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POLICY COHERENCE FOR DEVELOPMENT: ISSUES FOR BRAZIL¹

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Abstract

This paper provides a Brazilian perspective on the issue of policy coherence for development (PCD) as it relates to agriculture, drawing on Brazil's experience with OECD agricultural-related policies (e.g. tariffs, non-tariff barriers, export subsidies, and payments to domestic producers) and Brazilian agricultural-related policies (e.g. rural development, farm support, and trade), examining the extent to which these are acting in a coherent manner, with emphasis on enhancing global agricultural trade and the development of the Brazilian agrifood economy.

Introduction

Beginning in the late 1980s, Brazil started to adopt liberal, market oriented policies, which significantly impacted the performance of its agrifood economy. Brazil's economic reform program included control of inflation, macroeconomic stability, privatization of state-owned companies, industry deregulation, dismantling of agricultural credit and price support programs, and increased international integration. These changes have significantly impacted the competitiveness of the agrifood sector in Brazil, which has experienced substantial, export-led growth since the mid-1990s.

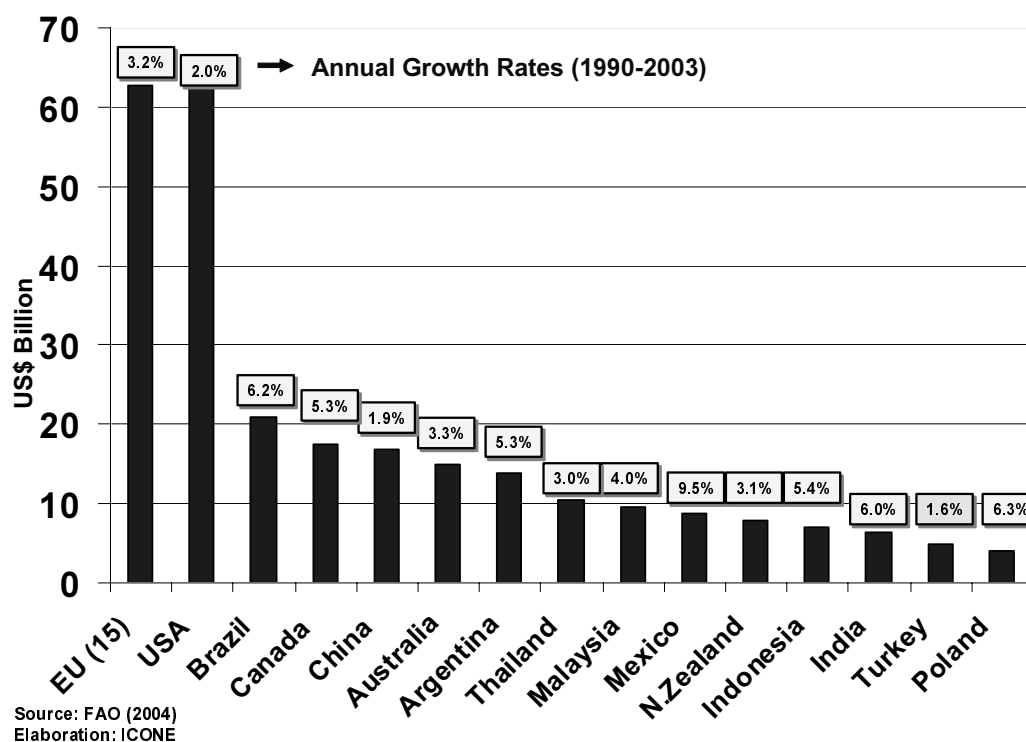
The agrifood sector is now among the most dynamic in the Brazilian economy. According to a recent article in *The Economist* (2005, p. 74), "agriculture is the Cinderella of Brazil's economy." Between 1990 and 2004, agricultural production doubled from 58 to 120 million metric tons (MT), while meat production surged from 7.5 to 18.3 million MT. The agrifood economy generated BRL 534 billion (USD 183 billion) in 2004, which is equivalent to 30% of the country's GDP. In addition, it was responsible for approximately 35% of total employment and 41% of total exports in 2004.

During the 1990-2004 period, total agricultural exports increased from USD 12.9 to USD 39 billion (Ministry of Industry, Development and Foreign Trade, 2005). Exports accounted for 31% of agricultural production in 2004 compared with shares of 22% in the United States (US), 41% in Canada and 74% in Australia (OECD, 2005). Brazil is now the world's third agrifood exporter – following the European Union (EU) and the US – after enjoying an annual growth rate of 6.2% in exports since 1990 (Figure 1). Brazil is the world's largest exporter of sugar, ethanol, coffee, beef, poultry, orange juice and

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tobacco, and is the second largest in the soybean complex. In 2004, Brazil surpassed the US as the country with the largest surplus in agricultural trade with USD 25 billion.

Figure 1. Top fifteen largest world agrifood exporters (2003)



The growing competitiveness of the Brazilian agrifood sector is attributed to a number of factors, including investments in agricultural research and availability of agricultural credit, which caused significant productivity gains since the 1970s. The average annual growth rate of total factor productivity in Brazilian agriculture was estimated at 3.3% for the period 1975-2002 and at 5.7% for 1998-2002, which are above the 1.6% growth rate achieved by US agriculture in the 1990s (Gasques et al., 2004). According to the same study, land productivity was the principal component of total factor productivity growth. While agricultural output doubled in the last fifteen years, land used in agricultural production increased 20%, from 38 to 48 million hectares. Other factors also contributed to the competitiveness and thus growth of the agrifood sector in Brazil, such as the macroeconomic stability introduced with the Real Plan and the significant reductions in government intervention and trade barriers (Jank, Nassar and Tachinardi, 2004).

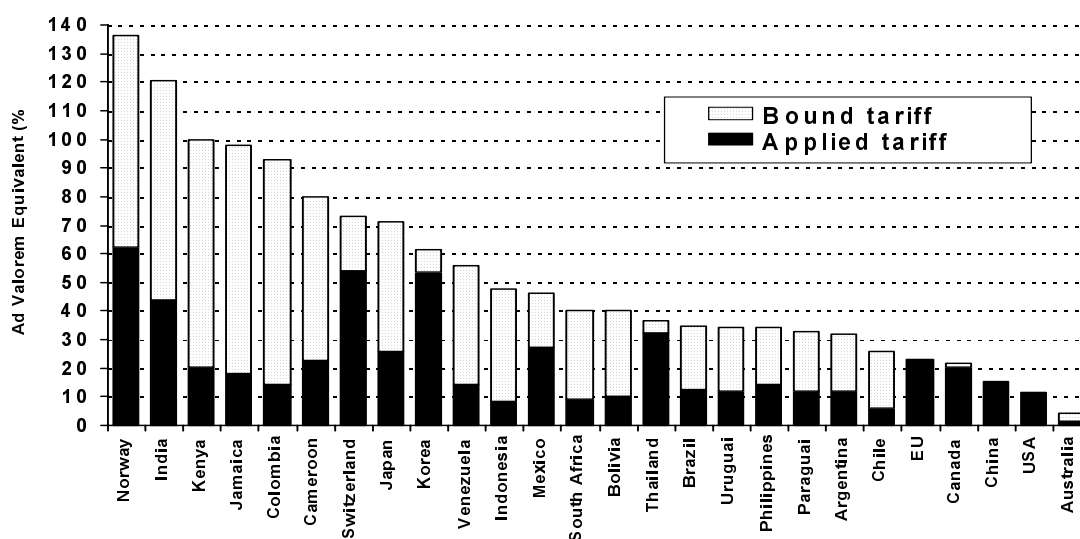
Despite these favorable developments and the availability of labor and natural resources, such as land and water, the growth of the agrifood sector in Brazil faces significant internal and external constraints. In the domestic arena, agricultural producers in Brazil face uncertainties related to the volatility of macroeconomic policies (high interest rates and over evaluation of the real exchange rate), the lack of clearly defined property rights to land, the regulatory framework concerning research and marketing of genetically modified organisms (GMOs), poor infrastructure causing logistical bottlenecks, and the decline in government spending in important areas such as sanitary defense, agricultural research and other traditional agricultural policy instruments. The recent reemergence of the foot-and-mouth disease, which led more than fifty countries (as of November 15, 2005) to close their borders to beef exports from Brazil, will be used as a case study to analyze some of the policy challenges to the development of the Brazilian agrifood economy.

In the external environment, trade barriers and subsidies to domestic producers and exporters, especially from OECD countries, still significantly impact Brazilian agrifood products. The benefits from agrifood economy development would be substantially increased in Brazil if OECD countries reformed their agricultural policies to minimize distortions in agricultural trade. That is why Brazil adopted a more aggressive position in international trade negotiations at the World Trade Organization (WTO), bringing two high-profile dispute cases against developed countries and taking leadership in the formation of a coalition of twenty-one developing countries known as the G-20. In the next section, we discuss the constraints to agrifood development in Brazil emanating from OECD member countries' policies.

Brazilian Agricultural Trade Policy and Perspectives in International Agricultural Negotiations

According to an OECD report on Key Issues for Policy Coherence for Development in Agriculture (2004), "agriculture is the area on which OECD member countries are creating most trade distortions by subsidizing production and exports and by imposing tariffs and non-tariff barriers on trade." Figures 2 and 3 show the relatively high average agricultural tariffs and domestic subsidies in the world. In a more recent report, which reviews agricultural policies in Brazil, the OECD (2005) observes that "if the US, the EU and other OECD countries were to cut import tariffs and export subsidies on agricultural products, farmers in Brazil would gain from the resulting rise in international prices, with the larger commercial producers benefiting most."

Figure 2. Bound and applied average agricultural tariffs in selected countries*



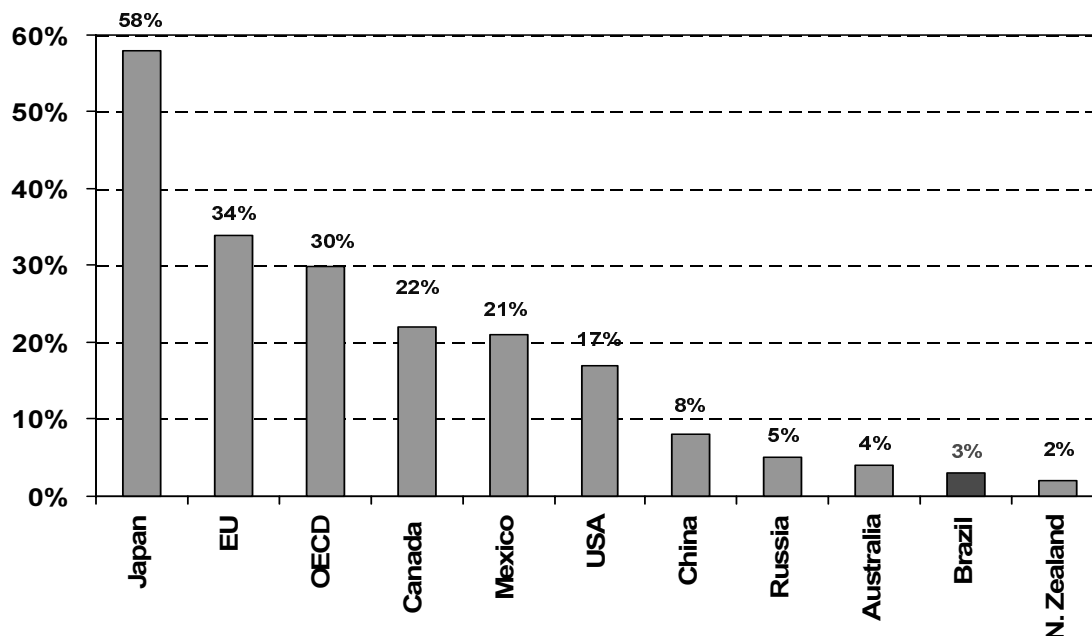
*Specific and compound tariffs were converted into Ad Valorem Equivalents (AVE) following the methodology agreed by WTO Members in 2005.

Source: WTO (2005). Elaboration: ICONE.

Given that Brazil has already achieved the status of a global agrifood powerhouse, why are international trade negotiations – including the WTO Doha Round, the Free Trade Area of the Americas (FTAA) and the EU-Mercosur regional agreement – still essential to the country's development? The answer resides in the nature of the products exported: 90% of Brazilian agrifood exports are comprised of

agricultural and agro-industrial commodities. International competitiveness and export growth largely depend on the outcome of international trade negotiations.

Figure 3. Domestic subsidies measured by the OECD producer support estimate (PSE%)*



*The PSE% expresses the total producer support as a percentage of gross farm receipts measured by the value of total production (at farm gate prices) plus budgetary support. *Source: OECD (2005).*

Perhaps more importantly, the main agrifood commodities exported by Brazil are treated as sensitive products by importing countries and, therefore, are highly regulated and protected. The great majority of the Brazilian agrifood commodities face border restrictions (Table 1). The sugar and ethanol sector is globally protected with tariff peaks, tariff rate quotas, special safeguards and other mechanisms. Other agrifood commodities are subject to more specific protection, such as grains and cotton in the US, which are highly subsidized. The meat sector – including beef, poultry and pork – faces a heterogeneous set of protectionist policies. The EU, Iceland, Norway and Switzerland adopt tariff peaks in all three types of meat, while Japan protects the pork sector, and Canada and Mexico protect the poultry sector.

In addition to tariff protection, sanitary barriers are also prevalent in the meat sector, including in countries with relatively lower tariffs such as the US (for beef, poultry and pork) and Canada (for beef and pork). As a result of tariff and non-tariff barriers, trade is severely constrained. Tariff rate quotas and special safeguards also restrict market access by most Brazilian agrifood commodities exported. For example, soybeans, tobacco, coffee and cocoa beans are subject to low tariffs, but their processed products – such as soybean oil, roasted and soluble coffee, cigarettes and chocolates – are targets of tariff escalation. We now discuss how Brazil is acting in the international arena to contribute to increase policy coherence in developed economies.

Table 1. Trade barriers to agrifood exports from Brazil

Product	EU	US	Japan
Raw sugar	<u>161</u> *	<u>133</u> *	311*
Ethanol	43*	46*	27
Powder milk	<u>64</u> *	<u>44</u> *	<u>155</u> *
Frozen chicken cuts	94*	12*	12
Frozen pork	43*	0	136*
Frozen beef	<u>124</u> *	<u>26</u>	50
Corn	<u>73</u> *	1*	87*
Tobacco	75*	350	0
Orange juice	15	39*	25

* Specific and compound tariffs. These tariffs were converted into Ad Valorem Equivalent (AVEs) following the methodology agreed by WTO Members in 2005.

Underlined numbers indicate the existence of Special Safeguard Measures (SSG).

Shaded cells indicate sanitary restrictions that act as a barrier to trade.

Sources: Bound rates from WTO, APEC, COMTRADE, USITC, and TARIC12. Elaboration: ICONE.

Brazil and the WTO cotton and sugar cases

On September 27, 2002, Brazil filed two dispute cases against US cotton subsidies and EU sugar export subsidies at the Dispute Settlement Body (DSB) of the WTO. Both cases constituted the first time a developing country challenged developed countries' agricultural domestic and export subsidies.

In the sugar panel against the EU, Brazil won alongside Australia and Thailand. The WTO Appellate Body agreed with the argument that the EU provides subsidies above the GATT agreement on agriculture regarding the exports of 1.6 million MT of white sugar. The WTO Appellate Body also confirmed the market distortions caused by sugar C exports, which refer to sugar production above the domestic market quota (A) and sugar receiving allowed export subsidies (B). As a result of these findings, the EU will have to exit a market of 3.8 million MT of white sugar, which will become available to competitive producers such as Australia, Brazil, South Africa and Thailand. This was an important victory for Brazil because EU sugar subsidies cause annual losses of USD 400 million to Brazilian producers. In the case of sugar, former European colonies in Africa, the Caribbean, and the Pacific (ACP) were against Brazil because they benefit from preferential access to the European market.

In the WTO cotton panel, Brazil claimed that the US violated the "peace clause" of the GATT agreement on agriculture as cotton producers received payments during the 1998-2002 marketing years that exceeded the 1992 level of USD 1.9 billion. Brazil's cotton case argued that US cotton subsidies caused "serious prejudice" to Brazilian cotton producers because they depressed cotton prices, allowing US producers to gain world market share in detriment of Brazilian producers (Chaddad, Aguilar and Jank, 2005; Jank, Araújo and Diaz, 2004).

Brazil also won the cotton case, but this time there was convergence of interests between the Brazilian position and West African countries (Benin, Burkina Faso, Chad and Mali). Following the establishment of the cotton panel in March 2003, the four African nations presented a proposal to the WTO that it should consider the elimination of cotton subsidies a priority. The cotton case thus won global media coverage as the proposal received the backing of NGOs and other pressure groups.

Brazil's victory in the sugar and cotton panels will have significant impacts in the Doha Round. First, the WTO cotton ruling may have far reaching consequences because the general programs –

including direct payments, countercyclical payments, marketing loans, crop insurance and export credit guarantee programs – constitute the vast majority of US agricultural support that flows to producers. These programs are in effect for several crops – including corn and soybeans – not just for cotton. Second, the sugar panel challenges a product that has never been reformed by the EU. Brazil now expects to consolidate these advances in the Doha Round, with a complete elimination of export subsidies and a significant reduction and discipline to the use of distorting domestic subsidies.

A pragmatic role in the WTO Doha Round

The WTO Doha Round was launched to reduce the historical imbalance between strong liberalization in industrial markets since the early stages of the General Agreement on Tariffs and Trade (GATT) in 1947 and persistent protectionism in agriculture, a sector that has been literally left behind in the world trading system. This round is a unique opportunity to improve conditions for international trade of agricultural products. It is at the multilateral level that developing countries can find space to address systemic issues such as domestic support and export competition, which are usually excluded from regional and bilateral trade agreements (IPC, 2005).

In 2002 the US doubled its agricultural subsidies by approving the most protectionist Farm Bill in its history. In 2003, the EU eliminated a few subsidies with another reform of its Common Agricultural Policy (CAP). However, Europe's reform excluded important sectors (i.e., sugar) and did not improve conditions for worldwide access to its large consumer market. On the eve of the 2003 Cancun Ministerial, the US and the EU released a joint proposal consisting of their respective defensive positions on subsidies and market access.

Together with China, India and eighteen other developing countries, Brazil formed the G-20 in an attempt to revive the Doha spirit on agricultural subsidy reduction and market liberalization in developed countries². In the middle of many other coalitions that are formed in the WTO negotiations, the heterogeneous G-20 has been recognized, by both developing and developed countries, as an important and strategic player in the current multilateral negotiations. Over the past two years the group has changed the variable geometry of the negotiations by acting in a cohesive and pragmatic manner, with strong political representation and good technical work shown in the dozens of proposals presented on each item of the agricultural negotiations agenda. Certainly, the G-20 has been the major result of Brazil's current trade policy.

In the current phase of the Doha Round, the main issues to be resolved include domestic agricultural subsidies and agricultural market access in both developed and developing countries. In particular:

- On domestic agricultural subsidies, it is necessary to force the US to accept deeper cuts and additional disciplines to avoid more escapes and loopholes, as well as demand the immediate implementation of the final decisions of the WTO Appellate Body on cotton subsidies. The Doha Round will fail if the US does not reduce its subsidies, which skyrocketed from USD 7 billion in 1997 to USD 20 billion in 2004. The need to decouple subsidies, given current production and price levels, is also an absolute must. The US has been quite skilful when it comes to “camouflaging” its agricultural subsidies in the

² G-20 member countries generate 12% of the world's GDP, 21% of the world's agricultural GDP, 20% of the world's agricultural exports, 57% of the world's population, and 70% of the world's rural population. The group of twenty-one countries has a balanced geographical representation. Five members are in Africa (Egypt, Nigeria, South Africa, Tanzania and Zimbabwe); six countries are in Asia (China, India, Indonesia, Pakistan, The Philippines and Thailand); and ten countries are in Latin America (Argentina, Bolivia, Brazil, Chile, Cuba, Guatemala, Mexico, Paraguay, Uruguay and Venezuela).

WTO, alleging that they are “less trade distorting.” The WTO cotton panel, however, exposed to world public opinion the highly distorting side of US subsidies as they reached excessively high levels. If Washington is unable to come up with groundbreaking proposals to lower subsidies in Geneva, not only is it likely that the Doha Round is doomed to failure but the WTO itself will be forced to deal with an explosion of new disputes (Jales and Nassar, 2005).

- On agricultural market access, the major effort needs to come from Europe. There is strong resistance, however, to the EU providing greater access to its consumers by means of reduced agricultural tariffs and expanded import quotas. Unlike the US, the EU challenge is not to reduce agricultural subsidies, which was partially achieved in the 2003 Fischler Reform. The greatest challenge facing EU policy-makers and negotiators is to promote openness to agrifood imports from more competitive countries. France continues to put pressure on the European Commission not to give up more, whereas ACP countries do not want to lose preferential access to the European market and tend to fight with the bloc against any wider opening of trade barriers.
- The G-20 should also be less defensive on agricultural market access for developing countries. As these nations account for 70% of the world’s rural population, it is expected that some of them will fear reducing their own tariffs on imports. The G-20 has deep internal controversies regarding market access. On one hand, some of its members – including Chile and Mercosur – adopt an offensive position and clearly stand for low agricultural protection. On the other hand, China and India adopt a defensive position as they seek to protect their domestic markets through high tariffs and new protection mechanisms such as the concepts of Special Products and Special Safeguards for developing countries (SSM). An impartial and reasonable reading of the numbers indicates, however, that there is much room for the G-20 to accept more ambitious cuts and simpler, more limited rules for sensitive products.

The most important question is whether the Doha Round will affect the current levels of protection, going beyond the trade and agriculture policies currently in place. The challenge ahead is to preserve the high level of ambition of the Doha Mandate.

Deadlocks in regional and bilateral negotiations

In addition to multilateral trade negotiations at the WTO, Brazil is also involved in regional and bilateral trade talks. More specifically, Brazil is involved in negotiations between the EU and Mercosur since 1999 and with 34 countries in the Western Hemisphere since 1994.

Losing ambition in the Free Trade Area of the Americas (FTAA)

The Free Trade Area of the Americas (FTAA) initiative was launched in 1994 to promote a gradual hemispheric integration through the substantial and progressive elimination of trade, services, and investment barriers. However, since 2003 FTAA negotiations have become increasingly contentious and moved towards a deadlock between the US and Brazil (Jank and Arashiro, 2004). Facing the US insistence to remove subsidies and trade remedy laws from regional talks, Brazil responded by proposing the transfer of rules in investment, services and intellectual property to the WTO. As a result, the “single undertaking” and the “most-favored nation” treatments – two core guiding principles of the negotiations – have already been broken. Under the negotiating format set up in the Miami ministerial meeting of November 2003, countries were left free to pursue agreements bilaterally or multilaterally with only a minimum set of common rules being applied. For different reasons, it appears that Brazil and the US, co-chairs of the negotiations, have opted for a more modest approach – the so-called “FTAA *a la carte*” – considerably lower in ambition when compared to what was observed at the early stage of negotiations.

The FTAA is currently at a dangerous crossroads as it faces the threat of losing relative importance to other bilateral and sub-regional trade blocs. Such agreements appear to have become the priority to Chile, Mexico and the US. The growth of bilateral agreements in the Western Hemisphere not only undermines the FTAA, but also adds substantial complexity to a future multilateral trade system. In this respect, the FTAA would be the best alternative relative to the proliferation of bilateral agreements in the Hemisphere because it would include uniform trading rules for all countries involved. If the FTAA were negotiated in the original format, a more balanced agreement would have been achieved in order to foster trade in all directions. Additionally, a hemispheric agreement would have avoided the negative effects of trade and investment diversions, and potential conflicts emanating from different rules of origin, technical standards and trade dispute settlement mechanisms.

Sensitivities in the EU-Mercosur bi-regional agreement

The EU absorbs 35% of Mercosur's total agricultural exports or the equivalent to 48% of total bloc exports to the EU. Export products of particular relevance to Mercosur include meats (beef, poultry and pork), sugar, ethanol, tobacco, milk powder, corn, wheat, orange juice and fruits. Although agriculture is at the center of Mercosur's interests, the sector continues to suffer from a high protectionist system in the EU based on tariff peaks, tariff rate quotas, minimum entrance prices, special safeguards and sanitary measures, together with domestic support and export subsidies (Jank at. al., 2004). The EU maintains an inflexible position relative to market access for agricultural products and restricts negotiations in this area to a small expansion of tariff rate quotas for selected products. Moreover, the concrete results of the EU-Mercosur negotiations are expected to be influenced by EU enlargements and further CAP reforms in sensitive products, such as sugar.

In recent years the EU-Mercosur negotiations failed to achieve any meaningful results. Both sides are to blame. On one hand, Europe continued to adopt an inflexible position regarding agricultural market access and did not show interest in concluding the agreement due to the lack of advances at the FTAA. Additionally, the EU agricultural offer was insufficient and for several products was lower than what Mercosur already exports. On the other hand, Mercosur did not contribute to the success of the negotiation process with an excessively timid proposal in industrial goods, services and government purchases. From the perspective of the agrifood sector, it would be best that the negotiations resume taking into consideration the informal offers made by both parties in 2004 before the timid offer exchange that led to the stalemate.

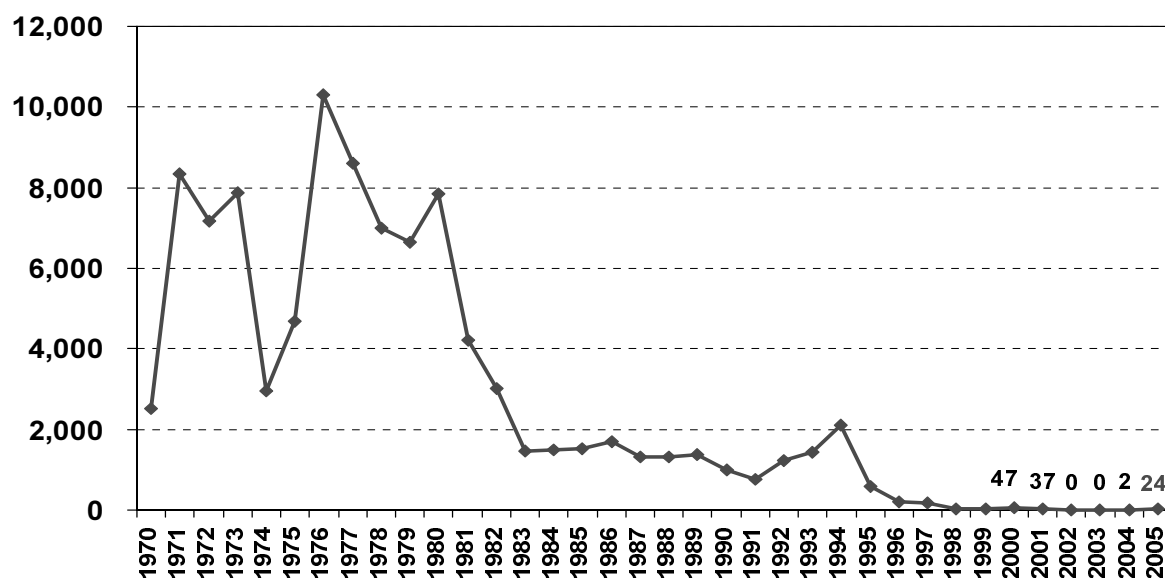
Finally, South-South cooperation has become an increasingly important topic in Brazilian foreign policy, but with no concrete results up to now. A trade-strengthening initiative has been launched between India, Brazil and South Africa (known as the IBSA initiative), a preferential trade agreement between Mercosur and India was signed in January 2004, a preferential trade agreement between Mercosur and the Southern Africa Customs Union (composed of Botswana, Lesotho, Namibia, South Africa and Swaziland) is under negotiation, and a free trade agreement between Mercosur and the Andean Community was signed in October 2004.

(The Lack of) Coherence in Brazil's Agricultural Policies

As mentioned in the introduction, meat production in Brazil more than doubled from 7.5 to 18.3 million metric tons (MT) between 1990 and 2004. This growth has been primarily fostered by a surge in exports. Total meat (poultry, pork and beef) exports from Brazil increased from USD 360 million in 1990 to USD 5.2 billion in 2004. In particular, beef exports during this period grew at a 31% annual average rate reaching US\$ 2 billion in 2004. This surge in beef exports was made possible by government efforts to eradicate foot-and-mouth disease (FMD) since the 1980s and especially with the 1992 National Program for the Eradication of FMD and coordinated sanitary defense efforts with neighbouring countries (Lima,

Miranda and Galli, 2005). As a result of these efforts, there has been a substantial decrease in the number of FMD cases in the country (Figure 4) leading the World Organization for Animal Health (OIE) to recognize several Brazilian states as FMD-free zones. Despite these advances in controlling FMD, Brazilian beef still faces sanitary barriers from major importing countries such as the US, Japan, Mexico South Korea, Canada and China – markets that imported USD 7.5 billion worth of beef products in 2004.

Figure 4. Number of cases of foot-and-mouth disease in Brazil



Source: Lima, Miranda and Galli (2005).

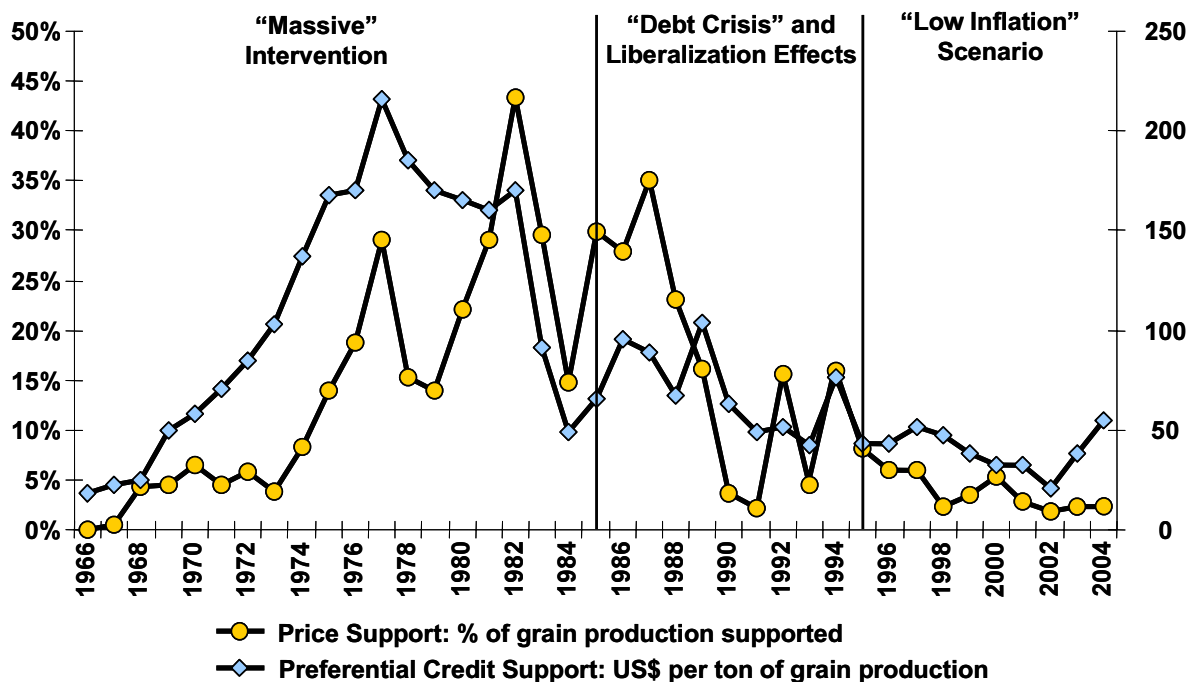
On October 9, 2005 a new case of FMD detected in Eldorado, Mato Grosso do Sul – the state with the largest cattle herd in Brazil – started a new crisis in the Brazilian beef industry. As more than fifty countries decided to close their borders to Brazilian beef – including the EU, Russia, Egypt and Chile, which are the top four importers from Brazil – fourteen thousand animals were sacrificed, packing houses reduced slaughtering activities, cattle prices fell and jobs were lost. Beef industry participants were quick to blame the government for the crisis, while President Lula suggested that cattle ranchers were responsible for vaccination and he was more concerned about avian flu. The Minister of Agriculture conceded that it was a matter of time for FMD to re-emerge in the country as the government has neglected sanitary defense programs in the early 2000s. This recent crisis in the beef industry raises the puzzling question of how the government lost sight of an industry that is so important to the country’s economy. In the analysis that follows we begin to inform this issue.

Brazilian government expenditures on farm programs

Over the last three decades, agricultural policy in Brazil underwent significant changes. The 1970s and early 1980s were characterized by massive government intervention in agricultural commodity markets primarily by means of agricultural credit and price support programs (Figure 5). At that time, agricultural policy had the objective of promoting food self-sufficiency while compensating the agricultural sector for the anti-agriculture bias of the import substitution model. The debt crisis of the late 1980s forced the Brazilian government to decrease support to farmers and to review agricultural policy goals. Structural reforms introduced in the early 1990s further decreased the strength of agricultural policy in Brazil with the elimination of export taxes and commodity price controls, market deregulation, and the

introduction of private instruments for agricultural financing. As a result of these changes, government support currently represents 3% of farm receipts in Brazil, compared with 2% in New Zealand, 4% in Australia, 17% in the US, and 34% in the EU (OECD, 2005).

Figure 5. The evolution of agricultural policy in Brazil*



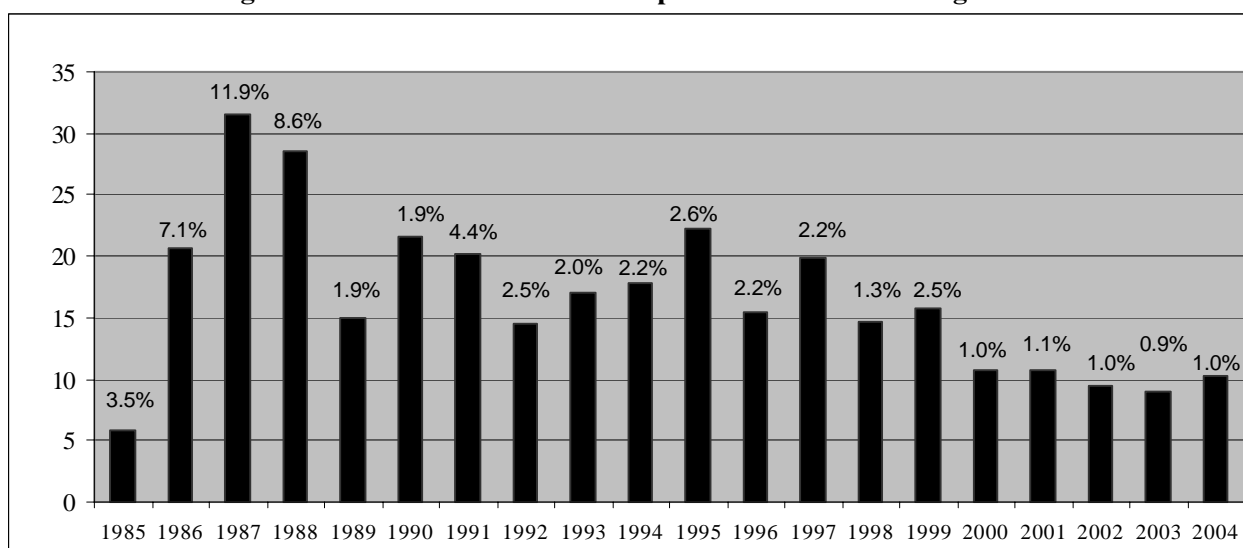
* Before 1965, there was price support for coffee, sugar cane, milk, and grains.
Source: Ministry of Agriculture, Livestock and Food Supply (MAPA), 2005.

Figure 6 shows the decreasing levels of government expenditures on agriculture-related programs in Brazil since the mid-1980s. The total amount spent in the 1985-1989 period reached BRL101 billion (USD 34.7 billion), which represented 5.6% of total government expenses. The total amount spent on agricultural programs decreased to BRL 50 billion (USD 17.1 billion) in the 2000-2004 period, representing one percent of total government expenses (Table 2).

Not only have government expenditures on farm programs decreased by half in real terms, but they were also pulverized in an increased number of programs. According to Gasques (2004), the number of agriculture-related programs increased from 30 before the year 2000 to 100 programs in 2003, 84 under the function Agriculture and 16 programs under the function Agrarian Organization³. Many of these programs are hard to evaluate and, in general, expenses are made in intermittent actions that do not contribute to intended goals. As a result, Gasques (2004) observes that some programs are stretched out to the limit and cannot survive with decreased budgets. Additionally, he argues that some programs such as sanitary defense have been neglected despite being essential to support agrifood development and export growth.

³ Brazilian government expenditures are organized in functions and programs. A function represents the higher level of aggregation of federal government expenses, including health, education, social security and the two agriculture-related functions (Agriculture and Agrarian Organization). A program comprises a group of government actions towards a specific policy goal.

Figure 6. Brazilian Government Expenditures in Farm Programs*



* Expenditures are measured in BRL billions corrected for inflation by IGP-DI (base year is 2004). The percentages on top of the bars represent expenditures in farm programs relative to total government expenditures.

Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

Table 2. Brazilian government expenditures in farm programs by function*

Years	Total Expenses in Agricultural Programs (BRL Billion)*	Total Expenses in Agrarian Organization (BRL Billion)*	Expenditures in Agriculture /Total Government Expenditures (%)	Expenditures in Agrarian Organization /Total Agriculture (%)
1985 – 1989	101.52	6.47	5.55	6.37
1990 – 1994	91.11	5.97	2.39	6.56
1995 – 1999	88.15	15.01	2.11	17.03
2000 – 2004	50.06	18.88	1.02	37.78
1985 – 2004	330.85	46.34	2.25	16.91

(*) Expenditures are measured in BRL billions corrected for inflation by IGP-DI (base year is 2004). Family Farming (PRONAF) was included in Agrarian Organization Expenses for the period between 2000 and 2004. Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

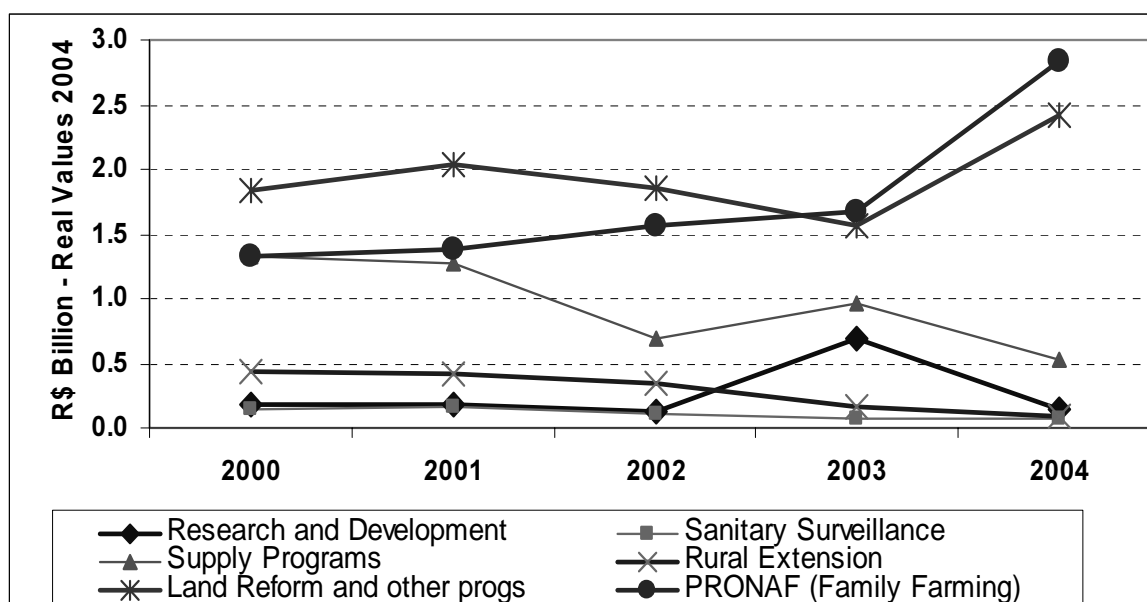
Another important trend is the increased priority devoted to the function known as “agrarian organization”. This function is largely related to land reform in Brazil, which since 1994 has settled approximately 500 thousand new family farms in expropriated land (Graziano, 2004). In addition to land reform, the government adopted a set of policies targeted to the rural poor in 1995 – known as PRONAF – including subsidized credit, training and extension. Interestingly enough the Brazilian government created a new ministry in 2000 to run programs targeted to family farms and land reform – the Ministry of Agrarian Development (MDA). According to Gasques and Bastos (forthcoming), MDA expenses in personnel and other current expenses cost Brazilian taxpayers BRL 2.2 billion (around USD 1 billion) between 2001 and 2004. Brazil is probably the only country in the world with two ministries of agriculture, which reflects the dualistic nature of farming. From a total of five million farms in the country, less than 10% has more than 100 hectares of land (IBGE, 1995). In other words, a small share of the farms accounts

for the majority of output and exports, whereas there are many small-scale, most of them inefficient producers.

Table 2 shows that federal government expenditures on Agrarian Organization programs have increased from 6.4% to 38% of total expenditures on farm programs from 1985-1989 to 2000-2004. In other words, not only did total government expenditures on agricultural programs decreased both in relative and absolute terms, but also traditional farm programs – including rural credit, commodity price support, agricultural research, sanitary and phytosanitary defense, and extension services – suffered increased competition from Agrarian Organization programs.

Figures 7, 8 and 9 show more clearly the increased priority devoted to land reform in Brazil in detriment to traditional farm programs since the year 2000. Figure 7 shows that government expenditures on land reform and similar programs increased from BRL 1.84 billion (USD 836 million) in 2000 to BRL 2.4 billion (USD 1.1 billion) in 2004. Expenditures on support of family farming (PRONAF) also increased from BRL 1.4 billion to BRL 2.8 billion. At the same time expenditures on government purchases and storage of agricultural commodities decreased from BRL 1.32 billion (USD 600 million) to BRL 0.53 billion (USD 241 million). Other traditional agricultural policy programs such as extension, research and sanitary defense also suffered resource cuts during the last five years.

Figure 7. Brazilian Government Expenditures in specific farm programs*

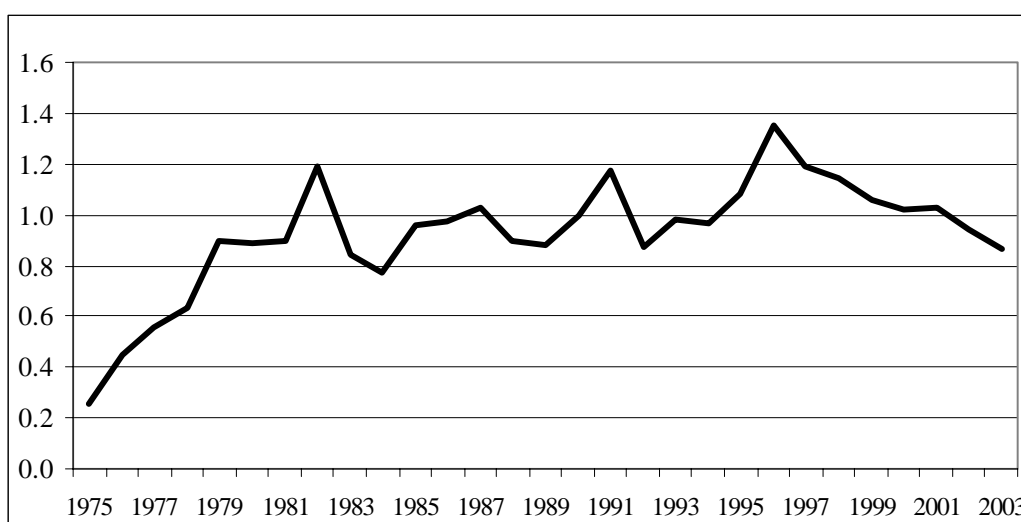


* Expenditures are measured in BRL billions corrected for inflation by IGP-DI (base year is 2004).

Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

Government expenditures in agricultural research through the Brazilian Agriculture Research Corporation (Embrapa) have substantially increased between 1975 and 1982 (Figure 8). As a result of the 1980s debt crisis, the government has not been able to sustain that growth. Consequently, government expenditures in agricultural research have moved around the BRL 1 billion (USD 455 million) mark between 1983 and 1995. Since reaching the BRL 1.35 billion (USD 614 million) peak in 1996, Embrapa has received decreasing levels of support from the government. Additionally, over 90% of total Embrapa budget is currently being used in personnel and other current expenses. Given the central role of Embrapa in tropical agriculture research this trend might jeopardize future productivity growth in Brazilian agriculture.

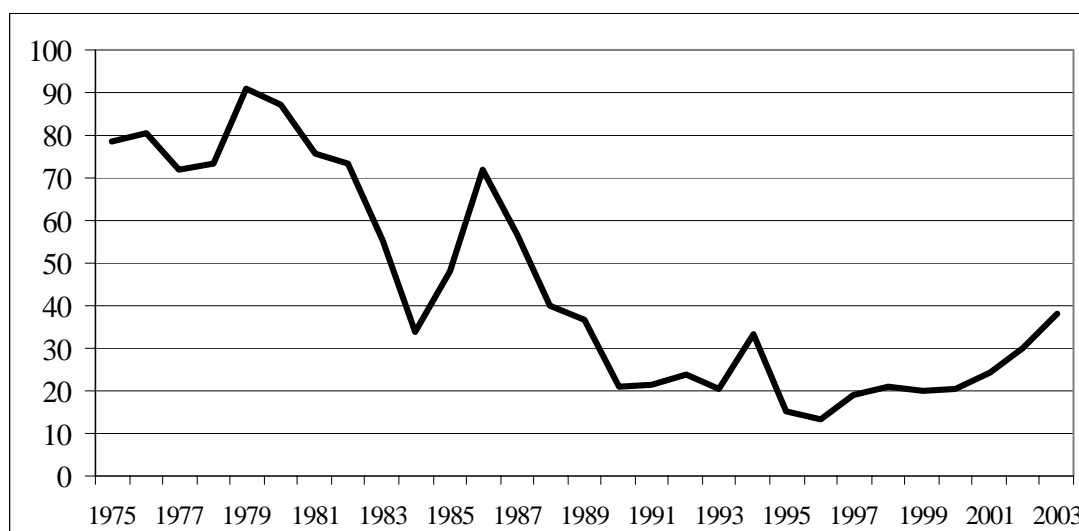
Figure 8. Brazilian government expenditures in agricultural research (Embrapa)*



* Expenditures are measured in BRL billions corrected for inflation by IGP-DI (base year is 2004).

Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

Figure 9. Brazilian government supply of agricultural credit*



* Expenditures are measured in BRL billions corrected for inflation by IGP-DI (base year is 2004).

Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

Another important component of agricultural policy in Brazil has been the supply of relatively cheap credit by government sources. Figure 9 shows, however, the reduced level of government intervention in agricultural credit markets since the late 1970s. Government supply of agricultural credit has decrease from BRL 91 billion (USD 41 billion) in 1979 to BRL 13 billion (6 billion) in 1996. During this period, non-traditional sources of credit – including private banks, agribusinesses and international lenders – have substituted for government-supplied credit. Since these non-traditional lenders did not generally reach small family farmers, PRONAF was instituted in 1995. PRONAF provides working capital

and investment credit to small farmers, including the beneficiaries of agrarian reform, at below-market interest rates. Since the institution of PRONAF, government supply of agricultural credit has rebounded to BRL 38 billion (USD 17.3 billion) in 2003, which is equivalent to approximately 30% of the total agricultural credit market.

Summary and Conclusions

The agrifood sector in Brazil underwent significant export-led growth in the last decade. This growth in agricultural production and exports has been attributed to a number of factors, including the market oriented policies introduced since the late 1980s and substantial investments in tropical agriculture research and availability of agricultural credit, which significantly impacted the performance and competitiveness of the country's agrifood economy. Total factor productivity in Brazilian agriculture grew at an average annual rate of 3.3% between 1975 and 2002. In 2004, Brazil surpassed the US as the country with the largest surplus in agricultural trade with USD 25 billion.

Despite these favorable developments and the availability of labor and natural resources, the growth of the agrifood sector in Brazil faces significant internal and external constraints. In the external environment, Brazilian agrifood exports are significantly impacted by OECD country trade barriers and subsidies to domestic producers and exporters. The benefits from agrifood economy development would be substantially increased in Brazil if OECD member countries reformed their agricultural policies to minimize distortions in agricultural trade. That is why Brazil adopted a more aggressive position in international trade negotiations by bringing two high-profile dispute cases against developed countries at the World Trade Organization (WTO) and by taking leadership in the formation of a coalition of developing countries (the G-20).

In the domestic arena, agricultural producers in Brazil face uncertainties related to the lack of clearly defined property rights to land, the regulatory framework concerning research and marketing of genetically modified organisms (GMOs), poor infrastructure causing logistical bottlenecks, and the decline in government spending in important areas such as sanitary defense, agricultural research and other traditional agricultural policy instruments. This paper has shown that government spending in farm programs has significantly decreased in the last couple of decades. Perhaps more importantly, the number of agriculture-related programs has tripled since the early 2000s, meaning that the limited available resources are spent in an increasing number of programs. Traditional farm programs – including commodity purchases and storage, agricultural credit, research and development, and sanitary defense – have suffered significant reductions as the Brazilian government has shifted priorities to land reform and other Agrarian Organization programs.

One of the structural changes of recent agrifood development in Brazil is the growth of commercial agriculture, including in areas that have traditionally been important to small-scale farmers such as dairy products and corn (OECD, 2005). This creates pressures on less competitive, semi-subsistence farmers, for whom the long-term future mostly lies outside agriculture. As a result of these changes, and significant political pressure from the landless workers movement (MST) and the Catholic Church, the Brazilian government has developed programs targeted to small-scale farmers, including land reform and PRONAF.

Given the role of agriculture in the Brazilian economy, however, it is important that policies aimed at poorer farmers do not hold back further improvements in productivity of more competitive farms. The recent re-emergence of the foot-and-mouth disease, which led more than fifty countries to close their borders to beef exports from Brazil, clearly shows some of the policy challenges to the development of the Brazilian agrifood economy. Brazilian efforts in international trade negotiations will not contribute to agrifood development if the country continues to neglect important domestic issues such as sanitary defense. Growth in perishable commodity exports – including meats and fruits – depend on the country's

success in guaranteeing product safety and quality. It is, therefore, important to enhance the network of laboratories for product testing, develop modern certification and traceability mechanisms, and control FMD and other diseases. If Brazil does not do its homework, it will suffer the consequences of the “visibility curse” as the country increases its market share in global agrifood trade and adopts a pro-active role in international trade negotiations.

In retrospect, farm policies in Brazil have evolved in the last three decades from a food security emphasis before 1985, to deregulation and openness to trade between 1985 and 1995 and, since then, to a land reform and family farm focus. Looking ahead, Brazilian policy makers should develop farm policies to balance competitiveness with social and environmental sustainability goals. This policy agenda should comprise social inclusion goals and programs targeted to different types of family farms, but also programs that are essential to agrifood competitiveness, including agricultural research, sanitary defense, food safety, traceability, clearly defined property rights to land, and infrastructure development.

References

Chaddad, F.R., Aguilar, P. and Jank, M.S. “Agrifood Market Integration: Perspectives from Developing Countries.” Paper presented at the Second Annual North American Agrifood Market Integration Workshop, San Antonio, TX, May 4-6, 2005. Paper available at: <<http://naamic.tamu.edu>>.

Food and Agricultural Organization (FAO). *FAOSTAT Database*, April 2004. Available at: <<http://faostat.fao.org>>.

Gasques, J.G. *Gasto Público para o Desenvolvimento Agrícola e Rural: O Caso do Brasil*. Research report prepared for the Food and Agriculture Organization (FAO), Santiago, Chile, 75 pp., 2004.

Gasques, J.G. and Bastos, E.T. *Gastos Públicos na Agricultura: Uma Atualização*, forthcoming.

Gasques, J.G., Bastos, E.T., Bacchi, M.P.R. and Conceição, J.C.P.R. “Condicionantes da Produtividade da Agropecuária Brasileira.” *Revista de Política Agrícola* 13(3): 73-90, 2004.

Graziano, X. *O Carma da Terra no Brasil*. São Paulo: A Girafa Editora, 2004.

IBGE (Instituto Brasileiro de Geografia e Estatística), *Brazilian Census of Agriculture*, 1995.

IPC (International Food & Agricultural Trade Policy Council). *Building on the July Framework Agreement: Options for Agriculture*. Washington, DC, June 2005.

Jales, M. and Nassar, A. “Insufficient Proposals in Agricultural Domestic Support and the Risk of Failure in the Doha Round”. To be published at *Bridges*, International Centre for Trade and Sustainable Development (ICTSD), November 2005.

Jank, M.S. and Z. Arashiro. “Free Trade in the Americas. Where Are We? Where Could We Be Headed?” In Inter-American Dialogue (org). *Free Trade in the Americas: Getting There From Here*. Washington, DC: Report of the Inter-American Dialogue, 2004.

Jank, M.S., L. Araújo and J. Diaz. “The WTO Dispute Settlement Mechanism Perspective: Challenging Trade-Distorting Agricultural Subsidies.” In J. Lacarte and J. Granados (eds). *Inter-Governmental Trade Dispute Settlement: Multilateral and Regional Approaches*. London: Cameron May, 2004.

Jank, M.S., J.Y. Carfantan, G. Kutas, A.J. Meirelles, A. Nassar and J.H. Cunha Filho. “Scenarios for Untying the Agriculture Knot.” In A. Valladao, F. Peña and P. Messerlin (eds). *Concluding the EU-*

Mercosur Agreement. Paris: Mercosur Chaire of the Institut d'Etudes Politiques de Paris. Presses de Sciences Po, 2004.

Jank, M.S., Nassar, A.M. and Tachinardi, M.H. "Agronegócio e Comércio Exterior Brasileiro." *Revista USP* 64 (Dezembro): 14-27, 2004.

Lima, R.C.A., S.H.G. Miranda and F. Galli. *Febre Aftosa: Impacto sobre exportações brasileiras de carne e o contexto mundial das barreiras sanitárias*. São Paulo: ICONE, October 2005.

Ministry of Agriculture, Livestock and Food Supply (MAPA). *Brazilian Agriculture Policy*. Presentation, Washington June 16, 2005.

Ministry of Finance. *Relatório Resumido de Execução Orçamentária do Governo Federal*. Data available at: <<http://www.fazenda.org.br>>, 2005.

Ministry of Industry, Development and Foreign Trade. Trade data available at: <<http://www.desenvolvimento.gov.br/sitio/sececx/negInternacionais/tec/apresentacao.php>>, 2005.

OECD. *Key Issues for Policy Coherence for Development in Agriculture*. Report available at <<http://www.oecd.org/dataoecd/22/53/25507214.pdf>>, 2004.

OECD. *OECD Review of Agricultural Policies: Brazil*. Report available at <http://www.oecd.org/document/62/0,2340,en_2649_201185_35584190_1_1_1_1,00.html>, 2005.

The Economist. *The harnessing of nature's bounty*. November 5-11, 2005, pp. 73-75.

World Trade Organization. Data and Notifications available at: <<http://www.wto.org>>, 2005.