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Developments in Brazilian Food Safety Policy

ABSTRACT: Brazil is an important case study of food safety policies because it is the eighth largest economy in the world in terms of Gross Domestic Product. Analysis of the policy and quality management initiatives of the Brazilian government shows that recent activities are more strongly oriented toward assuring access to international markets than to assuring the safety of food sold in domestic markets. This orientation has important implications for agribusiness firms operating in Brazil. Consumer awareness and consumer protection activities are increasing within the Brazilian economy, often with government support. However, developments in Brazil's food safety policy are likely to continue to emphasize quality assurance for the export market.

Studies of food safety programs in developing countries, such as Brazil, are scarce (Resende, 1993). Analysis of how food safety policy currently works and is likely to develop in Brazil can illustrate some of the general characteristics of this policy in other developing countries. Public programs for food safety tend to be quite varied (*World Health Organization*, 1996), as safe food may be assured by different combinations of actions by government, industry, and consumers. Governments frequently undertake food legislation and decree food inspection programs but also stimulate voluntary quality control programs in industry and provide consumer education. The food safety policy of a country can thus be extremely complex, and more study of the implications of specific situations is needed.

Brazil constitutes an important case study because it is the eighth largest economy in the world in terms of the Gross Domestic Product (GDP) and an important

developing country. With a population of nearly 158 million, it has enjoyed an annual growth rate of 3% in GDP, reaching a total of \$806 billion in 1997. In 1996, the food industry grew especially rapidly, gaining 5.1%, while agriculture and livestock grew at the rate of 3.0%, industry at 2.5%, and services at 3.4%.

The agricultural and food sector has been an important contributor to Brazil's export performance. In the early 1990s, Brazil's overall trade balance was positive but it turned negative in 1995, reaching a total deficit of almost \$6 billion for the first nine months of 1997. Many observers view this deficit as an important obstacle to the country's economic development. The agricultural sector has contributed significantly to total revenue from exports. Over 23% of Brazil's export income of \$47.7 billion in 1996 came from exports of soybeans (\$4.5 billion), coffee (\$2.1 billion), sugar (\$1.5 billion), meat (\$1.5 billion), and orange juice concentrate (\$1.4 billion) (Banco Central do Brasil, July 1997).

Here we analyze the principal public food safety programs in Brazil beginning with a description of the structure of food legislation and safety control under the responsibility of the Ministries of Health and of Agriculture and Supply. This is followed by a discussion of government initiatives in other types of quality certification, especially the emphasis of the Ministry of Commercial Industry and Tourism (MICT) on ISO 9000 certification. The analysis focuses on the public policy goals of the Brazilian system and their implications for agribusiness firms operating in Brazil. It also discusses the implications of a stronger system of consumer defense organizations, especially those linked to the Ministry of Justice but also to MICT, on future food policy development in Brazil.

1. BRAZILIAN FOOD LAWS

Responsibility for food safety is split between agencies in Brazil, as is also the case in the United States. The Secretary for the Control of Standards of Health and Hygiene of the Ministry of Health regulates all food service systems and industrialized food products except those of animal origin, beverages, and vinegar. These latter products are the responsibility of the Secretary for the Protection of Agriculture in the Ministry of Agriculture and Supply (MAA). This ministry is also responsible for the inspection and classification of plant products, as well as the inspection and control of input materials for use in agricultural activities. Overlapping jurisdiction, and potential conflicts, exist between the two agencies in relation to some products. For example, dietetic drinks have two registrations, one with the Ministry of Agriculture and Supply as a drink and one with the Ministry of Health as a dietetic product.

Brazil's basic food safety legislation has not changed significantly in response to domestic health-related concerns. The basic law for industrialized products dates to 1969 (Ministério da Marinha de Guerra, November 11, 1969). It establishes the food norms as determined by the Ministry of Health. The basic legisla-

tion for the Ministry of Agriculture and Supply was passed as far back as the 1930s (Ministério da Agricultura e do Abastecimento, 1996). In the related area of food nutrition, in 1995 a measure was passed dealing with nutrient claims on food labels such as "low content of," "does not contain," and "without the addition of" (Ministério da Saúde, May 1995, May 1996, August 1996). However, no survey of consumers' attitudes toward food labels has been undertaken. Nor have programs promoting nutritional awareness been implemented that would have helped consumers to interpret food labels. Overall, in food safety policy little attention has been given to the socio-cultural characteristics of the Brazilian population, such as the habit of self-medication. In contrast, very significant revisions in some food safety norms have been stimulated by developments in international trade and in international trade agreements.

Brazil has signed international agreements as part of the World Trade Organization (WTO), South Cone Common Market (MERCOSUR), American Free Trade Area, and others (Ministério da Agricultura e do Abastecimento, 1996). The Asuncion Treaty of 1991 creating MERCOSUR established 1994 as the goal for free trade between Brazil, Argentina, Paraguay, and Uruguay. Since 1994, a considerable increase in trade has occurred between Brazil and the other MERCOSUR countries. Brazilian imports from Argentina, for example, increased by over 400% between 1991 and 1996, whereas Brazilian exports to Argentina grew by 350% (Severo, 1997). The agricultural sector has shown the most rapid integration with the other countries' economies. Brazilian agricultural exports to other MERCOSUR countries jumped from \$119 million in 1990 to \$884 million in 1996. Meanwhile, Brazilian agricultural imports from other MERCOSUR countries grew from \$1.4 billion in 1990 to \$3.6 billion in 1996 (Severo, 1997). The establishment of an American Free Trade Area is still under negotiation, with completion scheduled for 2005. Within MERCOSUR, the member countries are revising their laws in an attempt to reach harmonization. The impact of this revision on consumers has not been analyzed but it will clearly ease trade among the member countries.

At present, food products for export from Brazil are required to respect the laws of the importing country. Imports must meet the demands of Brazilian laws covering domestically-produced foodstuffs, with inspection required upon arrival in the country. Certain specific exceptions do exist, however, such as for wine, which can be imported even if it fails to meet national standards if it has special characteristics typical of its country of origin. Such characteristics must be officially recognized and the importation authorized by a specialized organ of the MAA (Ministério da Agricultura e do Abastecimento, January 1997).

1.1. Food Inspection and Control of Standards of Health and Hygiene

Responsibility for food inspection is divided between the Ministry of Health and the Ministry of Agriculture and Supply. Efforts by the Brazilian Ministry of

Health to control food safety face serious difficulties. For many years, these and other public policies were centralized in the federal and state governments. However, under the SUS (Unitary System for Health) implemented in 1990, local or county governments were charged with planning, organizing, controlling, and evaluating actions and services involving health care. They were also charged with generating and executing public health services. Among these services are those involving the control of standards of health and hygiene in food production. Not all counties have actively assumed these tasks. While public responsibility has been decentralized, neither training or sufficient resources were offered for the efficient execution of these tasks.

The financial situation of public health policies in Brazil is precarious. Public and private investments in health services account for 4-5% of GDP (Pan American Health Organization, 1994). In 1993 the Brazilian government's investment in public health represented 1.3% of GDP, while in the neighboring Chile it was 2.6%, and in the United States it was 4.1% (Fundação Instituto de Pesquisas Econômicas, 1996). Ministry of Health programs designed to enforce health and hygiene standards have merited very little funding. Since 1995, the annual budget for these programs has not exceeded \$61 million or less than one-half of one percent of the Ministry of Health's 1997 budget.

The objectives of the Brazilian food safety system can be analyzed by examining how it currently performs. A basic criticism of the present system of food control is that it largely confines itself to registering food products and establishments. In contrast, it carries out very few activities involving preventive inspection or education. The system for sanctions when food laws have been violated is ineffective, as few fines are assessed, the values are low, and judicial processes are extremely slow. Data to evaluate the effectiveness of the enforcement system for health standards are scarce. For example, data are not available on enforcement actions taken and their results. Data on morbidity and mortality related to illnesses of foodborne origin are inaccessible because they have not been computerized.

Overall, there is a lack of implementation of the basic elements necessary for an effective national strategy for control of health and hygiene standards for food production in Brazil. For example, the Ministry of Health mandated adoption of a HACCP (Hazard Analysis and Critical Control Points) approach to safety assurance for all establishments processing food products under its jurisdiction or providing services in the food sector (Ministério da Saúde, 1993). However, no significant measures have been taken for its implementation. The agency has apparently assumed that once the decree was in effect, the sector would automatically adopt the proposed methodology. In practice, only a very few companies have implemented HACCP and no inspection has been undertaken to enforce its utilization.

In contrast, the Ministry of Agriculture and Supply has begun a program to implement HACCP for fish, meat, and milk (Ministério da Agricultura e do Abastecimento, 1997). It has given top priority to implementation for companies involved in export, since this methodology is (or will be) required in international commerce (Caswell and Hooker, 1996). The first industry segment to implement HACCP has been fish exporters, with 53 companies currently using the approach.

This highlights the fact that Brazilian food safety policies are currently more influenced by the requirements of international commerce than by domestic public health concerns. In fact, expenditures on quality control linked to bilateral agreements has increased from \$352,500 in 1995 to \$800,000 in 1996, representing 16% of the total expenditure for the quality control of food products. Moreover, the MAA itself recognizes the fact that although the country tends to fulfill its external commercial commitments, it often fails to enforce importation requirements due to a lack of adequate legislation and institutional inefficiency (Ministério da Agricultura do Abastecimento e da Reforma Agrária, 1996).

The Brazilian Ministry of Agriculture and Supply is making efforts to modernize its sanitary and phytosanitary control policy, in part to increase its alignment with new principles outlined for this policy under the World Trade Organization. On the phytosanitary side, the new approach is to move from the former focus on "disease control" to one of recuperation, maintenance, and upgrade of the health of both animals and plants. The goal is for the modes of sanitary and phytosanitary control to reach into each and every step of the food chain, allowing *in loco* data retrieval for the purpose of quality certification (Ministério da Agricultura e do Abastecimento, 1996). In its modernization plan, the MAA intends to inspect all of the merchandise entering the country by the beginning of the century. Programs to assure the safety of domestically produced and consumed food products and imports lag behind those for exports.

1.2. Industrial Quality Certification

Food safety policy in Brazil is also shaped by the activities of the Ministry of Industry, Commerce, and Tourism. It assumes responsibility for industrial measurement, standardization, and quality control and certification. The National Institute of Measurement, Standards, and Industrial Quality (INMETRO), part of the MICT, is the central executing organ of the National System of Measurement, Standards, and Industrial Quality (SINMETRO), which encompasses both public and private entities.

One of the present objectives of MICT is the continuation of programs designed to promote quality control and productivity in the industrial sector. The initiative most directly linked to food safety is the Brazilian Program for Quality and Productivity (PBQP), which was implemented in November 1990. The program has ambitious objectives, including doubling exports by 1999; implementing quality control programs in all agencies of direct administration; the implementation of

PBQP in all sectors of the economy; ISO 9000 certification of 5,000 companies; ISO 14000 certification of 1,000 companies; implementation of quality control programs in 500,000 companies; and the direct involvement of representatives of consumer organizations in PBQP. Other important aims have also been formalized (*Ministério da Indústria, do Comércio e do Turismo*, 1996).

To reach these goals, the MICT has 18 strategic projects planned for the period of 1997-98 (*Ministério da Indústria, do Comércio e do Turismo, Secretaria de Política Industrial*, 1996). Some of these projects include Consumer Awareness and Education; Modernization of Technical Regulations; Certification and Quality Awards in Public Services; and Agricultural Seals. Nearly \$12 million was budgeted for support of PBQP for 1996-1999 (*Ministério da Indústria do Comércio e do Turismo, Secretaria de Política Industrial*, 1996).

Management methods for quality and productivity have already been implemented in some Brazilian industries, although these efforts have been limited to a few companies and sectors, especially the chemistry, transport, electrical materials, and communication sectors. Some larger companies have helped pave the way for these initiatives (*Banco Nacional de Desenvolvimento Econômico e Social*, 1996). Research has shown that the competitive strategies of industry are quite diversified, although all have the general aim of "increasing consideration of client needs, guaranteeing the technical specifications of products, and improving the quality of raw materials" (*Banco Nacional de Desenvolvimento Econômico e Social*, 1996). The same research shows that the strategy of "participate in the foreign market" is not primary in many industries. In the Brazilian food industry about 80% of production is for the domestic market (*Associação Brasileira de Agribusiness*, 1993).

As of March 1997, a total of 1,854 companies were ISO 9000 certified in Brazil. Forty-six of these companies produce food products, drinks, and tobacco, while another 5 are involved in agriculture, fishing, hunting, and forestry. According to these figures, Brazil ranks first among South American countries in certified companies and 21st in the world (*Folha de São Paulo*, 1996). Research conducted with 455 of the certified companies shows that obtaining certification involved a total cost of \$19 million for additional quality control activities (*Ministério da Indústria do Comércio e do Turismo Instituto Nacional de Metrologia, Normalização e Qualidade*, 1996). The impact of ISO certification at the consumer level requires further analysis.

The PBQP includes the Agricultural Seal program, which awards a seal for special quality for certain food products. Examples include "early-maturing steers," irrigated fruit "for export quality," and "organic agriculture." These seals serve the market for products of special quality but do little to assure the basic quality, especially safety, of foods in the domestic market which do not receive effective inspection. A greater need exists for public resources to be used to assure access to safe food for the entire population.

2. CONSUMER EFFORTS AND ORGANIZATION

Public policy on food safety includes consumer protection and education programs, and may be influenced by consumer movements. The movement for consumer rights is relatively recent in Brazil, despite the fact that public agencies for consumer protection were first established in the 1970s. The Code for Consumer Defense (CDC) was issued in 1990. In relation to foods, it anticipates special attention to norms which guarantee health protection (Article 8) and specifies that the supplier undertake any payment for damages (Articles 12 and 18) (Instituto Brasileiro de Defesa do Consumidor, 1997).

The current National System for Consumer Defense, (Decree 2,181 of March 20, 1997) (Presidência da República, March 1997), includes the Secretary of Economic Rights of the Ministry of Justice; other federal, state, and municipal agencies; and various civil entities concerned with consumer rights. The Department of Consumer Rights and Protection (DPDC) of the Secretary of Economic Rights is charged with the coordination of this system. It is empowered to investigate and punish infractions. Civil entities for consumer protection and defense can submit complaints to public agencies, represent consumers in court, and undertake other related tasks.

The number of public services available for defending consumer rights has increased markedly in recent years. The present challenge is the consolidation of national policies on consumer protection. According to Liporace (1996), however, there is a lack of coordination between the various institutions involved in the protection and defense of the consumer. A negative consequence of this lack is that the parties do not present a unified front in advocating for questions of special importance such as the adoption of effective preventive measures.

Some attempts at coordination have been made, however, including the project "Consumer and User Education and Awareness" of the PBQP. In its initial phase of implementation, this project is coordinated by INMETRO (National Institute of Measurements) of MICT. The project's goal is "furnishing Brazilian consumers and users with knowledge and information which will enable them to make well-founded choices about goods and services and make them aware of their rights and obligations, as well as establishing channels of communication between citizens and the entities furnishing public services" (Instituto Nacional de Metrologia, 1997). Several agencies are participating in the program, including civil associations for consumer rights, the Department of Consumer Protection and Defense of the Secretary of Economic Rights, state consumer protection agencies (PROCON), representatives of various regions of the country, and the Ministries of Education and Finance. Four major areas of action have been defined for the project: basic education, distance education, channels for consumer communication, and organized consumer movements. One of the most interesting aspects of the project

is an attempt to focus on “users of public services,” as complaints about such services are still seldom made by consumers.

One of the main civil entities for the defense of the consumer is IDEC (Brazilian Institute for Consumer Defense).¹ Established in 1987, it presently has some 40,000 members and is affiliated with important international consumer associations such as Consumers International and ACOM (Association of the Consumers of the MERCOSUR). This organization is particularly concerned with foods. It compares food products, based on safety, labels, sensory characteristics, and packaging, and publishes its test results in its monthly journal (Consumidor S.A.). The organization also participates in committees that set food standards.

Few studies have been published to date about the attitudes of Brazilian consumers toward food safety. However, recent research supported by the MICT found that Brazilian consumers are quite aware of questions of quality, with a reasonable proportion of the population already checking the freshness of food items (e.g., that the expiration date has not passed) and making complaints to consumer defense agencies when problems occur (Ministério da Indústria, 1996). Over time it can be expected that consumer demand for higher quality, especially safer, products will have an increasing impact on the domestic food market.

3. CONCLUDING THOUGHTS

This brief analysis of the principal public programs related to food safety highlights the following general characteristics of Brazilian policy:

1. Food laws are being modernized in response to the creation of large trading blocks and the opening of international markets.
2. Special efforts are being focused on the agricultural and food sectors involved in export.
3. For the domestic food supply, activities are limited in scope and effective central planning and coordination is lacking for programs related to public health concerns.
4. A process of social exclusion has begun, providing public certification for products with superior quality, while the population at large still lacks access to products meeting minimum safety standards.
5. Consumer groups are becoming better organized, with this effort supported by public policy. However, this organizational process is still in its initial stages and much remains to be done to achieve an efficient program of public services.

This general picture is consistent with Brazil’s emphasis on agricultural exports as fundamental to the country’s economic development; its relative lack of a government commitment to public health; and the existence of social exclusion. The emphasis on international trade will continue but other factors are likely to begin

to play stronger roles in determining domestic food quality policy. Consumer awareness with regard to food quality is expected to increase in the future and consumer organizations are growing stronger. In addition to the effects of the competition provided by the organization of economic blocks, this should provide incentives for the private sector to implement improved methods of safety control.

Overall, the tendency for increased international commerce should lead to a restructuring of food safety policies in developing countries such as Brazil. In these countries existing safety controls are ineffective in assuring the safety of food produced and consumed domestically. At the same time, some overly restrictive food legislation can cause nontariff trade barriers (Hooker and Caswell, 1996). Our analysis of the Brazilian situation highlights a common situation where the government has only tended to emphasize safety controls for food products destined for export, operating less stringent systems for imports and domestic production consumed within the country (Smith, 1997). This approach may make sense given the importance of agricultural and food exports to the country's economy and the increasing stringency of importing countries' regulations. Furthermore, these type of export standards are well understood by agribusiness companies operating in international markets.

Further development of the Brazilian food safety system will focus on assuring continued access of Brazilian products to important export markets, resulting in continual upgrading of export control systems. On the domestic front, the government must make choices about the degree and type of modernized control systems to be adopted for imports and domestically produced and consumed foods. The strengthening of consumer organizations and incentives for food establishments to adopt improved quality control methods are fundamental to this modernization. A model that emphasizes domestic public health is feasible given the financial constraints of countries such as Brazil. These policies could be based on assuring a minimum level of food safety for the entire population. This is particularly important because more expensive food products of superior quality are limited in consumption to a small proportion of the population. Assurance and certification of non-safety related quality attributes for these products can be effectively guaranteed by the private sector. For food safety, improvements in the efficiency of the public system could be realized by the elimination of duplication through the implementation of a single centralized policy. Systems of regular preventative inspection along with well-structured punishment for violations of food laws are important. Agribusiness firms can expect export systems to develop apace with international developments, while the domestic system begins the process of catching up.

NOTE

1. <http://eu.ansp.br/~idec>.

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