

# ANALYSIS OF PUBLIC POLICIES FOR DEVELOPING THE BRAZILIAN BORDER STRIP<sup>1</sup>

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CAROLINE KRÜGER<sup>2</sup>

MARINA KOLLAND DANTAS<sup>3</sup>

JOSÉ MARCELO DE CASTRO<sup>4</sup>

CLÁUDIA SOUZA PASSADOR<sup>5</sup>

ADRIANA CRISTINA FERREIRA CALDANA<sup>6</sup>

## 1 Introduction

Historically, mankind has undergone transformations due to population growth, also influenced by technological advances and by the productive organization based on the irrational use of resources, which led to impacts that were difficult to understand (BURSZTYN; BURSZTYN, 2012; MEADOWS; MEADOWS; RANDERS, 1992).

Given this scenario, with the intensification of deleterious environmental, socio-political and economic consequences, the perception emerges that development is necessary, as long as it meets a set of principles. From this perspective, the concept of sustainable development has spread as a proposal to balance satisfying current needs without compromising the maintenance of future generations (WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (WCED), 1987).

This global reorientation has put more pressure on governments to redefine their goals towards a long-term, consistent and systematic model of development (LEAL FILHO, 2000). In this context, the strategic function of the public sector is to promote policies imposing restrictions on markets to harmonize economic growth with environmental preservation and social justice, minimizing historical inequalities (BURSZTYN, BURSZTYN, 2012, FIORINO, 2010, PASSADOR, PASSADOR, 1998; SANTOS, 1985).

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1. The present study is part of an ongoing research project entitled "Public Policies for Sustainable Development: A Study on the Brazilian Border Strip", with contributions from FEA-RP/USP, Ipea, IEA and CNPq.

2. PhD student in Management of Organizations at the School of Economics, Business Administration and Accounting of Ribeirão Preto, University of São Paulo, e-mail: kruger@usp.br.

3. PhD student in Management of Organizations at the School of Economics, Business Administration and Accounting of Ribeirão Preto, University of São Paulo, e-mail: marikolland@gmail.com.

4. PhD student in Management of Organizations at the School of Economics, Business Administration and Accounting of Ribeirão Preto, University of São Paulo, e-mail: jmc@usp.br.

5. Associate Professor in the Department of Management at the School of Economics, Business Administration and Accounting of Ribeirão Preto, University of São Paulo, e-mail: cspassador@gmail.com.

6. Associate Professor in the Department of Management at the School of Economics, Business Administration and Accounting of Ribeirão Preto, University of São Paulo, e-mail: caldana@usp.br.

To this end, the Ministry of National Integration (Ministério da Integração Nacional - MI) carried out a diagnosis of the regions of vulnerability in Brazil, among which the portion of national territory called the Border Strip (BS) was highlighted. This 150 km wide strip of land, starting from the international boundary, extends through the country, from North to South, for 15 thousand kilometers bordering with ten of the twelve countries in South America, totaling 27% of Brazilian territory, encompassing 588 municipalities in eleven states of the federation, home to around 10 million people. It is considered a region of latent needs, lacking consistent actions, that promote development (MACHADO, 2005; TORRECILHA, 2013).

The BS is the result of a historical process founded on the State's concern with guaranteeing its sovereignty and national independence since the Colonial period. However, only in 1979, by means of Law No. 6,634 of 1979, the BS was established, defined its territorial conformation, and its strategic function as a territorial security area, was reiterated (BRASIL, 2005). In addition, the 1988 Constitution endorsed the provision of the ideal "security, control and protection".

Since then, concern for the security and sovereignty of the territory has grounded discussions on regional development, in the perspective that in order to be safe, it is necessary to strengthen other aspects of the BS to generate employment and income (BRASIL, 2010).

One of the defining characteristics of the BS is low population density, due to the concentration of development in the regions close to the coast of Brazil, associated with the great distances and difficulty communicating with the main decision-making centers, meaning that, since its creation, the BS has experienced relative isolation, being granted occasional incentives for territorial occupation, which placed it on the margins of the central development policies (BRASIL, 2005; BRASIL, 2009a).

Despite the limitations, the BS has been the target of public policies since the 1980s. However, it was only in 2004, following a negative assessment by the Federal Government's Border Range Program (1999-2002) due to the allocation of resources without clear guidelines and failing to consider sub-regional differences, that the BS was defined as a special planning area for promoting development public policies (BRASIL, 2005; MACHADO, 2005). The relevance of this political agenda led to the "restructuring" the Border Strip Development Program, including the strategic orientation of regional development and integration of South America (BRASIL, 2005).

Since then, there have been other public actions in the region, and the institutional measures adopted have had the main objective of improving the "quality of life of the frontier population, that is, sustainable development" (BRASIL, 2010, p. 68).

Thus, from a political-administrative point of view, it is fundamental to analyze and discuss the organization and performance of public actions carried out in the region, in order to address local vulnerabilities and promote sustainable development. Thus, this research sought to answer the question: What were the main federal public policies implemented in the Brazilian BS and its possible results in the regional socio-economic context? Therefore, the study aims to identify the main policies implemented in the Brazilian BS, seeking to represent the evidence of its reflexes in the evolution

of indicators in education, health, employment and income, calculated for the years 2005 and 2011.

## 2 Sustainable Development and Public Policies

“It is difficult to locate in history a cause that has acquired such convergence and in such a short time as Sustainable Development” (BORSZTYN; BORSZTYN, 2012, p.31). According to the authors, the proposal to impress a new character on the search for traditional development arose, during the twentieth century, after the crisis of utopias such as socialism, scientific salvationism, welfare state and consumerism, as they were not capable of solving the basic needs of the world’s population, as well as causing the planetary ecosystem equilibrium to break down through environmental damage.

The questioning of the current development model was influenced by a series of international discoveries, documents and events, including publication of the report “The limits of growth”, as well as the UN Conference on the Human Environment, in Stockholm, 1972, which consolidated an agenda on the subject, with the aim of producing concrete and shared actions among nations (BORSZTYN, BORSZTYN, 2012, HARDING, 2006, MCCORMICK, 1992).

Based on accumulating knowledge about unfavorable environmental prospects, successive state-level meetings were held, culminating in 1987 in the document “Our Common Future” (Brundtland Report), which formalized the concept of sustainable development, establishing it as a fundamental goal for all countries (HARDING, 2006; MCCORMICK, 1992; PECCATIELLO, 2011).

However, the culmination of discussions on inserting sustainability into the international agenda occurred in 1992 in Rio de Janeiro, during the United Nations Conference on Environment and Development (HARDING, 2006; PECCATIELLO, 2011; UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, 1992). At this event, the foundations were established for partnerships leading to the Millennium Declaration, in 2000, in which eight goals were set for the eradication of poverty, health promotion, education, equality, as well as the guarantee of environmental equilibrium (UNITED NATIONS, 2002).

Later, in 2002, at the World Summit for Sustainable Development in Johannesburg, environmental discussions advanced into the social and economic spheres (DREXHAGE; MURPHY, 2010), imposing a function of the environment-society-economy triad onto the development goals. In 2012, commitments to sustainable development were renewed during Rio + 20, with proposals for access to and use of planetary natural resources and their social impacts (UNITED NATIONS DEVELOPMENT PROGRAMME, 2015).

In 2015, the United Nations (UN) formalized a new agenda, called Sustainable Development Goals (SDG). Agenda 2030 consists of a Declaration with 17 SDGs and 169 targets, as well as a section on means of implementation, global partnerships, and ways of monitoring and review, which aim to respond to new challenges (UNDP, 2015).

Thus, historically it has been observed that nations have increasingly included sustainability principles in their legal frameworks, and at least “on paper”, the topic has

become institutionalized (HARDING, 2006). International protocols and agreements were signed and reflected new configurations, government practices and public policies.

It should be noted that, despite the diversity in the concepts of “sustainable development”, some premises are common and related to the need for integration between the economic, social and environmental spheres, highlighting intragenerational and intergenerational equity, which requires global institutional reforms (HARDING, 2006; WCED, 1987). It is recommended here that these premises form the basis for analyzing the public policies that involve this concept.

Public policies are the set of governmental decisions aimed at producing results by maintaining or modifying a given reality (SARAVIA, 2007) as they enable the State to coordinate its resources to meet specific and socially relevant objectives (SECCHI, 2013). Public policies are the legitimate means for sustainable development to become viable, being the basis of the State’s strategic action to promote equity throughout the territory.

In analytical terms, public policies can be understood through the “cycle” approach, a sequential division model of the development process of these actions in stages, which include: building, formulating, implementing and evaluating the political agenda (SOUZA, 2006; WU et al., 2014). Thus, after being designed and formulated, public policies are divided into plans, programs, projects, databases or information and research systems, becoming subject to control and evaluation (FARIA, 2005; SOUZA, 2006).

In Brazil, several public policies entered the political agenda to induce development and minimize inequalities, with the emphasis on promoting social justice in priorities areas that were considered priorities, including the BS. In this region, for decades, the “public problem” was primarily associated with national territory defense and security (BRAZIL, 2005), impacting on a precarious infrastructure, incapable of subsidizing a process of sustainable development (GADELHA; COSTA, 2005).

Faced with the transformation of globalization, the BS is no longer considered just a territorial boundary between countries and a marginal zone, an inhospitable place of smuggling, misplacement, drug trafficking, for criminals to pass and escape through, becoming a space of exchange and communication, sharing of cultures and commercial activities (FERREIRA; MARIANI; BRATICEVIC, 2015).

As a result of the intensified flow of services and products and the exchange of people, the difficulties and vulnerability already present in border municipalities have increased (PEITER, 2005). This situation requires greater flexibility in public policies to meet the demands of the population groups that inhabit or circulate in the border area.

In this context, the development of the region gained status as an important guideline of national and international policy, institutionalized by the National Policy for Regional Development (Política Nacional de Desenvolvimento Regional - PNDR) and embodied in the Borderland Development Program (Programa de Desenvolvimento da Faixa de Fronteira - PDFF), created in 1999 and restructured in 2005.

Thus, in terms of producing and structuring public policy, after entering the national political agenda, the bottleneck for development action in the BS moved to another stage of the public policy cycle, evaluation. According to Costa and Castanhar (2003, p. 972), “the purpose of evaluation is to guide decision-makers, orienting them

as to the continuity, need for corrections or even suspension of a particular policy or program.”

However, even though evaluation is crucial for the continuity and monitoring of policies, many difficulties occur at this stage, such as lack of adequate tools and data to measure performance of actions (FARIA, 2005; SOUZA, 2006). According to Andrade et al. (2010) this fact is observed in Brazil, as monitoring and evaluating public policies is not yet an appropriate practice, either because of the lack of dissemination of an evaluation culture or because of fear of criticism in terms of promoted governmental actions.

Thus, in Brazil, the concern with evaluating policies emerged late, with the public and social transformations begun in the 1980s (RAMOS; SCHABBACH, 2012). As a result of these reforms, evaluation has become indispensable for: streamlining decision-making processes; optimizing resource use; enabling social control as well as allowing better results with regards meeting social demands (COSTA, CASTANHAR, 2003, RAMOS, SCHABBACH, 2012).

In recent years, the UN-reviewed post 2015 Development Agenda has considered the need to evaluate public policies, highlighting the importance of monitoring in promoting sustainable development, using indicators, metrics and data in this process that are credible and internationally comparable (UNDP, 2015).

Trevisan and Van Bellen (2008) observe that measurement models are indispensable for the concept of sustainable development to be operationalized. However, there are still gaps in obtaining data on the context of Brazilian municipalities, especially regarding environmental management (ASSIS et al., 2012), which makes it difficult to analyze the performance of public policies implemented with a view to sustainable development.

### 3 Methodological Aspects

This study has a qualitative-quantitative, descriptive and spatio-temporal design. The method used consisted of bibliographical and documentary analysis and organizing georeferenced data, using the municipality as the unit of information. The population of interest comprises the 588 Brazilian municipalities that make up the national BS.

Initially, a search was made in the portals of government agencies, aiming to identify the set of public policies in the BS, limited to federal policies implemented until the year 2010, that is, with scope in the period of analysis and in the locus considered in the research.

Research was also conducted using the bibliographic bases, Google Scholar, Scopus and Web of Science, with the keywords “*faixa de fronteira*” and “*políticas públicas*”, including variations on the terms, the English words “border strip” and “public policies” and reference to Brazil in the scope of analysis.

Subsequently, the policies circumscribed to these search standards were synthesized in a chart, giving an integrated view of the actions carried out and their relationship with the “sustainable and integrated” development model. The chart categorized the policies according to: responsible agency, objective, actions developed, range, period of action, scope of action (social, environmental and economic), and priority theme addressed.

This categorization process was based on analysis of each of the policies described in the official public documents. It should be noted that the information in the “scope of action / priority theme” fields was defined by the authors from reading and analysis of the proposed objectives and actions presented in the documents.

The second phase of the article consisted of analyses of the results of regional development. For this, data were collected for each BS municipality: name, municipal reference code and values from the FIRJAN Municipal Development Index (Índice FIRJAN de Desenvolvimento Municipal - IFDM), calculated for the years 2005 and 2011. The initial period being selected as the first year with consolidated information on the indicator and 2011 as the last year with data available, within the study period. In addition, the choice of this time horizon of analysis represents two distinct periods, before and after the diagnosis made about the BS in the PDFF that guided changes in the form of regional management.

The IFDM was chosen because it is one of the most complete options available to all Brazilian municipalities in terms of development evaluation indicators. This index is prepared by the Federation of Industries of Rio de Janeiro (Federação das Indústrias do Rio de Janeiro - FIRJAN) and evaluates the dimensions: Employment and Income, Education and Health (FIRJAN, 2014).

In the context of this study, the IFDM was analyzed as a whole (composite index) and also disaggregated into its three dimensions.

The spatial database handling and the illustrations (maps) used the Geographic Information System (GIS) QGIS. Spatial data were obtained from the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística - IBGE) and adapted to research needs. The units of information (municipalities) were grouped into sets, called “arcs”, following the specifications and nomenclatures defined in the study conducted for the federal government by the Retis Research Group, Federal University of Rio de Janeiro (Universidade Federal do Rio de Janeiro - UFRJ) (BRASIL, 2005; PEITER, 2005).

The graphical representations produced were analyzed descriptively and interpreted based on the result of the difference between those of the IFDM for the 2011 and 2005, used to illustrate the temporal dynamics of development in the BS.

## 4 Analysis and Discussion of Results

### 4.1 Public Policies and Sustainable Development of the Brazilian Border Strip

Until the beginning of the 21st century, many ministries did not have specific policies for the frontier area and transnational integration, and the public actions carried out in this region were essentially based on the scope of public security and occupation of the territory (GADELHA, COSTA, 2005).

However, according to the political guideline to privilege this region, priorities were revised, directing attention and investments to the BS. In this sense, a set of public policies have been implemented, found in the study and presented in Chart 1.

Chart 1 - Public Policies implemented in the Brazilian Border Strip

Public Policy	Agency Responsible	Objective	Actions	Range	Period	Scope of Action / Priority Theme
Calha Norte Program (Programa Calha Norte - PCN)	Ministry of Defense	Promote the occupation and orderly development of the Northern Amazon, respecting regional, cultural and environmental characteristics.	Actions distributed in two dimensions of performance: Military Branch - Maintenance of Sovereignty and Territorial Integrity; and Civilian Side - Supporting Government Actions in Promoting Regional Development.	369 municipalities in 8 States (AC, AM, AP, MG, part of MS, PA RO and RR)	From 1985	Social, Economic and Environmental / Security and Development
Free Trade Areas (Áreas de Livre Comércio - ALC)	MDIC <sup>1</sup> and SUFRAMA <sup>2</sup>	Generate jobs and income, better infrastructure, training of human resources, among others.	Actions to support production, economic infrastructure, research and development, training of human resources and promotion of tourism projects through agreements signed with federal, state and municipal government agencies, educational institutions, universities and non-profit entities.	Tabatinga (AM), Macapá/Santana (AP), Guajará-Mirim (RO), Boa Vista and Bonfim (RR) and Epitaciolândia and Cruzeiro do Sul (AC)	From 1989	Economic and Social / Trade
Program Promoting Development of the Border Strip (Programa de Desenvolvimento da Faixa de Fronteira- PDFF)	Ministry of Integration	Resume the development process of the region.	Actions committed to: i) structuring and streamlining local productive arrangements; ii) support for implementing complementary, social and productive infrastructure; iii) support for the generation of productive enterprises; iv) social organization and associativism; and v) formation of agents for the integrated and sustainable development in the Border Strip.	BS municipalities	From 1999, restructured in 2005, concluded in 2015	Social and Economic/ Development and Integration
Facilitation of Road Transport at the Borders	ANTT <sup>3</sup> and the Ministry of Tourism	Efficiently manage terrestrial tourist transportation, linking the Ministry of Tourism Registration System (CADASTUR) to the ANTT Certification System.	Actions in favor of developing a clear and consistent policy that allows the efficient management of the Brazilian terrestrial tourist transport to unify information and create a seal to be affixed on vehicles that allows the fiscalizing agent to check the regularity of the tourist transporter	BS municipalities	From 2001	Social and Economic/ Transport and Tourism
Migratory Issues	Ministry of Labor and Employment	Legalize residence and work of nationals abroad and vice versa.	Actions to create a single regulatory framework to deal with flows of cross-border workers, aiming to undo the asymmetries generated by the adoption of a differentiated policy, formatted according to geographic location, Brazilian interests and the relationship with the neighboring country.	Variable, according to location, interests and relationship with neighboring country	From 2002	Social and Economic/ Migration and Labor
Concertation of Borders and Frontier Tourism Program (Programa Turismo de Fronteiras - FRONTUR)	Ministry of Tourism	Enable and commercialize integrated tourism in the BS.	Actions to promote tourism generated in the border scenario, bringing together all agencies and entities related to cross-border tourism to discuss and find solutions focused on facilitating the international flow of tourists.	BS municipalities	From 2003	Social and Economic/ Tourism

Bilingual Border Schools Intercultural Project	Ministry of Education	To construct a common model of teaching in schools in the border zone from an intercultural education program (Portuguese and Spanish).	Actions to promote an exchange between teachers from countries bordering Brazil, with a view to integrating Brazilian students and teachers with students and teachers from neighboring countries. Teachers, from both countries, plan the lessons together and determine which parts of the project will be exchanged, so that what occurs is not teaching of the foreign language, but teaching in the foreign language, creating a real bilingual environment for the students.	Twin cities in Brazil with bordering countries <sup>4</sup>	From 2005	Social/ Education
Integrated Border Health System (Sistema Integrado de Saúde das Fronteiras - SIS-Fronteira)	Ministry of Health	Improve health care at the border.	Actions for local health diagnosis and elaboration of an operational plan, aiming at qualifying professionals in the services and actions and improvement of the network of health services in the frontier municipalities.	121 municipalities that are situated within 10 km from the border	From 2005 to 2014	Social/Health
Borders and Migration Issues (SINIVEM <sup>3</sup> /PRONASCI <sup>6</sup> )	Ministry of Justice - Federal Police Department	Mapping criminals to reduce regional crime rates and mitigate the impacts of migratory flows towards the national territory.	Actions to map criminals, through a broad and unrestricted process of cooperation between government intelligence agencies.	BS municipalities	From 2007	Social/Security
Protected Amazônia Program (Programa Amazônia Protegida -PAP)	Brazilian Army	Increase the number of border squads in the forest and modernize them, as well as create new brigades.	Actions aimed at creating new brigades, modernization of platoons and restructuring of existing ones.	Border strip in Amazônia	From 2008	Social/Security
Land tenure regularization	INCRA <sup>7</sup>	Prioritize land regularization and the ratification of titles in the BS.	Actions relating to the legitimization of rural property; ratification of rural properties that were unduly titrated by the States; analysis of usucaption actions; analysis of domain chains and studies when creating rural settlement projects and quilombola communities; verification of compliance with the clauses of the securities issued; deactivation and issuance of concession of Real Right of Use in the case of conservation units; monitoring social function of land; updating the rural register; georeferencing certification; assignment and donation of areas to municipalities, associations, churches; discrimination and collection of vacant land; issuing of declaratory terms - Braviaco; etc.	BS municipalities	From 2009	Economic and environmental / Land Tenure and Environmental Licensing Regularization
Program for the Promotion of Sustainability of Sub-Regional Spaces (Programa de Promoção da Sustentabilidade de Espaços Sub-Regionais - PROMESO)	Ministry of Regional Integration	Increase autonomy and sub-regional sustainability, by stimulating: social organization, development of endogenous potentials and strengthening of productive bases.	Actions on two axes: - stimulation and strengthening of the meso-regional forums so that they are channels of civil society participation in defining actions to be contemplated with public investments; - economic activation through the promotion of Local Productive Arrangements identified as priorities in the meso-regions.	Alto Solimões, Vale do Rio Acre, Mercosur Border and Southern Rio Grande do Sul.	From 2009	Economic, Social and Environmental

Notes: <sup>1</sup> Ministry of Industrial Development and Foreign Trade (Ministério de Desenvolvimento Indústria e Comércio Exterior – MDIC). <sup>2</sup> Superintendence of the Manaus Free Trade Zone (Superintendência da Zona Franca de Manaus – SUFRAMA). <sup>3</sup> National Land Transport Agency (Agência Nacional de Transportes Terrestres – ANTT). <sup>4</sup> Dionísio Cerqueira (SC), Foz do Iguaçu (PR), Uruguiana (RS), São Borja (RS), Itaqui (RS), Chuí (RS), Jaguarão (RS), Ponta Porã (MS) and Pacaraima (RR). <sup>5</sup> National Integrated System of Identification of Vehicles in Motion (Sistema Integrado Nacional de Identificação de Veículos em



Movimento – SINIVEM). <sup>6</sup>National Program of Public Security with Citizenship (Programa Nacional de Segurança Pública com Cidadania – PRONASCI). <sup>7</sup>National Institute of Colonization and Agrarian Reform (Instituto Nacional de Colonização e Reforma Agrária – INCRA).

Source: Produced by the authors based on the bibliographic-documental search

Most of the public policies have been implemented since the year 2000, with the exception of the Calha Norte Program (PCN) and the Free Trade Areas (ALC). The PCN was created through verification of weak governmental presence in this area impacting on the military development of the Brazilian Amazon; also aiming to integrate indigenous groups into society (ALLEN, 1992); in search of population density; constructing basic infrastructure, as well as the combatting electricity theft (BRASIL, 2010). Recurrent problems in the trajectory of the Brazilian BS (TORRECILHA, 2013).

The Free Trade Areas Program (ALC), initially implemented in Tabatinga in Amazonas, was expanded to other twin cities in the northern region of Brazil. This is because the projects presented to the SUFRAMA related to the ALCs are the result of institutional strategic planning, in partnership with the states of the Western Amazon, aiming to support production projects and economic infrastructure that may contribute to the socio-economic development (BRASIL, 2010).

In this context, the 1988 Constitution contributed to fostering public policies by demanding from the Union the implementation of plans for development and planning of the territory, establishing among the fundamental objectives of the Federative Republic of Brazil the reduction of regional inequalities. In this context, Constitutional Funds were created, which began allocating three percent of the tax revenue from income and industrialized products to financing the productive sectors of the North, Northeast and Midwest Regions. Of these three regions, a large part of two of them two are in the BS. However, during the period known as the “lost decade”, planning was generally neglected, “because the crisis of the Brazilian economy monopolized attention on short-term issues and imposed dominance of monetary policy toward combating inflation” (CARGNIN, 2014, p.20).

Later, with the PNDR, initiated in 2003, development has become central, with repercussions on plans and programs (CARGNIN, 2014). Thus, when analyzing the programs implemented in the BS, it can be seen that the majority emerged from that period.

There is also a trend toward greater investment in socio-economic development, a situation fostered by projects such as: Border Coordination and Frontier Tourism Program (Concertação de Fronteiras e Programa Turismo de Fronteiras - FRONTUR); Migratory Issues; Facilitation of Road Transport in Borders; Free Trade Areas; in addition to the PDFF, as well as in infrastructure areas.

In contrast, the environmental dimension is mentioned in only three policies: Land regularization project, which, despite not expressly targeting environmental preservation, contextualizes this dimension when referring to environmental licensing process; Calha Norte Program, has a more structured environmental scope, since its action is in the North of Brazil, a region with significant border extension and scarce population density, characteristics that direct the program to security, trying to safeguard biodiversity itself (VERISSÍMO et al., 2011).

The third policy is not specific to the border region, but was allocated among them because it differentiates itself from the others in the quest for sustainable development. The PROMESO, whose governmental body is the Ministry of Integration, seeks to “promote the articulation of public policies in specific spaces, identifying socio-economic, cultural, political, institutional and environmental potentialities and vulnerabilities” (BRASIL, 2009b, p.6).

From these descriptions, it is necessary to analyze the orientation of the public policies identified for promoting sustainable development, emphasized in the governmental proposal of the PDFF. In this context, as discussed by Bursztyn and Bursztyn (2012), breaking with the paradigm is a slow process, which demands changes in practices already consolidated, convincing stakeholders, scientific confirmation of assumptions and adaptation of regulation mechanisms. According to Harding (2006), sustainable development still suffers from ambiguities and uncertainties, and can be defined as the 21st century utopia.

Although the principles of sustainability have been progressively included in the Brazilian normative framework, progress in the implementation of these actions follows a slower course. This fact can be seen in this study, which shows a contradictory situation between the theoretical proposal of governmental action and the measures implemented in the BS.

Therefore, although the set of public policies based on development of the border region is a guide for “sustainable and integrated development” (BRAZIL, 2010, p.35), in practice, this instrument does not lead to a systematic adoption of balanced public policies between economic, social and environmental dimensions. The results of the documentary analysis show that no consistent initiatives have been conducted in the context of environmental management, although the region presents demands in this regard.

The public policies constructed followed the concept of traditional development, prioritizing economic growth and, to some extent, social actions, without, however, assessing the impact of these proposals in terms of degradation of natural ecosystems. This finding corroborates Fiorino’s (2010) view that, between economic prosperity, social equity and justice, and environmental sustainability, the latter still tends to be subjugated in the dynamics of contemporary society.

In addition, it stands out that an analysis carried out by the Federal Audit Office (Tribunal de Contas da União - TCU) reported that the great obstacle of the BS lies not in the lack of policies, but in their disarticulation and fragmentation. Based on this diagnosis, the Permanent Commission for the Development and Integration of the Border Region (Comissão Permanente para o Desenvolvimento e a Integração da Faixa de Fronteira - CDIF) was created, consisting of a Board composed of federal agencies and entities representing states and municipalities, with the purpose of elaborating and proposing general guidelines for coordinated Federal Government action in supporting the development and integration of the BS (BRASIL, 2010).

It should be noted that the lack of analysis of the main obstacles and impacts of public actions makes it difficult to improve, modify or even expand a specific policy or program. Therefore, it is necessary to understand how a mix of public policies affects the

indicators of a given territory and how their results can provide a restructuring in the planning and efficient application of resources (RESENDE, 2014).

Despite their importance, in general, studies related to the evaluation stage of policies are more restricted. Based on this observation, the next topic will discuss variations in the work and income, health and education indicators in the BS in the period, seeking to characterize local development in the period of implementation of the public policies selected by the research.

#### 4.2 Evaluation of Border Strip Development

The period under analysis is characterized by the positive performance of Brazil as measured by the IFDM. In general terms, this indicator showed a positive variation of 19.3% in the comparison between 2005 and 2011. This trend was followed by the partial employment and income indicators (20%), education (23.5%) and health (14.7%). It should be noted that of the 500 municipalities with the best rankings in 2011, 8.6% were in the BS and, from 2005 to 2011, 10 municipalities from the region joined this group.

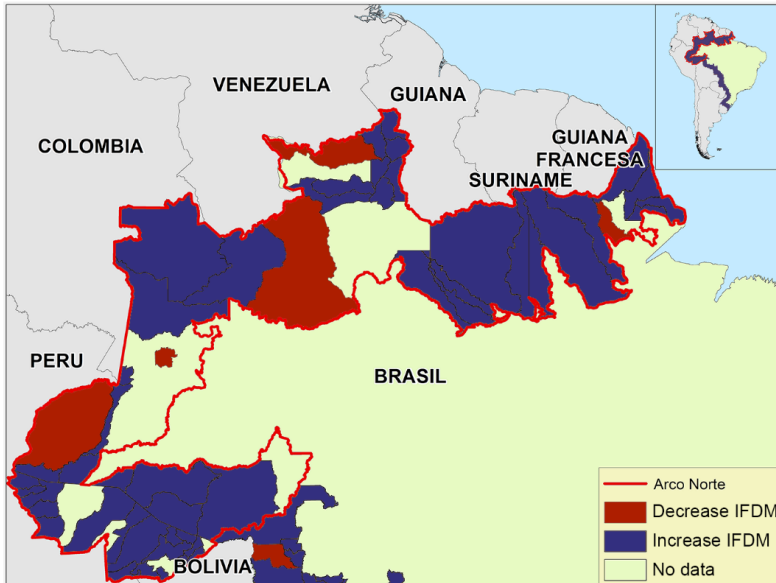
Below is the development dynamic in the BS in three figures, each representing a different set of municipalities grouped in “arcs”.

In Figure 1, the area outlined by the red line, called “Arco Norte”, is composed of the states of Amapá, Pará, Roraima, Amazonas and Acre, in which there are 71 municipalities, for 17 of which data is missing due to lack of information, reflecting Peiter’s (2005) and PDFF (BRASIL, 2005) notes about the lack of administrative structure that enables the generation of information for management in several municipalities in this region.

It is noteworthy that only 6 municipalities in this arc showed a reduction in the composite development indicator, in this case, the decrease in the IFDM was a reflection of the combination of the decrease of indicators in the three dimensions, Employment and Income, Health and Education. However, it was found that, comparatively, those municipalities presented a negative variation, of 36.9%, on average, in the Employment and Income dimension.

Furthermore, round 50 municipalities in this arc showed an increase in the composite development indicator, following the same tendency of the IFDM calculated for Brazil. Although there is an information deficit, the improvement is significant in most of the localities analyzed in this arc.

Figure 1 – Variation of the IFDM (2011-2005) in municipalities in the Arco Norte at the BS



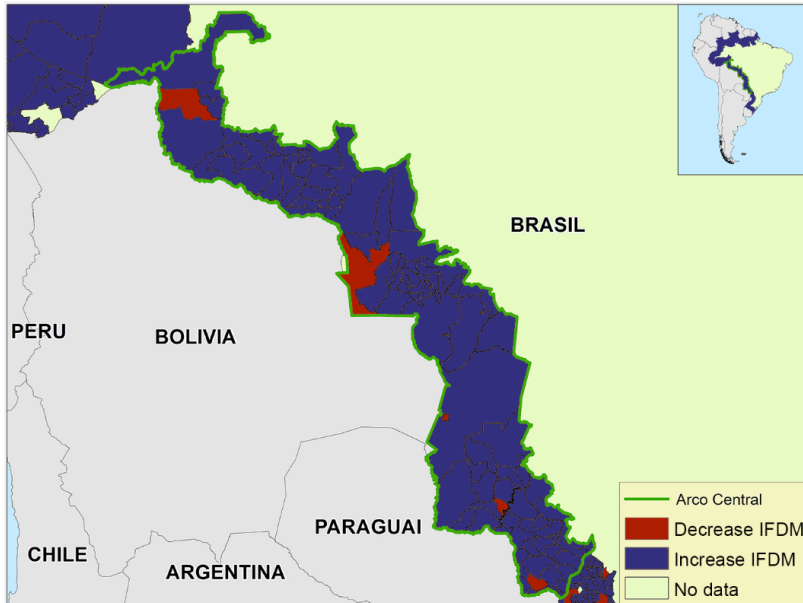
Source: Produced by authors based on the FIRJAN (2014).

There is no clarity as to which policies implemented in the Arco Norte led to the improvement observed in the indicators, since, as shown in Chart 1, the region was the focus of a set of public actions. On the other hand, the distinct behavior in the Employment and Income dimension reproduces the historical problems of the region, traditionally marked by a low degree of regional development and reduced incentive to entrepreneurship (BRASIL, 2010).

In Figure 2, the region circumscribed by the green line, denotes the Arco Central, composed of the states of Rondônia, Mato Grosso and Mato Grosso do Sul. It was also seen that the indicator for a significant number of cities improved, of the 99 municipalities, only 6 showed a reduction in the IFDM. In these municipalities, despite the increase in the Education indicator, 22% on average, much higher than the national average (14.7%), the percentage combination of reductions in the Employment and Income and Health indicators resulted in a reduction in the IFDM. Again, the greatest drop observed was in the Employment and Income dimension, which corresponded to a decrease in these 6 municipalities of, on average, 33%.

In this sense, the good performance of meat and soy exports in the last decade has not been enough to provide fair development in the region. In any case, this region is promising for development, given that its local production base is linked to agriculture, livestock and related services and industries (BRASIL, 2009a) in the export sector.

Figure 2 - Variation of the IFDM (2011-2005) in the municipalities of the Arco Central at the BS

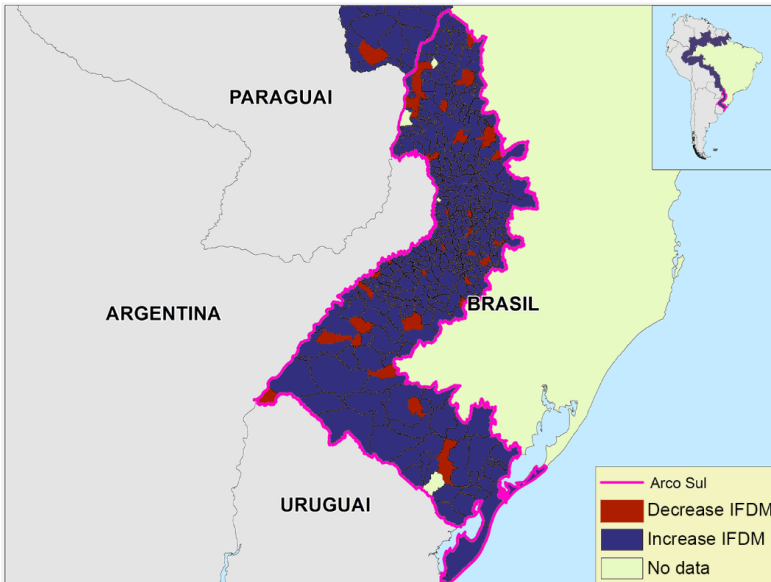


Source: Produced by authors based on the FIRJAN (2014).

The third sub-region of the BS - the Arco Sul - is composed of the states of Paraná, Santa Catarina and Rio Grande do Sul, presenting a significantly larger number of municipalities (418) than previous arcs. In addition, in this region, the largest absolute number of municipalities with a composite indicator of development is concentrated (37). In these, the dimensions of Employment and Income as well as Health had a strong influence on the negative performance of the IFDM, being more intense in the former.

Although there are important intra-regional differences, there is noticeable diversity of the values of Arco Sul indicators, the area with the most intense influence of the socio-economic and cultural legacy of extensive cattle raising, rhiziculture and viticulture activities. Another interesting and significant aspect reveals that this region is affected by cross-border dynamics, resulting from the project of economic integration promoted by Southern Common Market (Mercado Comum do Sul - Mercosul) (BRASIL, 2010).

Figure 3: Variation of the IFDM (2011-2005) in the municipalities of the Arco Sul at the BS



Source: Produced by authors based on the FIRJAN (2014).

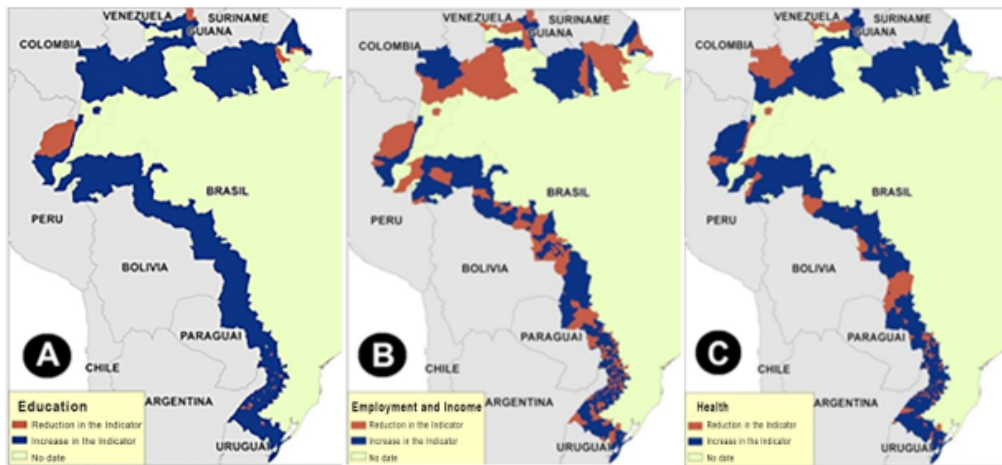
In general terms, from the point of view of the IFDM, BS municipalities developed during the period under analysis, as only 56 (8.4%) of the 568 municipalities that presented data during the evaluation period saw their IFDM reduced.

However, analysis of the IFDM disaggregated into its component dimensions, enables a more detailed reading of the information contained in the composite indicator. Thus, Figure 4 illustrates the variation of the indicators, calculated for each municipality of the BS.

Note the predominance of the dark blue color in the BS area, especially in maps 4A and 4C, which represent the Education and Health dimensions, respectively. Therefore, there was an increase in the indicator of the dimensions in the period and, therefore, a positive contribution to the IFDM.

This is not the case in map 4B, in which the reddish color indicates a negative variation of the Employment and Income indicator for 212 municipalities, that is, 37.3% of the total analyzed in the period.

Figure 4: Variation in the IFDM dimensions (Education, Employment-Income and Health) in the Municipalities of the Brazilian BS (2011-2005)



Source: Produced by authors based on the FIRJAN (2014).

The positive performance of the IFDM in most of these municipalities was due to the compensating effect of the gains obtained in the other two dimensions. This means that, from the 212 municipalities that had the Employment and Income Dimension of the IFDM reduced in the period between 2005 and 2011, only 48 had the aggregate indicator reduced in the same period, note that 77% of those who presented insufficient employment and income saw the aggregate indicator compensated by Education and Health.

Paradoxically, as pointed out above, the public policies implemented in the BS emphasized the promotion of programs focused on the economic aspects of local development (BRAZIL, 2010; PEITER, 2005). However, careful reading of these data reveals that the dimension that presented the most negative variation in the period was exactly the one related to the economic dynamics. This finding leads to the need for deeper reflection on the results obtained from the policies implemented vis-à-vis the objectives sought in their planning.

## 5 Final Considerations

The survey of the federal public policies implemented in the BS demonstrated, in terms of scope of action, a predominance of investment in the socio-economic dimension. There is, therefore, a contrast between the discourse promoting regional sustainable development and the actions implemented, as there has been no integration and balance between initiatives in the environmental, economic and social spheres.

Contrary to this, despite the fact that it is the object of a greater number of public policies, during evaluation of the development indicators of the BS municipalities, the dimension associated with “economic development” was the one that performed worst. It should be noted that 12 public policies were identified, most of which were implemented from 2000, except for two programs that refer to the 1980s.

As for evaluation of the development indicators, based on the IFDM, the cartographic representations showed improvement in most of the border municipalities. It cannot be concluded that the specific BS policies were responsible for the improvement in this indicator, as, during this period, progress was made in Health and Education in general in Brazil, due to national policies. On the other hand, a significant number of BS municipalities showed decreases in employment and income indicators, offsetting the scenario of improvements observed in the country in this dimension. As emphasized, these socio-economic aspects were priorities for the definition of local development policies, but their results were not expressed in the selected indicators.

Limitations of the research include the lack of indicators related to some municipalities, showing possible insufficiency of administrative structure in some localities. Thus, it demonstrates the need to make produce feasible tools for planning and evaluating specific public policies. It should also be pointed out that most of the indicators refer to income generation in formal employment only, which may have hampered the growth of local income. The use of indicators that capture the income of the informal sector of the BS economy would be an alternative to overcome this difficulty.

In addition, from the proposed discussions, it was possible to observe gaps in research approaching the development of the Brazilian border strip. This finding evidences the need for an agenda of future studies to be structured with the purpose of advancing the frontier of knowledge on this subject.

Thus, it is suggested that the results of each of the public policies implemented in this region and indicated in the text, be evaluated in-depth, using varied methodologies that include performance analyses of these actions for promoting local development. Another suggestion is to analyze the influence of macroeconomic, political and other factors on the understanding of the results in the development indicators, as well as conducting research that analyzes the evolution of other types of indicators in these municipalities.

In addition, comparative studies could be carried out with other countries to understand the scope of government actions promoted in border areas, taking into account their respective national realities.

In summary, the discussions carried out throughout this article enabled an advance in the process of evaluating government actions based on comparative analysis of results between different localities and time periods, in order to support public decision making, improve the actions promoted and consequently, the sustainable development of the border municipalities in this country.



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# ANALYSIS OF PUBLIC POLICIES FOR DEVELOPING THE BRAZILIAN BORDER STRIP

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CAROLINE KRÜGER  
MARINA KOLLAND DANTAS  
JOSÉ MARCELO DE CASTRO  
CLÁUDIA SOUZA PASSADOR  
ADRIANA CRISTINA FERREIRA CALDANA

**Abstract:** The National Border Strip (BS) geographically comprises the region of the Brazilian territorial boundary and, historically, is recognized by isolation, socio-economic and environmental vulnerabilities. In order to overcome these difficulties and promote sustainable regional development, a set of public policies was implemented, with emphasis on restructuring the Border Area Development Plan (PDFF) in 2005. In face of the investments made and the scarcity of information about this territory, this paper identified the main policies implemented in the BS based on literature review and documentary research. Also, thematic maps showed the effects of these policies on the changeovers of education, health, employment and income indicators, all calculated for the years 2005 and 2011. The results show that the policies emphasized development in the social and economic spheres, with less emphasis on the environmental context. Improvements in living conditions were identified in most municipalities, especially in education and health.

**Keywords:** Public policy; Sustainable development; Border area; Social indicators.

**Resumo:** A Faixa de Fronteira (FF) nacional compreende geograficamente a região do limite territorial brasileiro, sendo historicamente reconhecida pelo isolamento, vulnerabilidades socioeconômicas e ambientais. No intuito de superar essas dificuldades e promover o desenvolvimento regional sustentado, um conjunto de políticas públicas foi implementado, com destaque para a reestruturação do Plano de Desenvolvimento da Faixa de Fronteira (PDFF) em 2005. Face aos investimentos efetivados e a escassez de informações sobre este território, o estudo identificou, mediante revisão bibliográfica e documental, as principais políticas executadas na FF. Ademais, evidenciou em mapas temáticos o reflexo destas ações na evolução dos indicadores de educação, saúde, emprego e renda, calculados para os anos de 2005 e 2011. Os resultados mostram que as políticas enfatizaram o desenvolvimento das

esferas social e econômica, com menor ênfase para o contexto ambiental. Identificaram-se ainda melhorias nas condições de vida, na maior parte dos municípios, principalmente em educação e saúde.

**Palavras-chave:** Política pública; Desenvolvimento sustentável; Faixa de fronteira; Indicadores sociais.

**Resumen:** La Franja Fronteriza nacional (FF) comprende geográficamente la región del límite territorial brasileño e históricamente es reconocida por el aislamiento, vulnerabilidades socioeconómicas y ambientales. Con el fin de superar estas dificultades y promover el desarrollo regional sostenible, se implementó un conjunto de políticas públicas, con énfasis en la reestructuración del Plan de Desarrollo de la Zona Fronteriza (PDFF) en 2005. Frente a las inversiones realizadas y la escasez de información sobre este territorio, el estudio identificó las principales políticas implementadas en el FF basadas en revisión de literatura e investigación documental. Además, en mapas temáticos se mostraron los efectos de estas políticas en la variación de los indicadores de educación, salud, empleo e ingreso, calculados para los años 2005 y 2011. Los resultados muestran que las políticas enfatizaron el desarrollo en el ámbito social y económico, con menos énfasis en el contexto ambiental. Se identificaron mejoras en las condiciones de vida en la mayoría de las municipalidades, en especial en la educación y la salud.

**Palabras-clave:** Política pública; Desarrollo sostenible; Franja fronteriza; Indicadores sociales.

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