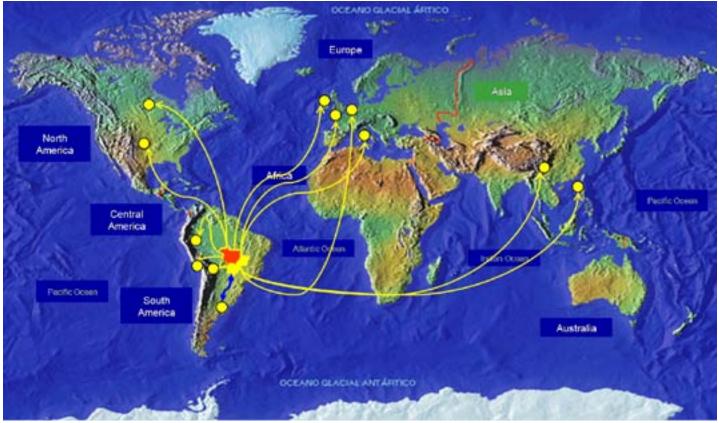
Sources: Secretaria de Comércio Exterior (SECEX) and Companhia Nacional de Abastecimento (CONAB)

Main export routes for soybeans



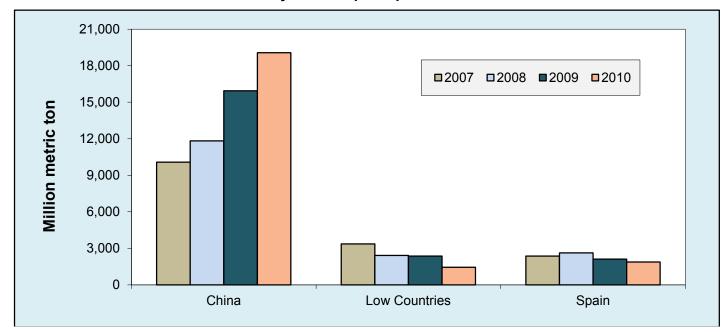
*Companhia Nacional de Abastecimento (CONAB) **World Wildlife Fund (WWF)

Source: USDA/Agricultural Marketing Service & Foreign Agricultural Service



World export routes for Brazilian soybeans

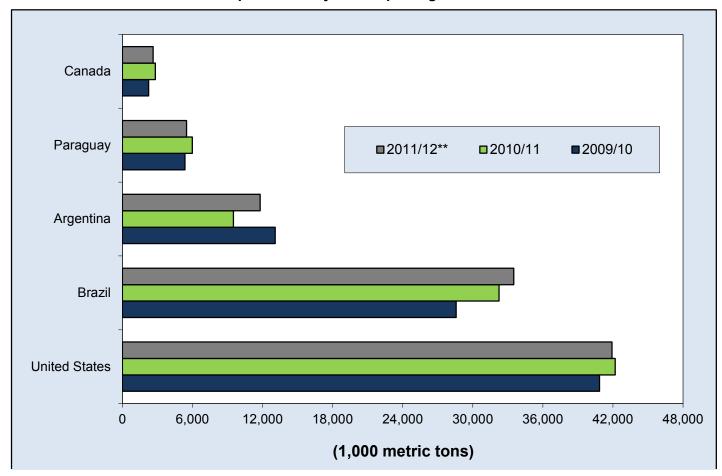
Source: State of Mato Grosso, Department of Tourism and Commerce, Caceres



Brazil soybeans: top 3 export destinations

Sources: Secretaria de Comércio Exterior (SECEX) and Companhia Nacional de Abastecimento (CONAB)

Brazil is the second largest soybean exporter country after the United States.

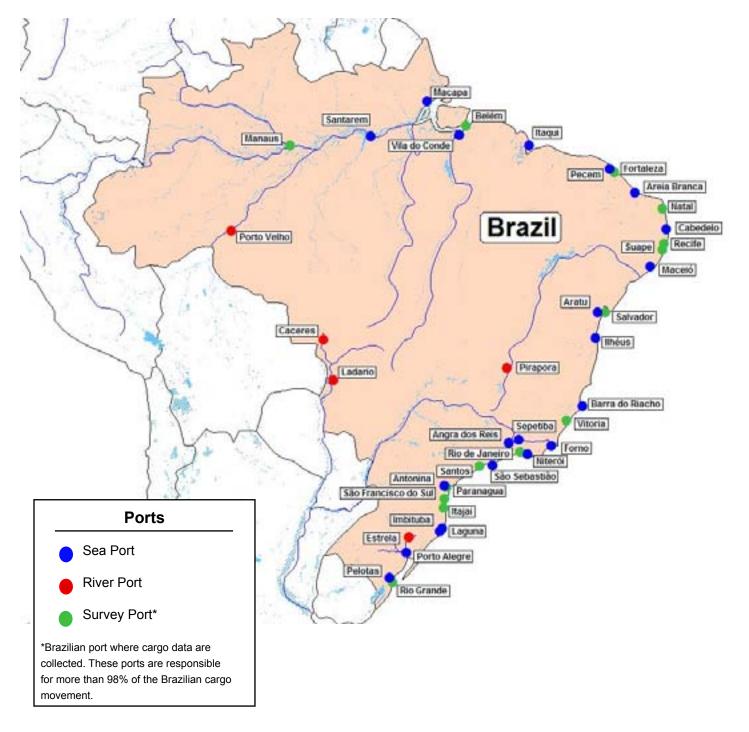


Top 5 world soybean exporting countries

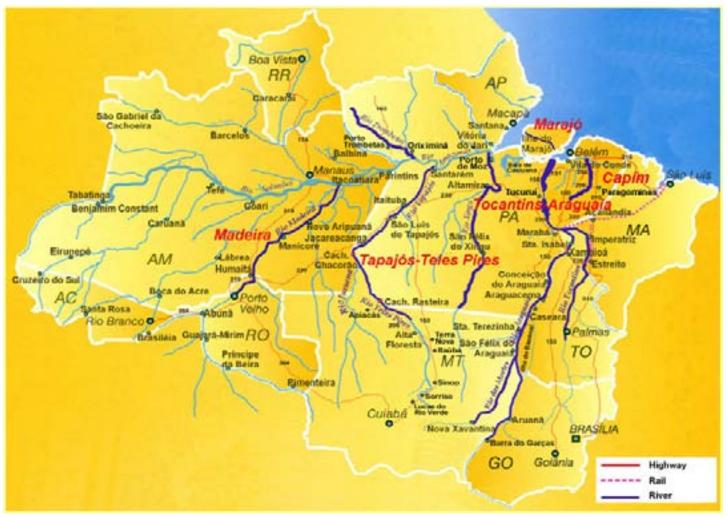
*Forecast: May 11, 2011 Source: USDA/FAS

Brazilian ports

There are 40 water and sea ports and 42 private terminals. The Port of Santos Channel is 426.4 ft wide and 42.64 ft deep. The Port of Paranaguá's entrance strip is 656 ft wide and 39.36 ft deep. It has 3 access channels. Galheta, the major access channel, extends 17.7 miles and has a width ranging from 492 to 656 ft, and a depth of 39.36 ft. The Port of Vitória's entry strip is 820 ft wide and 62.32 ft deep. Its access channel extends 4.34 miles, and is 393.6 ft wide and 36.08 ft deep.



Sources: Companhia Nacional de Abastecimento (CONAB) Ministério dos Transportes, Brazil



Major rivers of the Amazonian Basin

Source: National Agency for Waterway Transportation (ANTAQ)

Brazil has 39,060 miles of river-lake surface water and 27,280 miles of navigable rivers but only 8,060 miles commercially navigated.

| Brazil waterway system | |
|-------------------------------|---------------|
| Extension | Miles |
| River-lake surface water | 39,060 |
| National river network | 27,280 |
| Naturally navigable waterways | 17,980 (100%) |
| Commercial navigations | 8,060 (45%) |
| Vessel owned | 1,148 |

Source: Confederação Nacional do Transporte (CNT)

National Agency for Waterway Transporation (ANTAQ)

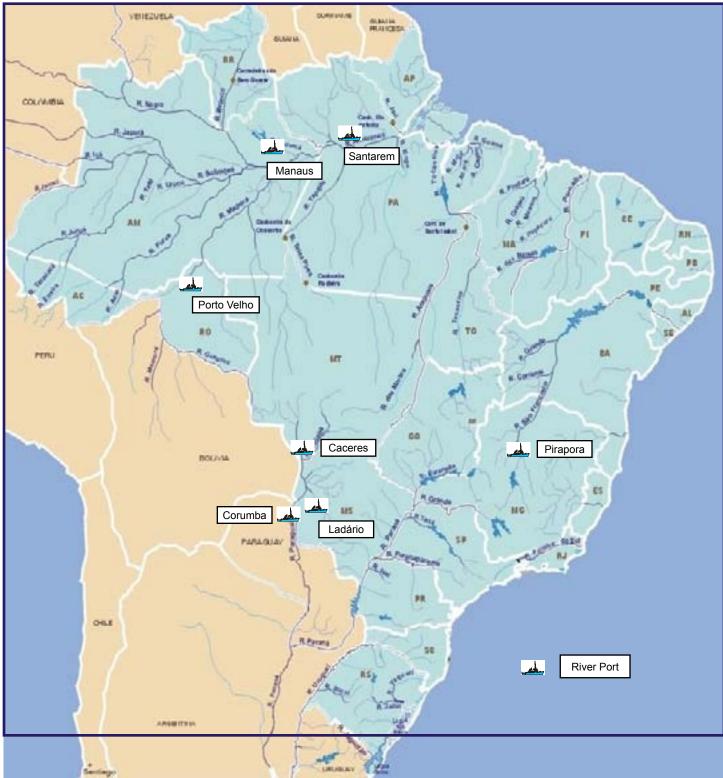
Brazilian river system



Source: National Agency for Waterway Transportation (ANTAQ)

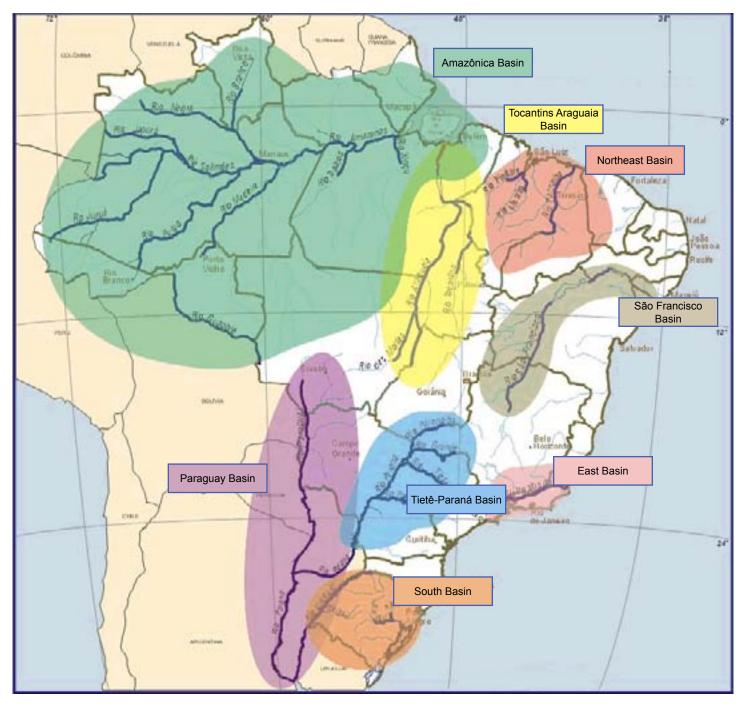
Brazilian river system

The Port of Manaus access channel is 1,640 ft wide and 114.8 ft deep. Porto Velho's access channel depth varies from 8.2 to 57.4 ft. The Port of Santarém's access channel is 5,904 ft wide and 49.2 ft deep.



Brazilian river basins

Brazil's river system comprises 8 basins: Amazônica, Nordeste, Tocantins Araguaia, São Franciso, Bacia do Leste, Bacia do Prata, Paraguay, and Sul. The Amazônica and Paraguay Basin account for 72 percent of the total area of the Brazilian basins. The Paraguay Basin serves Argentina, Brazil, Bolivia, Paraguay, and Uruguay. Its navigable extension is comparable with the Mississippi River in the United States and the Rhine River in Europe.

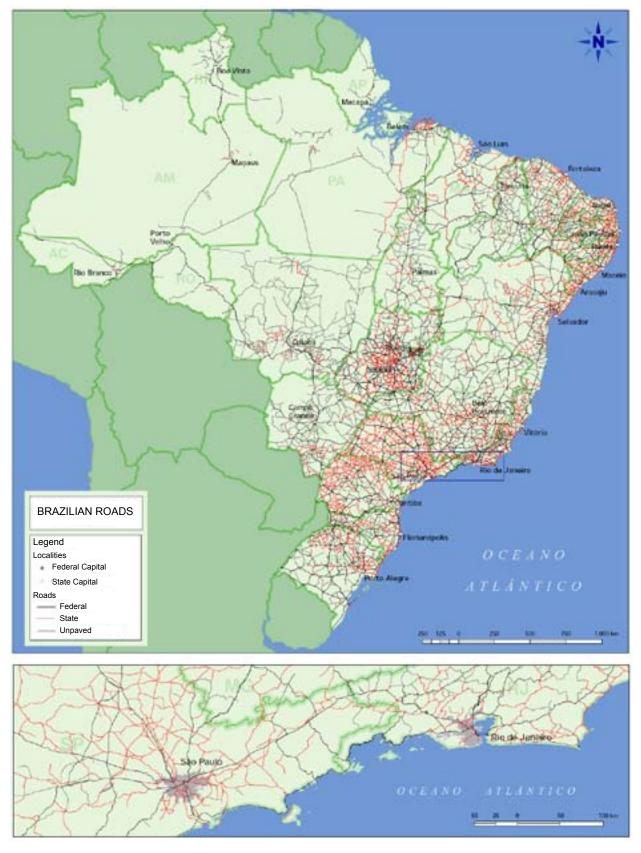


Source: Ministério dos Transportes, Brazil



Brazilian multimodal transportation system

Source: Agência Nacional de Transportes Aquavárious



Major Brazilian highways

Source: Confederação Nacional do Transporte

The Brazilian highway system extends 980,198 miles with only 13 percent paved.

| Braz | zil highway system (| extension in miles, 2 | 2010 |
|---------------|----------------------|-----------------------|---------|
| | Paved roads | Unpaved roads | Total |
| Federal | 38,658 | 8,583 | 47,241 |
| Federal/State | 10,547 | 3,728 | 14,276 |
| State | 66,060 | 70,340 | 136,399 |
| County | 16,633 | 765,649 | 784,142 |
| Total | 131,898 | 848,300 | 980,198 |
| % share | 13 | 87 | 100 |

Source: Confederação Nacional do Transporte

Transportation Modes





Source: Confederação Nacional do Transporte

Brazilian public highways



Source: Confederação Nacional do Transporte

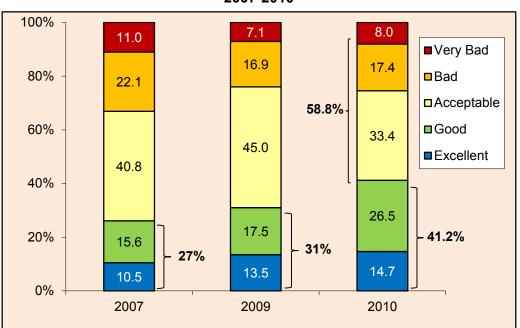


Brazilian private highway conditions

Source: Confederação Nacional do Transporte

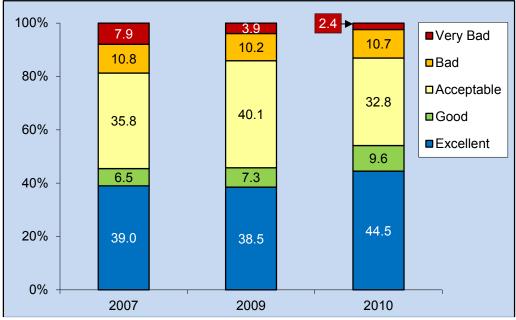
Brazilian highways

The 2010 Confederação Nacional do Transporte (CNT) survey of the overall highway condition in Brazil indicated an improvement from previous years. It shows that 41.2 percent of the roads ranged from good to excellent in 2010 compared to 26 percent in 2007. Still, 59 percent ranged from as merely acceptable or worse. The survey also shows that almost 87 percent of the paved roads were in good to excellent condition and 13 percent ranged from acceptable to very bad condition; 30 percent of traffic road signs had problems; and 88.7 percent of the roads are two lane.



Brazilian highway conditions 2007-2010

Source: Confederação National do Transporte

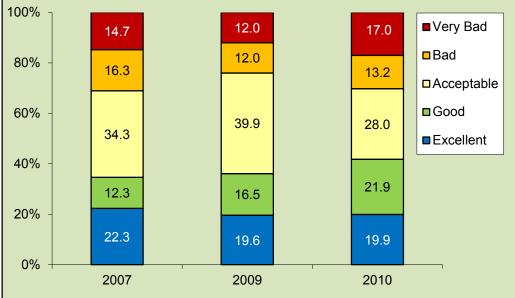


Brazilian paved highway conditions 2007-2010

Source: Confederação National do Transporte

Transportation Modes



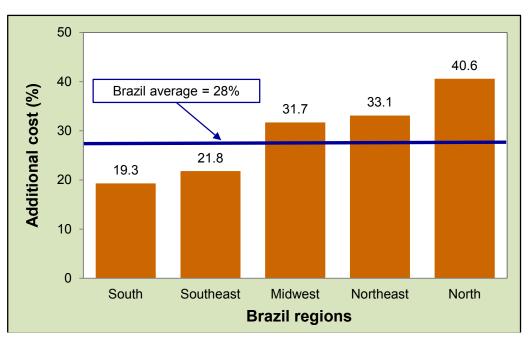


Source: Confederação National do Transporte

The Brazilian paved road conditions improved in 2010 with a significant reduction of road in critical condition with sign problems and potholes.

| C | CNT—survey indicators, 2009-2010 | | | | | | | | | | | | |
|---|----------------------------------|------------|--------|------------|------------|--|--|--|--|--|--|--|--|
| la dia stara | 20 | 09 | 20 | 10 | Percentage | | | | | | | | |
| Indicators | Miles | Percentage | Miles | Percentage | Change | | | | | | | | |
| Paved road in critical conditions (acceptable, bad, and very bad) | 30,131 | 54.2 | 7,394 | 13.1 | -75.5 | | | | | | | | |
| Road signs with problems | 35,489 | 63.9 | 17,052 | 30.2 | -51.9 | | | | | | | | |
| Road without shoulders | 25,690 | 46.3 | 33,917 | 60.2 | 32.0 | | | | | | | | |
| Road signs covered with shrubbery | 7,248 | 13.1 | 9,055 | 16.0 | 24.9 | | | | | | | | |
| Road segments with potholes | 2,569 | 4.6 | 1,809 | 3.2 | -29.6 | | | | | | | | |
| Predominantly two lane roads | 49,371 | 88.9 | 49,993 | 88.7 | 1.3 | | | | | | | | |

The CNT estimates that due to the poor conditions of the paved roads, the operational cost of cargo trucks is 28 percent higher compared with a paved road under optimal conditions. This cost is higher in the North, Northeast, and Center-West regions. For example, if the cost of shipping a metric ton of soybeans from Sorriso, North MT, to Santos is \$100/mt and the Brazil average increased operational cost is 28 percent, then the optimal cost should be \$72/mt.



Cost increases due to road pavement conditions, 2009

Source: Confederação National do Transporte

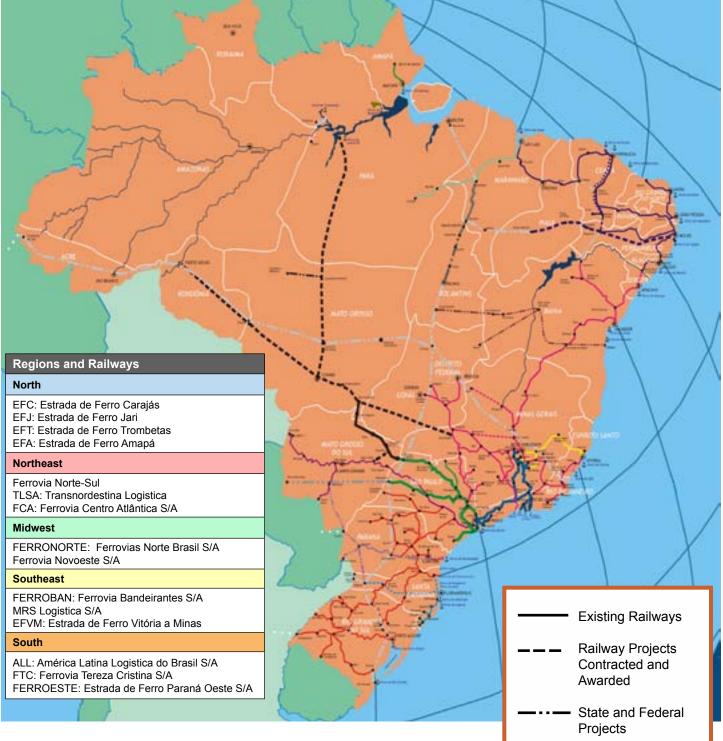
Brazilian railway expansion: ongoing projects

The Brazilian railroad system consists of 12 railroads with an extension of 18,487 miles, mostly concentrated in the South, Southeast, and Northeast. Currently, there are ongoing projects to expand the railways by 3,168 miles in the North, Northeast and Midwest regions.



Brazilian rail system: gauge sizes

The gauge system (distance between two rails) varies by region, creating difficulties in integrating the system like the North American region which uses a standard gauge. There are 3 types of gauge: metric (39"), broad (63") and mixed (39"-63"). The metric gauge accounts for 81 percent of the total Brazilian railroads, and predominates in the Southern region. The broad gauge accounts for 17 percent of total railroads and prevails in the Southeast region.



Source: National Association of Rail Transporters (ANTF)

| | | Ur | nited States | _ | n supply a netric tons | | oution | | |
|-----------|-------------------|---------------------|--------------|---------|---------------------------|---------|--------|-------------------------|------------------|
| Year* | Area Harvested | Beginning Stocks | Production | Imports | Total Supply | Exports | Crush | Domestic Consumption | Ending Stocks |
| 1998/99 | 28,507 | 5,438 | 74,598 | 96 | 80,132 | 21,899 | 43,262 | 48,749 | 9,484 |
| 1999/00 | 29,318 | 9,484 | 72,224 | 114 | 81,822 | 26,537 | 42,927 | 47,388 | 7,897 |
| 2000/01 | 29,303 | 7,897 | 75,055 | 97 | 83,049 | 27,103 | 44,625 | 49,203 | 6,743 |
| 2001/02 | 29,532 | 6,743 | 78,672 | 63 | 85,478 | 28,948 | 46,259 | 50,867 | 5,663 |
| 2002/03 | 29,339 | 5,663 | 75,010 | 127 | 80,800 | 28,423 | 43,948 | 47,524 | 4,853 |
| 2003/04 | 29,330 | 4,853 | 66,783 | 151 | 71,787 | 24,128 | 41,632 | 44,600 | 3,059 |
| 2004/05 | 29,930 | 3,059 | 85,019 | 152 | 88,230 | 29,860 | 46,160 | 51,410 | 6,960 |
| 2005/06 | 28,834 | 6,960 | 83,507 | 92 | 90,559 | 25,579 | 47,324 | 52,751 | 12,229 |
| 2006/07 | 30,190 | 12,229 | 87,001 | 246 | 99,476 | 30,386 | 49,198 | 53,473 | 15,617 |
| 2007/08 | 25,959 | 15,617 | 72,859 | 269 | 88,745 | 31,538 | 49,081 | 51,627 | 5,580 |
| 2008/09 | 30,222 | 5,580 | 80,749 | 361 | 86,690 | 34,817 | 45,230 | 48,112 | 3,761 |
| 2009/10 | 30,907 | 3,761 | 91,417 | 397 | 95,575 | 40,852 | 47,669 | 50,617 | 4,106 |
| 2010/11 | 31,006 | 4,106 | 90,610 | 408 | 95,124 | 41,368 | 44,906 | 48,318 | 5,438 |
| 2011/12** | 30,051 | 5,438 | 87,770 | 408 | 93,616 | 40,687 | 45,042 | 48,153 | 4776 |

*Data based on local Marketing Year (MY). Soybeans are on a September/August MY **Forecast: July 12, 2011

Source: USDA/Foreign Agricultural Service/Circular Series

| | Soybean pro | oduction: wor (1,000 me | | distribution | | | | | | |
|---------------|---|----------------------------|---------|--------------|---------|--|--|--|--|--|
| Country* | Country* 2007/08 2008/09 2009/10 2010/11 20 | | | | | | | | | |
| United States | 72,859 | 80,749 | 91,417 | 90,610 | 87,770 | | | | | |
| Brazil | 61,000 | 57,800 | 69,000 | 74,500 | 72,500 | | | | | |
| Argentina | 46,200 | 32,000 | 54,500 | 49,500 | 53,000 | | | | | |
| China | 13,400 | 15,540 | 14,980 | 15,200 | 14,300 | | | | | |
| India | 9,470 | 9,100 | 9,700 | 9,600 | 9,800 | | | | | |
| Paraguay | 6,900 | 4,000 | 7,200 | 8,300 | 7,500 | | | | | |
| Canada | 2,696 | 3,336 | 3,507 | 4,345 | 4,000 | | | | | |
| Other | 7,944 | 9,435 | 10,534 | 11,638 | 12,583 | | | | | |
| Total | 220,469 | 211,960 | 260,838 | 263,693 | 261,453 | | | | | |

*Most countries are on an October/September Marketing Year (MY). The United States, and Mexico are on a September/August MY. Canada is on an August/July MY. Paraguay is on a March/February MY. **Forecast: July 12, 2011

Source: USDA/ Foreign Agricultural Service/Circular Series

| | Soybean in | nports: world (1,000 me | supply and di tric tons) | istribution | |
|--------------|------------|----------------------------|-----------------------------|-------------|--------|
| Country* | 2007/08 | 2008/09 | 2010/11 | 2011/12** | |
| China | 37,816 | 41,098 | 50,338 | 52,000 | 56,500 |
| EU-27 | 15,123 | 13,213 | 12,301 | 13,800 | 13,300 |
| Mexico | 3,614 | 3,327 | 3,523 | 3,700 | 3,750 |
| Japan | 4,014 | 3,396 | 3,401 | 3,250 | 3,400 |
| Taiwan | 2,148 | 2,216 | 2,469 | 2,400 | 2,600 |
| Thailand | 1,753 | 1,510 | 1,660 | 2,030 | 2,050 |
| Egypt | 1,061 | 1,575 | 1,638 | 1,750 | 1,800 |
| Indonesia | 1,147 | 1,393 | 1,620 | 1,635 | 1,650 |
| Turkey | 1,277 | 1,007 | 1,860 | 1,100 | 1,400 |
| Korea, South | 1,232 | 1,167 | 1,197 | 1,260 | 1,260 |
| Other | 8,926 | 7,474 | 6,794 | 6,895 | 7,156 |
| Total | 78,111 | 77,376 | 86,801 | 89,820 | 94,866 |

*Most countries are on an October/September Marketing Year (MY). The United States, Mexico, and Thailand are on a September/August MY. Canada is on an August/July MY. Paraguay is on a March/February MY and Turkey is on an March/February MY.

**Forecast: July 12, 2011

Source: USDA/ Foreign Agricultural Service/Circular Series

| | Soybean exports: world supply and distribution (1,000 metric tons) | | | | | | | | | | | | |
|---------------|---|--------|--------|--------|--------|--|--|--|--|--|--|--|--|
| Country* | 2007/08* 2008/09 2009/10 2010/11 2011/12 | | | | | | | | | | | | |
| United States | 31,538 | 34,817 | 40,852 | 41,368 | 40,687 | | | | | | | | |
| Brazil | 25,364 | 29,987 | 28,578 | 30,850 | 34,000 | | | | | | | | |
| Argentina | 13,839 | 5,590 | 13,088 | 8,500 | 11,300 | | | | | | | | |
| Paraguay | 4,585 | 2,234 | 5,350 | 6,185 | 5,500 | | | | | | | | |
| Canada | 1,753 | 2,017 | 2,247 | 2,825 | 2,631 | | | | | | | | |
| Other | 1,696 | 2,197 | 2,534 | 3,064 | 3,458 | | | | | | | | |
| Total | 78,775 | 76,842 | 92,649 | 92,792 | 97,576 | | | | | | | | |

*Most countries are on an October/September Marketing Year (MY). The United States, and Mexico are on a September/August MY. Canada is on an August/July MY. Paraguay is on a March/February MY. **Forecast: July 12, 2011

Source: USDA/ Foreign Agricultural Service/Circular Series

| | Soybean c | rush: world s (1,000 met | upply and dist ric tons) | tribution | |
|---------------|-----------|-----------------------------|-----------------------------|-----------|-----------|
| Country* | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12** |
| China | 39,518 | 41,035 | 48,830 | 55,100 | 60,600 |
| United States | 49,081 | 45,230 | 47,669 | 44,906 | 45,042 |
| Argentina | 34,607 | 31,243 | 34,127 | 38,800 | 40,000 |
| Brazil | 32,117 | 31,868 | 33,700 | 35,900 | 37,100 |
| EU-27 | 14,870 | 12,860 | 12,510 | 13,400 | 13,200 |
| India | 8,400 | 7,200 | 7,500 | 9,400 | 8,800 |
| Mexico | 3,650 | 3,465 | 3,583 | 3,770 | 3,800 |
| Russia | 1,051 | 1,497 | 1,950 | 2,220 | 2,640 |
| Japan | 2,890 | 2,497 | 2,370 | 2,260 | 2,360 |
| Taiwan | 1,965 | 1,917 | 2,150 | 2,125 | 2,300 |
| Paraguay | 2,100 | 1,700 | 1,700 | 1,850 | 1,850 |
| Thailand | 1,514 | 1,390 | 1,520 | 1,725 | 1,850 |
| Egypt | 1,129 | 1,545 | 1,635 | 1,744 | 1,800 |
| Bolivia | 1,160 | 1,435 | 1,480 | 1,450 | 1,450 |
| Canada | 1,383 | 1,286 | 1,292 | 1,425 | 1,350 |
| Other | 7,421 | 7,072 | 7,518 | 7,734 | 8,213 |
| Total | 202,856 | 193,240 | 209,534 | 223,809 | 232,355 |

*Most countries are on an October/September Marketing Year (MY). The United States, Mexico, and Thailand are on a September/August MY. Canada is on an August/July MY. Paraguay is on a March/February MY and Turkey is on an March/February MY.

**Forecast: July 12, 2011

Source: USDA/ Foreign Agricultural Service/Circular Series

| | Soybean ending stocks: world supply and distribution (1,000 metric tons) | | | | | | | | | | | | |
|---------------|---|--------|--------|--------|--------|--|--|--|--|--|--|--|--|
| Country* | Country* 2007/08 2008/09 2009/10 2010/11 2 | | | | | | | | | | | | |
| Argentina | 21,760 | 16,588 | 22,277 | 22,850 | 22,900 | | | | | | | | |
| Brazil | 18,898 | 12,037 | 15,836 | 20,311 | 18,361 | | | | | | | | |
| China | 2,752 | 7,555 | 13,259 | 14,209 | 13,109 | | | | | | | | |
| United States | 5,580 | 3,761 | 4,106 | 5,438 | 4,776 | | | | | | | | |
| EU-27 | 814 | 558 | 277 | 502 | 472 | | | | | | | | |
| Other | 1,679 | 2,177 | 3,591 | 2,565 | 2,349 | | | | | | | | |
| Total | 51,483 | 42,676 | 59,346 | 65,875 | 61,967 | | | | | | | | |

*Most countries are on an October/September Marketing Year (MY). The United States is on a September/August MY. Canada is on an August/July MY. Paraguay is on a March/February MY and Turkey is on an March/February MY. **Forecast: July 12, 2011

Source: USDA/ Foreign Agricultural Service/Circular Series

| Quarterly cost | Quarterly costs of transporting U.S. soybeans to Hamburg, Germany, and Shanghai, China | | | | | | | | | | | | |
|-----------------------------------|--|---------|-------------------------|---------|------------|----------------------------|------------|------------------------|---------|--------|--|--|--|
| | | | 2010 | | | | | 2010 | | | | | |
| | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | Avg | | | |
| | | | | To Hamb | ourg, Germ | any (via U | I.S. Gulf) | | | | | | |
| | | Mir | nneapolis, I US\$/mt | | | | Da | venport, lo US\$/mt | wa | | | | |
| Truck | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | | | |
| Rail** | 34.74 | - | - | - | 10.86 | 23.84 | - | - | - | 23.84 | | | |
| Barge ¹ | 10.86 | 25.45 | 32.82 | 41.82 | 27.74 | 10.86 | 18.88 | 26.16 | 31.85 | 21.94 | | | |
| Ocean ² | 24.92 | 27.87 | 28.31 | 24.84 | 26.49 | 24.92 | 27.87 | 28.31 | 24.84 | 26.49 | | | |
| Total transportation ² | 80.98 | 61.98 | 70.87 | 75.60 | 72.36 | 70.08 | 55.41 | 64.21 | 65.63 | 63.83 | | | |
| Farm price ³ | 340.98 | 336.69 | 352.25 | 385.69 | 353.90 | 346.00 | 343.92 | 362.05 | 399.16 | 362.78 | | | |
| Landed cost | 421.96 | 398.67 | 423.12 | 461.29 | 426.26 | 416.08 | 399.33 | 426.26 | 464.79 | 426.62 | | | |
| Transport % of landed cost | 19.2 | 15.5 | 16.7 | 16.4 | 17.0 | 16.8 | 13.9 | 15.1 | 14.1 | 15.0 | | | |
| | | | | To Sha | nghai, Chi | na (via U.s | S. Gulf) | | | | | | |
| | | Miı | nneapolis, I US\$/mt | | | Davenport, Iowa US\$/mt | | | | | | | |
| Truck | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | | | |
| Rail** | 34.74 | - | - | - | 34.74 | 23.84 | - | - | - | 10.86 | | | |
| Barge ¹ | 10.86 | 25.45 | 32.82 | 41.82 | 27.74 | 10.86 | 18.88 | 26.16 | 31.85 | 21.94 | | | |
| Ocean ² | 65.54 | 67.71 | 60.33 | 55.46 | 62.26 | 65.54 | 67.71 | 60.33 | 55.46 | 62.26 | | | |
| Total transportation ² | 121.60 | 101.82 | 102.89 | 106.22 | 108.13 | 110.70 | 95.25 | 96.23 | 96.25 | 99.61 | | | |
| Farm price ³ | 346.86 | 336.69 | 352.25 | 385.69 | 355.37 | 351.51 | 343.92 | 362.05 | 399.16 | 364.16 | | | |
| Landed cost | 468.46 | 438.51 | 455.14 | 491.91 | 463.51 | 462.21 | 439.17 | 458.28 | 495.41 | 463.77 | | | |
| Transport % of landed cost | 26.0 | 23.2 | 22.6 | 21.6 | 23.3 | 24.0 | 21.7 | 21.0 | 19.4 | 21.5 | | | |
| | | | | To SI | nanghai, C | hina (via F | PNW) | | | | | | |
| | | Miı | nneapolis, I US\$/mt | | | | Da | venport, lo US\$/mt | wa | | | | |
| Truck | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | 10.46 | 8.66 | 9.74 | 8.94 | 9.45 | | | |
| Rail** | 48.11 | 48.62 | 48.83 | 48.99 | 34.74 | 48.47 | 49.93 | 50.50 | 50.31 | 34.74 | | | |
| Ocean ² | 38.64 | 38.44 | 33.15 | 29.25 | 34.87 | 48.47 | 38.44 | 33.15 | 29.25 | 37.33 | | | |
| Total transportation ² | 97.21 | 95.72 | 91.72 | 87.18 | 92.96 | 97.57 | 97.03 | 93.39 | 88.50 | 94.12 | | | |
| Farm price ³ | 337.43 | 334.00 | 347.35 | 381.28 | 350.02 | 336.45 | 335.59 | 348.82 | 385.56 | 351.61 | | | |
| Landed cost | 434.64 | 429.72 | 439.07 | 468.46 | 442.97 | 434.02 | 432.62 | 442.21 | 474.06 | 445.73 | | | |
| Transport % of landed cost | 22.4 | 22.3 | 20.89 | 18.61 | 21.0 | 22.5 | 22.4 | 21.12 | 18.67 | 21.2 | | | |

**Rail service is required due to seasonal closure of the Minneapolis segment of the Mississippi River

¹The Mississippi River closes from Minneapolis to just north of St. Louis from mid-December to late March.

²The Baltic Exchange; excludes handling charges ³Source: USDA/NASS

| | Averag | e cost o | of trans | porting | U.S. s | oybean | s to Han | nburg, | Germai | ny, and | Shang | hai, Ch | ina | |
|--------------------------------------|--------|----------|----------|------------------------|--------|--------|------------------------|----------------------------|--------|---------|-----------------------|---------|--------|------------------------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | % Change 2009-10 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | % Change 2009-10 |
| | | | | | | Тс | g, Germa | ny | | | | | | |
| | | | Mir | nneapolis, US\$/mt· | | ta | | | | Da | venport, I US\$/mt | | | |
| Truck | 8.59 | 9.75 | 10.09 | 11.50 | 10.01 | 9.45 | -5.57 | 8.59 | 9.75 | 10.09 | 11.50 | 10.01 | 9.45 | -5.57 |
| Rail** | - | - | - | 26.00 | - | 10.86 | - | - | - | - | - | - | 23.84 | - |
| Barge ¹ | 25.74 | 33.21 | 29.38 | 34.75 | 25.56 | 27.74 | 8.52 | 21.84 | 25.59 | 23.89 | 30.41 | 19.77 | 21.94 | 10.96 |
| Ocean ² | 28.61 | 24.03 | 58.81 | 52.66 | 21.10 | 26.49 | 25.52 | 28.61 | 24.03 | 58.81 | 52.66 | 21.10 | 26.49 | 25.52 |
| Total transportation ² | 62.93 | 66.99 | 98.28 | 105.41 | 56.67 | 72.36 | 27.69 | 59.04 | 59.38 | 92.79 | 94.57 | 50.88 | 63.83 | 25.46 |
| Farm price ³ | 217.58 | 200.41 | 274.79 | 411.71 | 363.76 | 353.90 | -2.71 | 215.65 | 204.05 | 285.77 | 416.89 | 370.01 | 362.78 | -1.95 |
| Landed cost | 280.51 | 267.40 | 373.07 | 517.12 | 420.46 | 426.26 | 1.38 | 274.69 | 263.43 | 378.56 | 511.46 | 420.89 | 426.62 | 1.36 |
| Transport % of landed cost | 22.47 | 24.94 | 25.7 | 20.1 | 13.5 | 17.0 | 25.9 | 21.54 | 22.49 | 23.9 | 18.3 | 12.1 | 15.0 | 23.8 |
| | | | | | | - | To Shangh | nai, China | a | | | | | |
| | | | Mir | nneapolis, US\$/mt· | | ta | | Davenport, Iowa US\$/mt | | | | | | |
| Truck | 8.59 | 9.75 | 10.09 | 11.50 | 10.01 | 9.45 | -5.57 | 8.59 | 9.75 | 10.09 | 11.50 | 10.01 | 9.45 | -5.57 |
| Rail** | - | - | - | 26.00 | - | 34.74 | - | - | - | - | - | - | 10.86 | - |
| Barge ¹ | 25.74 | 33.21 | 29.38 | 34.75 | 25.56 | 27.74 | 8.52 | 21.84 | 25.59 | 23.89 | 30.41 | 19.77 | 21.94 | 10.96 |
| Ocean ² | 49.50 | 41.59 | 81.36 | 91.18 | 51.21 | 62.26 | 21.58 | 49.50 | 41.59 | 81.36 | 91.18 | 51.21 | 62.26 | 21.58 |
| Total transportation ² | 83.83 | 84.54 | 120.84 | 143.93 | 86.78 | 108.13 | 24.61 | 79.93 | 76.93 | 115.35 | 133.09 | 80.99 | 99.61 | 22.99 |
| Farm price ³ | 217.58 | 200.41 | 274.79 | 411.71 | 363.80 | 355.37 | -2.32 | 215.65 | 204.07 | 285.74 | 416.89 | 370.01 | 364.16 | -1.58 |
| Landed cost | 301.40 | 284.95 | 395.62 | 555.64 | 450.57 | 463.51 | 2.87 | 295.58 | 281.00 | 401.09 | 549.98 | 450.99 | 463.77 | 2.83 |
| Transport % of landed cost | 27.84 | 29.54 | 30.1 | 25.4 | 19.2 | 23.3 | 21.7 | 27.08 | 27.31 | 28.3 | 23.7 | 17.9 | 21.5 | 20.3 |

**Rail service is required due to seasonal closure of the Minneapolis segment of the Mississippi River

¹The Mississippi River closes from Minneapolis to just north of St. Louis from mid-December to late March. The distance by barge between Minneapolis and Davenport to the Port of New Orleans is 1,713 and 1,343 miles, respectively.

²The Baltic Exchange; excludes handling charges

³USDA/NASS

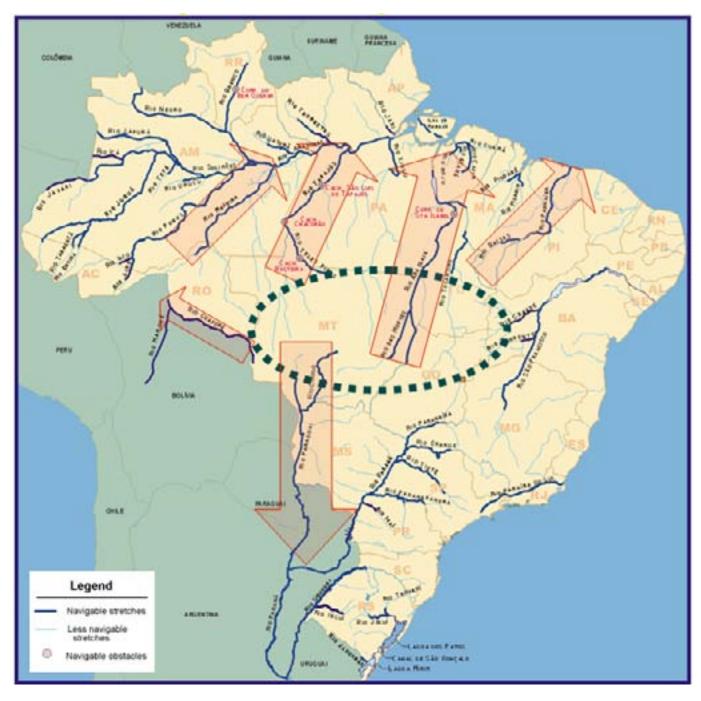
| | Average quarterly exchange rate | | | | | | | | | | | | | | |
|------------------|---------------------------------|------------|------------|------------|--------|------------|------------|------------|------------|--------|------------|------------|------------|------------|--------|
| | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2005 | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2006 | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2007 |
| Real per US\$ | 2.6652 | 2.4818 | 2.3428 | 2.2509 | 2.4352 | 2.1959 | 2.1852 | 2.1711 | 2.1520 | 2.1761 | 2.1082 | 1.9818 | 1.9177 | 1.7857 | 1.9484 |
| | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2008 | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2009 | 1st qtr | 2nd qtr | 3rd qtr | 4th qtr | 2010 |
| Real per US\$ | 1.7365 | 1.6561 | 1.6678 | 2.2779 | 1.8346 | 2.3113 | 2.0728 | 1.8680 | 1.7386 | 1.9977 | 1.8003 | 1.7927 | 1.7487 | 1.6963 | 1.7595 |

Source: Banco Central do Brasil

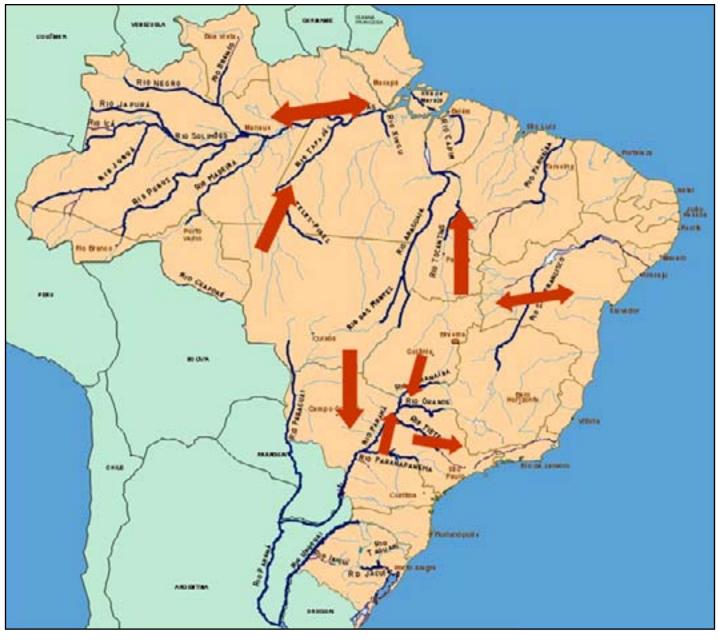
| Selected quarterly Brazilian farm prices (US\$/metric ton)* | | | | |
|--|-------------------|-------------|--------|--------|
| Year | Rio Grande do Sul | Mato Grosso | Goiás | Paraná |
| 2005 | | | · | |
| 1st qtr | 202.61 | 145.15 | 174.70 | 196.31 |
| 2nd qtr | 210.19 | 161.38 | 179.81 | 207.04 |
| 3rd qtr | 214.23 | 175.08 | 188.26 | 222.81 |
| 4th qtr | 206.36 | 174.28 | 184.89 | 214.81 |
| Average | 208.35 | 163.97 | 181.92 | 210.24 |
| 2006 | | | | |
| 1st qtr | 202.56 | 157.86 | 180.71 | 206.88 |
| 2nd qtr | 198.03 | 150.72 | 175.49 | 194.83 |
| 3rd qtr | 207.37 | 161.30 | 185.73 | 211.06 |
| 4th qtr | 233.43 | 189.65 | 216.60 | 242.47 |
| Average | 210.34 | 164.88 | 189.63 | 213.81 |
| 2007 | | | | |
| 1st qtr | 249.78 | 196.22 | 231.95 | 251.13 |
| 2nd qtr | 228.00 | 198.61 | 225.49 | 239.48 |
| 3rd qtr | 256.59 | 234.16 | 267.93 | 272.70 |
| 4th qtr | 333.86 | 306.30 | 349.22 | 361.26 |
| Average | 267.06 | 233.82 | 268.65 | 281.14 |
| 2008 | | | 1 | |
| 1st qtr | 404.89 | 349.23 | 406.90 | 423.63 |
| 2nd qtr | 429.72 | 389.20 | 401.89 | 434.42 |
| 3rd qtr | 435.02 | 419.80 | 409.37 | 435.49 |
| 4th qtr | 309.01 | 277.74 | 274.34 | 303.68 |
| Average | 394.66 | 358.99 | 373.13 | 399.31 |
| 2009 | | | | |
| 1st qtr | 315.99 | 264.63 | 288.68 | 326.95 |
| 2nd qtr | 359.68 | 315.88 | 336.86 | 373.16 |
| 3rd qtr | 374.28 | 347.80 | 356.43 | 391.57 |
| 4th qtr | 388.08 | 369.07 | 371.29 | 398.17 |
| Average | 359.51 | 324.34 | 338.31 | 372.46 |
| 2010 | | | | |
| 1st qtr | 331.49 | 261.05 | 309.89 | 325.22 |
| 2nd qtr | 304.36 | 269.58 | 271.15 | 300.32 |
| 3rd qtr | 342.98 | 328.51 | 315.43 | 350.41 |
| 4th qtr | 400.78 | 413.46 | 400.62 | 425.79 |
| Average | 344.90 | 318.15 | 324.27 | 350.44 |

Source: Companhia Nacional de Abastecimento (CONAB)

Major river export routes



Source: National Agency for Waterway Transportation (ANTAQ)



Major river system corridors

Sources: Ministério dos Transportes, Brazil National Agency for Waterway Transportation (ANTAQ)

