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The Evolution of Agricultural Policies and Agribusiness Development in Brazil

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In the late 1980s, Brazil started to adopt liberal and market-oriented policies, which significantly impacted the performance of its food and agricultural (henceforth agrifood) sector. The agrifood sector is now among the most dynamic in the Brazilian economy. Grain production doubled from 58 to 120 million metric tons (MT) and meat production surged from 7.5 to 20.7 million MT between 1990 and 2005. The agrifood economy generated R\$534 billion (US\$183 billion) in 2004, which is equivalent to 30% of the country's GDP. In addition, it represented 35% of total employment and 40% of total exports in 2004.

Agricultural production growth and agribusiness development in Brazil are largely dependent on exports, which account for 31% of agricultural production. Total agricultural exports more than doubled from US\$13-32 billion in the 1990-2005 period. Brazil is now the world's third agrifood exporter – following the European Union (EU) and the United States (US) – and surpassed the US as the country with the largest surplus in agricultural trade, with US\$29 billion in 2005.

The growing competitiveness of the Brazilian agrifood sector is attributed to a number of factors, including investments in tropical agricultural research and availability of agricultural credit, which caused significant productivity gains since the 1970s. The technologies that made the expansion into the *cerrado* region in the Brazilian Central-West – in soils that are distinctly inferior to those in Argentina, the US Corn Belt and Southern Brazil – resulted from public investments in agricultural research. 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% between 1998 and 2002, which are above the 1.8% growth rate achieved by US

agriculture between 1948 and 2002 (Gasques et al., 2004). Other factors also contributed to the competitiveness and growth of the agrifood sector in Brazil, such as relative macroeconomic stability after 1994 and the significant reductions in government intervention and trade barriers (Jank, Nassar, & Tachinardi, 2004).

Despite these favorable developments and the availability of labor and natural resources, agrifood growth in Brazil faces significant internal and external constraints. In the external environment, trade barriers and subsidies to domestic producers and exporters, especially in developed countries, significantly impact Brazilian agrifood exports. As a result, Brazil adopted a more aggressive position in international trade negotiations at the World Trade Organization (WTO), bringing three high-profile dispute cases against developed countries and taking leadership in the formation of a coalition of developing countries known as the G-20.

In the domestic arena, agricultural producers in Brazil face uncertainties related to exchange rate volatility, 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 food safety, animal and plant health inspection, agricultural extension, irrigation, and other traditional agricultural policy instruments. The recent reemergence of foot-and-mouth disease, which led more than 50 countries to close their borders to beef exports from Brazil, is one recent example of the policy challenges to the development of the Brazilian agrifood economy. This article discusses the evolution of agricultural policies in Brazil and how they impact the competitiveness of the agrifood sector.

Table 1. The evolution of agricultural policy in Brazil.

	1965-1985	1985-1995	1995-2005	Proposed Agenda
Macroeconomic conditions and policy	<ul style="list-style-type: none"> - High inflation - Controlled exchange rate - High growth rate - Increased government expenditures in farm policy 	<ul style="list-style-type: none"> - Uncontrolled inflation and low growth (stagflation) - Heterodox plans - Debt crisis - Land as real asset - Decreased government expenditures in farm policy 	<ul style="list-style-type: none"> - Control of inflation - Volatile exchange rate - High real interest rates - Modest growth rate - Privatization 	<ul style="list-style-type: none"> - Low inflation - Structural reforms and fiscal balance - Less volatile exchange rate - Lower interest rates - Sustained growth - Investments in infrastructure
Agricultural policy goals	<ul style="list-style-type: none"> - Food security 	<ul style="list-style-type: none"> - Deregulation - Liberalization 	<ul style="list-style-type: none"> - Land reform programs - Family farming and social inclusion 	<ul style="list-style-type: none"> - Competitiveness - Sustainability (economic, social, and environmental)
Price support and government storage	<ul style="list-style-type: none"> - Massive intervention: public agencies, government purchases and storage, price controls - Commodity price support 	<ul style="list-style-type: none"> - Decreased intervention - Agricultural commodity market deregulation 	<ul style="list-style-type: none"> - Modest and selective intervention 	<ul style="list-style-type: none"> - Modest and selective intervention
Rural credit	<ul style="list-style-type: none"> - Government supply of credit financed by Treasury (SNCR) - Negative real interest rates 	<ul style="list-style-type: none"> - Decreased government supply of credit - Interest rates less subsidized 	<ul style="list-style-type: none"> - Credit lines targeted to family farms (PRONAF) - Specific programs for investment credit (BNDES) - Agricultural credit crisis and debt rescheduling 	<ul style="list-style-type: none"> - Crop insurance - Private instruments for agricultural finance - Targeted credit lines to family farms - Credit cooperative development
Agricultural trade policy	<ul style="list-style-type: none"> - Closed economy - High tariffs - Import Substitution model - Export taxes on primary commodities 	<ul style="list-style-type: none"> - Unilateral openness to trade - International integration (Mercosur) - Elimination of export taxes 	<ul style="list-style-type: none"> - Aggressive policy against agricultural trade barriers - WTO dispute panels - Leadership in G-20 - Negotiation of regional agreements (FTAA, EU-Mercosur) 	<ul style="list-style-type: none"> - Aggressive trade policies: negotiations, litigations - Increased emphasis on NTBs: technical, sanitary, and social barriers - Conclusion of regional and bilateral trade agreements
Agricultural research and extension	<ul style="list-style-type: none"> - High investment in public research (Embrapa, federal and state universities) - Development of public extension service network 	<ul style="list-style-type: none"> - Leveling-off of public investment 	<ul style="list-style-type: none"> - Crisis of public research and extension services 	<ul style="list-style-type: none"> - Renewed public commitment to agricultural R&D, including GMOs - Increased role of public-private partnerships - Intellectual property rights
Social policies (family farms and land reform)	<ul style="list-style-type: none"> - Minimal 	<ul style="list-style-type: none"> - Initial stage (Extraordinary Ministry of Land Reform) 	<ul style="list-style-type: none"> - Ministry of Agrarian Development (MDA) - Distributive programs: land reform, "Bolsa Família," rural retirement, PRONAF 	<ul style="list-style-type: none"> - Policy evaluation and monitoring - Retarget programs to different types of family farms - Farm cooperative development and modernization

The Evolution of Agricultural Policies in Brazil

Agricultural policy goals and programs in Brazil have changed significantly (Table 1). The period between the mid 1960s to early 1980s was characterized by massive government intervention in agricultural commodity markets primarily by means of subsidized rural credit and price support mechanisms, including government purchases and storage of excess supply (Figure 1). At that time, the

agricultural sector in Brazil was in general not competitive (except in tropical products such as coffee and sugar), and was characterized by highly skewed distributions of farm income and land ownership with large, unproductive landholdings known as "latifundios." It was in the 1960s and 1970s that the country started to urbanize as many rural poor migrated to large cities. During this period, agricultural policy had the objective of promoting food secu-

rity of an increasingly urban population, while compensating the agricultural sector for the anti-export bias of the import substitution model that was common in developing countries at the time.

The debt crisis of the late 1980s forced the Brazilian government to decrease support to farmers and to review agricultural policy goals. Economy-wide structural reforms introduced in the early 1990s further decreased the distortion of agricul-

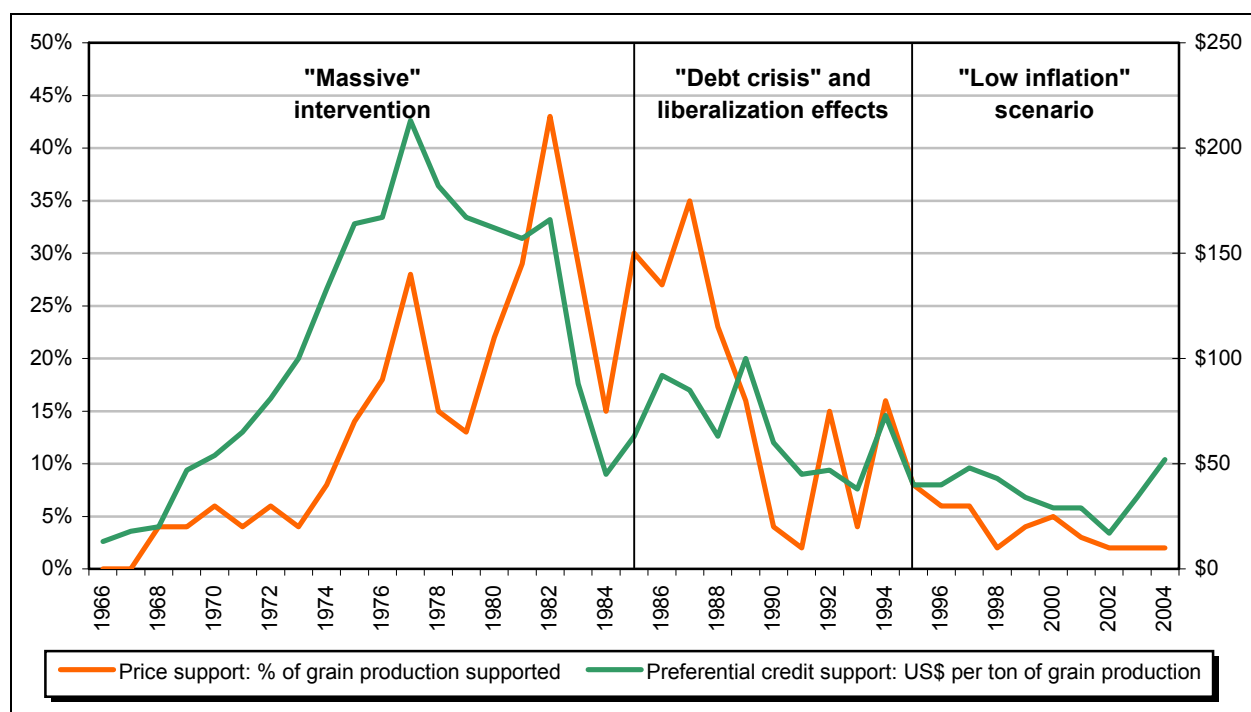


Figure 1. Commodity price and preferential credit support in Brazil.

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

tural policy in Brazil by eliminating export taxes and price controls, deregulating and liberalizing commodity markets, unilaterally reducing trade barriers (today the average applied tariff on agrifood products is 12.5%), and introducing 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, 8% in China, 18% in the US, and 34% in the EU (OECD, 2005).¹

1. These numbers refer to producer support estimates (PSE) that measure the value of supports from all forms of public policies, including domestic support and border measures relative to gross farm receipts between 2002 and 2004. The highest percentage PSE levels in Brazil are for rice (17%), cotton (13%), and wheat (6%).

Government expenditures on agriculture-related programs in Brazil have decreased over the last five presidential administrations (Table 2). The annual average amount spent in the Sarney administration (1985-1989), in real values, was R\$20.9 billion (roughly US\$9 billion), which represented 5.6% of total government expenses. The average amount spent on agricultural programs decreased to R\$10.7 billion (or about US\$5 billion) per year in the current administration, representing 1.8% of total government expenses in 2003-2005.

Not only have government expenditures on farm policy decreased by half in real terms since the late 1980s, they were also used in an increased number of programs by the last two administrations. 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 organization."² The performance of many of these programs is difficult to evaluate and, in general, expenses are quite variable or even arbitrary and do not contribute to intended goals. Additionally, some programs are stretched to the limit and cannot survive with continued budget reductions. Public services such as animal and plant health inspection, public research, and infrastructure improvements have been receiving fewer resources, despite the strong private and public

2. 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.

Table 2. Brazilian government expenditures in farm programs by administration and function.^a

Period	Average Annual Expenditures with Agricultural Policies			Agriculture/ Total (A/C)	Agrarian Organization/ Total (B/C)	(A+B)/Total Government Expenditures
	Agriculture (A)	Agrarian Organization (B)	Total (C)			
Sarney 1985-1989	19,549	1,330	20,879	94%	6%	5.6%
Collor-Itamar 1990-1994	17,510	1,229	18,739	93%	7%	2.8%
Cardoso 1 1995-1998	15,273	3,342	18,615	82%	18%	3.4%
Cardoso 2 1999-2002	8,712	3,290	12,002	73%	27%	2.0%
Lula 2003-2005	5,901	4,809	10,710	55%	45%	1.8%

^a Expenditures are measured in R\$ millions corrected for inflation by IGP-DI (base year is 2005). Agrarian Organization expenditures include family farm programs. Source: Ministry of Finance (2005). Elaboration: Gasques (2004) and ICONE.

efforts that were made in the 1990s to include Brazil as one of the world's leading agrifood export countries.

Significant changes in agricultural policy goals were introduced by the first Cardoso administration in 1995, which shifted priority to land reform and family farming in an attempt to alleviate rural poverty. This shift in agricultural policy goals is reflected in government expenditures in a new focus area called the "agrarian organization" (Table 2). Agrarian organization programs are primarily related to land reform. Under the Cardoso administration, approximately 500,000 new family farms were settled in expropriated land. In addition to land reform, the government adopted a set of policies targeted to "family agriculture" in 1995 – known as PRONAF – including subsidized credit lines, capacity building, research, and extension services.

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). Brazil is probably the only country in the world with two ministries of agriculture. This reflects a

supposed duality of farming in the country – related to the skewed distribution of rural income and land ownership – and the misleading perception that agribusiness development necessarily leads to small farmer exclusion. According to the 1995 Census of Agriculture, farms with less than 10 hectares (24.7 acres) represent 49.7% of all farms in the country and hold 2.2% of all landholdings. With more than 500 hectares (1,235 acres), the largest farms represent only 2.2% of all farms, but own 56.5% of all landholdings.

More recently, MDA officials became more vocal about the country's agricultural trade policy. In the Hong Kong Ministerial meeting of the WTO, the Minister of Agrarian Development openly defended the right of "food sovereignty" for developing countries by means of direct subsidies and additional border protections. During the same meeting, the Brazilian Minister of Agriculture, Livestock and Food Supply (MAPA) was asking for substantial improvements in market access for both developed and developing countries.

Federal government expenditures on agrarian organization programs

increased from 6% in the Sarney administration to 45% of total expenditures on farm programs in the Lula administration (Table 2). Not only did total government expenditures on agricultural policy decrease both in relative and absolute terms, but traditional agricultural policy functions were also sacrificed to support agrarian organization programs. For instance, government expenditures on land reform increased from R\$1.84 billion (US\$836 million) in 2000 to R\$2.4 billion (US\$1.1 billion) in 2004, while expenditures on support of family farming (PRONAF) doubled from R\$1.4 billion to R\$2.8 billion. At the same time, expenditures on government purchases and storage of agricultural commodities were substantially reduced from R\$1.32 billion (US\$600 million) to R\$0.53 billion (US\$241 million). Other traditional policy programs, such as agricultural research, extension, and plant and animal health, also suffered budget cuts during the last five years.

The Modernization and Globalization of the Brazilian Agrifood Sector

Concurrent with these significant institutional and policy changes, the Brazilian agrifood system transitioned from a traditional to an increasingly global and industrial model. Fostered by rising incomes, urbanization, economic liberalization, and access to competitive raw materials, multinational food processors and retailers entered or increased their investments in the Brazilian market during the 1990s. Increased foreign direct investment (FDI) by large, private agribusinesses in Brazil displaced domestic competitors, increased industry concentration, and eliminated many medium and small companies. As a result, the market share of multinational corporations in the domestic food market increased. For instance, Brazilian affiliates of multinational agrifood companies generated 137,000 jobs, almost US\$5 billion in exports, and sales of US\$17 billion in 2000. Given the total value of food industry shipments in Brazil of US\$58 billion, the aggregate market share of foreign companies reached 30% in 2000. Among the top ten food processors in the country, eight are multinational firms with foreign headquarters. Recent official data show that FDI inflow in the Brazilian agrifood processing industry totaled US\$8.2 billion between 2001 and 2004. The top-three food retailers in the country are now controlled by two French supermarket chains (Casino and Carrefour) and one US-based company (Wal-Mart), with a combined market share of 39%.

Concomitant to these structural changes in the post-farm gate stages of the agrifood system, agricultural production also modernized and

became increasingly capital intensive and integrated with upstream and downstream supply chain participants. Tightly coordinated agrifood supply chains have been developed by the private sector – in particular, large multinational food processors, fast-food restaurant chains and retailers – to cater to increasingly differentiated domestic and export markets. Farmers in Brazil are increasingly exposed to markets that are much more demanding in terms of food quality and safety, more concentrated and vertically coordinated, and more open to international competition.

According to the last census of agriculture conducted in 1995, the total number of farms reached 4.8 million (IBGE, 1995), but just a small share of the farms account for the majority of output and exports. Many of the small farms involve subsistence production and are resource poor. One of the structural changes of recent agrifood development in Brazil is the growth of commercial agriculture characterized by economies of scale and capital intensity. The spread of commercial agriculture occurs even in sectors that have traditionally been dominated by small-scale farmers such as dairy and corn. The dairy sector is illustrative, as the number of dairy producers supplying milk to the top 12 processors decreased from 175,000 in 1997 to less than 70,000 in 2004.

Taking Stock and Looking Ahead

The agrifood sector in Brazil underwent significant changes in the last decade. First, it was exposed to a dramatic “competition shock” as a result of economic liberalization, industry deregulation, and dismantling of the safety net provided by massive government expenditures in traditional agricultural policy programs. Subse-

quently, it experienced significant modernization and industrialization induced by private sector strategic responses to these institutional and policy changes. The development of a global agrifood model in Brazil resulted in structural changes in all stages of the agrifood value chain, significant export-led growth, and apparent small farmer exclusion.

Since the end of the military dictatorship in the late 1980s, there has been significant political and social pressure for the government to tackle the issue of the historical unjust land distribution in the country. In response to these pressures, the Sarney administration created the Extraordinary Ministry of Land Reform, but it was not until the first Cardoso administration in 1995 that the land reform program became a reality. The necessary impetus for the agricultural policy goal of land reform and the associated shift in government expenditures was the result of continued pressure from the landless workers movement (MST) in the form of land invasions, the Catholic Church, and many NGOs, combined with persistent poverty, income inequality, and small farmer exclusion from the expansion of the agricultural sector.³

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3. *With the technological modernization of agriculture, the end of investment in land just as a real asset to protect against high inflation, and after hundreds of thousands of new settlements in expropriated land, the number of unproductive landholdings (“latifundios”) sharply declined in Brazil. This is the main reason why the new targets of MST today are the “agribusiness sector” as whole and “multinational companies,” more specifically.*

Given the central role of the agri-food sector in the Brazilian economy, however, it is important that policies aimed at poorer farmers do not hold back further investments in public goods that will contribute to productivity gains and market access of all types of farms and the country's agri-food competitiveness. The recent reemergence of the foot-and-mouth disease and the logistical bottlenecks caused by underinvestment in rural infrastructure in the Central-West clearly show how lack of investment by the government in critical services can have broad impacts for an economy increasingly dependent on exports. Brazilian efforts in international trade negotiations will not contribute to agrifood growth and economic development if the country does not continue to invest in important programs such as agricultural research, public infrastructure, animal and plant health inspection, and measures to protect the environment. If Brazil continues to trade off economic development with support to small-scale farmers, it will suffer the consequences of the "visibility curse." As the country has progressed as a global economic force it has greater influence, but at the same time comes under greater scrutiny. Increased market share and activity in global agrifood trade requires that the country be increasingly vigilant as to how it comports itself. Resorting back to subsidy programs and import barriers of a bygone era in order to help small farmers survive could affect the country's ability to negotiate for freer markets and gain access to important foreign markets. A

heightened presence in markets also behooves exporters to be increasingly quality sensitive as market opportunities increase and the global logistics system becomes oriented to an active South American supply network.

In retrospect, farm policies in Brazil have evolved in the last three decades from a food security and self-sufficiency emphasis before 1985, to deregulation and openness to trade between 1985 and 1995 and, since then, in a reactionary bent focused on the small family farm and land reform.⁴ Looking ahead, Brazilian policy makers should develop farm policies to balance competitiveness with social and environmental sustainability goals. The policy agenda which we outline in the last column of Table 1 should comprise social inclusion goals and programs targeted to different types of family farms, but also programs and services that are essential to agrifood competitiveness. The real challenge confronting policy makers in the future is to provide agricultural producers of any scale the necessary tools to assist them in integrating with the global agrifood economy.

For More Information

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4. Albert Hirschman's masterpiece "The Rhetoric of Reaction: Perversity, Futility and Jeopardy" is a perfect conceptual text to understand the dilemma of swinging policy priorities confronting "patronal" vs. "family" agriculture in Brazil.

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