

The Brazilian Army in civil construction in the Lula administration (2003-2010): a window of opportunity

El Ejército Brasileño en las obras civiles bajo el Gobierno Lula (2003-2010): una ventana de oportunidad

Abstract: This article studies the employment of military engineering in civil infrastructure works by the Lula administration during its first two terms in office (2003–2010). To this end, two objectives were set: to compare this employment about previous governments, from the military and democratic periods, with 1965 as the starting point; and to apply the multiple streams analysis model (windows of opportunity) to try to explain the reason for this use by the Lula administration. The work was divided into two main parts: a quantitative analysis, in which there was a comparison between administration to individualize the period of the Lula government; and a qualitative analysis, based on three works that showed Army involvement, in which an explanation was sought for this distinction. As a result, we identified a phenomenon, characterized by the large budget allocated to the Army to carry out infrastructure works in the period analyzed, as well as the characteristics of the multiple streams that opened a window of opportunity for the employment of military engineering.

Keywords: Lula Administration; Military Engineering; Brazilian Army; Civil Construction; Windows of Opportunity.

Resumen: Este artículo realiza un estudio sobre el uso de la ingeniería militar en obras de infraestructura civil por parte del Gobierno Lula en sus dos primeros mandatos (2003-2010). Para ello, plantea dos objetivos: comparar este uso con el de otros gobiernos del período militar y democrático a partir del marco de tiempo inicial del año 1965; y aplicar el modelo de análisis de flujo múltiple (ventanas de oportunidad) para explicar la razón de este uso bajo el Gobierno Lula. Este trabajo realiza un análisis cuantitativo, en el que se hace una comparación entre los gobiernos para individualizar el período de Gobierno Lula, y un análisis cualitativo, basado en tres proyectos que contaron con la participación del Ejército, cuando se buscó una explicación para esta distinción. Los resultados permitieron identificar un fenómeno caracterizado por el gran presupuesto asignado al Ejército para la consecución de las obras de infraestructura en el período, así como las características de los flujos que abrieron la ventana de oportunidad para el uso de la ingeniería militar.

Palabras clave: Gobierno Lula; Ingeniería Militar; Ejército Brasileño; Obras Civiles; Ventanas de Oportunidades.

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1 INTRODUCTION

This article is the result of a master's thesis in Strategic Studies from Universidade Federal Fluminense (UFF), approved in 2012. We analyzed the use of the Brazilian Army in large infrastructure projects during the government administration of Luiz Inácio Lula da Silva. Through the lens of public policies, the factors that allowed military engineering to participate again in major infrastructure works of the Federal Government were analyzed, a situation that had not occurred since the military governments of the 1964-1985 period.

The use of the military in infrastructure projects in the Lula administration presented characteristics that differentiate it from previous administrations. This distinction arose from the increase in budgetary resources allocated to the Army by other ministries and agencies not affiliated with the Ministry of Defense. The main objective of this article is to present these various aspects as a phenomenon. To this end, two secondary objectives were established. The first aims to demonstrate, via a comparative quantitative analysis, that the budgetary volumes allocated to the Brazilian Army for infrastructure projects differed from those received under other administrations. The second objective involves a qualitative analysis of three major projects undertaken by the Army during the period in question, using the multiple streams framework (Kingdon, 1995) to explain the reasons behind this distinction.

The objectives outlined for the study align with the hypothesis that the Lula administration employed the Army in infrastructure projects to address issues in the implementation processes of public policies in that sector. This solution was adopted under the strong influence of military personnel with extensive experience in that field, who were interested in revitalizing military construction activities and, coincidentally, rose to the highest ranks within the Army during the period in question.

Given the points outlined above, it is evident that this article carries an analytical perspective on the use of the Army Corps of Engineers. Thus, we clarify that the objective was never to pass judgment on the case, whether this use was positive or negative. Instead, we aim to analyze the facts surrounding this use, grounded in theoretical models from public policy studies. To further support the attempt at neutrality in this study, a brief historical overview of the Brazilian Army's role in national infrastructure projects will be described.

Engineering is a specialty of the Army that holds three primary missions: supporting troop movement, hindering enemy movement, and assisting in the physical protection of friendly forces. To fulfill these missions, a fundamental characteristic is the use of specialized techniques and equipment, many of which are similar or identical to those used in civil construction. Engineering is a military specialty with a typically "dual" nature, meaning its activities can be performed both in times of peace and war.

Historically, the activities of Military Engineering have their roots in Colonial Brazil. Portuguese military engineers were responsible for constructing various public constructions, such as barracks, churches, aqueducts, forts, military colonies, and the urbanization of towns that shaped Portuguese territory in America. The results of this work can still be seen today, both in capitals—such as the various fortresses in Rio de Janeiro and Salvador—and in remote locations, such as Coimbra (MS) and Príncipe da Beira (RO).

From 1822 to the present day, significant changes in the organization of military engineering have occurred, as well as in the specialized techniques and equipment used. However, its missions and methods of employment within the realm of national policy and strategy have changed far less over the years. In Brazilian republican history, the Army's involvement in civil infrastructure projects has been a consistent practice. From the construction of telegraph lines with Marshal Cândido Rondon in the first two decades of the 20th century, to the establishment of railway trunk lines in the South during the same period, the construction of highways starting in the 1930s, major drought mitigation projects in the Northeast Region of Brazil in the mid-1950s, and the large-scale integration projects in the Brazilian Amazon under the military governments of the 1970s (Figueiredo, 2014).

From the mid-1980s onwards, the Brazilian government began to distance the Army from the country's major infrastructure projects. Consequently, the Brazilian Engineer Construction Battalions began to conduct projects of local, municipal, and state interest. Most of the time, these projects were the result of parliamentary amendments or efforts made with the state superintendencies of the *Departamento Nacional de Estradas de Rodagem* (DNER – Brazilian National Department of Roads) (which was dissolved in 2001 and replaced by the *Departamento Nacional de Infraestrutura de Transportes* [DNIT – National Department of Transport Infrastructure]), led by local politicians and military leaders (Araújo, 1992). The latter were said to have an interest in maintaining a basic level of construction training within the military.

It was only under the Lula administration that the Army was once again called upon to participate in the country's major civil infrastructure projects. In December 2005, the 1st Brazilian Army Corps of Engineers began participating in the duplication and improvement of the BR-101/NE highway (Brasil, 2007b), a project with a total value of over one and a half billion reais. In 2007, two sections of the São Francisco River Integration Project with the Hydrographic Basins of the Northern Northeast (PISF) were assigned to the 2nd and 3rd Engineer Construction Battalions. In 2007, the Army took on the task of rehabilitating BR319, specifically in the section connecting Porto Velho to Manaus (Exército Brasileiro, 2009). Additionally, in 2009–2010, part of the expansion work at the Guarulhos International Airport was assigned to the Army Joint Construction Projects Department (Exército Brasileiro, 2011). As a result, the *Sistema de Obras de Cooperação* (SOC – Joint Construction Projects System) managed a total of R\$1,753,634,802 by 2010 (data from the Brazilian System for Financial Administration – SIAFI), with an average of R\$292,272,467 per year.

2 DEVELOPMENT

2.1 Quantitative analysis of budgetary resources allocated to the Army to carry out civil infrastructure projects

The first objective of this research was to conduct a quantitative analysis aimed at comparing the budgetary volumes allocated to the Army for performing public works under different administrations. For this analysis, this research used budget data from 1965 to 2010 (46 years of sample). This scope was not broader due to the challenges in sourcing data on the financial resources allocated to civil construction conducted by the Army. We highlight that the management of these resources falls under the responsibility of entities not affiliated with the Army Command, the former Ministry of the Army, or the Ministry of Defense.

To estimate the annual total of resources, the amounts allocated to each project were summed up by year.

For clarification, the estimation methodology for determining the funds required to conduct a project with the Army under a cooperation regime involves two key parties: the executor (Engineer Construction Battalions) and the policy entrepreneur, typically a public agency responsible for managing the project and its budgetary resources. From there, a work plan is prepared by the SOC of the *Departamento de Engenharia e Construção* (DEC – Army Department of Engineering and Construction), detailing the total resources and timelines required for executing the project, previously provided by the ministry or agency (policy entrepreneur) requesting the engineering service. After analysis and adjustments made by the policy entrepreneur, in agreement with the Army (executor), a cooperation agreement is signed for the execution of the project, which includes a physical and financial plan. This methodology remained consistent throughout the analyzed period, with the current version being established by an Army ordinance in 2015 (Exército Brasileiro, 2015).

Financial data for the period from 1965 to 1994 were sourced from the Army Statistical Yearbooks available at the 2nd Deputy Chief of Staff of the Army. Data for the period from 1996 to 2010 were obtained from the SIAFI, with support from the Brazilian Army Joint Construction Projects Department. As it was not possible to obtain the value for 1995 from the available sources, it was estimated based on the average for the preceding three years. This approach is justified by the fact that the 1995 budget was prepared in 1994 during the Itamar Franco administration (1992–1994). We highlight that all monetary values in this study were adjusted to December 2010 using the General Price Index – Internal Availability (IGP-DI) from the Getulio Vargas Foundation (FGV), based on the value adjustment tool available on the Central Bank of Brazil's website. This index was chosen due to the long period it reaches. Upon reviewing other indices from the Brazilian Institute of Geography and Statistics (IBGE), we observed that they covered more recent periods, starting from 1979, which made their use in this study unfeasible.

To simplify the comparative analysis, the annual period was used as the basis, with data grouped by presidential terms from 1965 to 2010. This encompassed a total of 12 administrations, five during the military regime and seven after the return to democracy. The five military presidents were Humberto Castelo Branco, Artur da Costa e Silva, Emílio Garrastazu Médici, Ernesto Geisel, and João Figueiredo. The democratic presidents were José Sarney, Fernando Collor, Itamar Franco, Fernando Henrique Cardoso (two terms), and Luiz Inácio Lula da Silva (two terms). We highlight that, although there were 12 administrations, the periods of each were distinct for various reasons, which reinforced the use of an annual measurement. The governmental periodization, as explained, was necessary and served as the foundation for the construction of the comparative tables presented throughout the study.

After an initial analysis of the collected data, it became clear that something significant was occurring in the use of the Army Corps of Engineers during the first term of President Lula. Unlike previous years, the data for the period in question showed that the volume of projects grew abruptly (approximately three times) from 2004 to 2005 (Table 1).

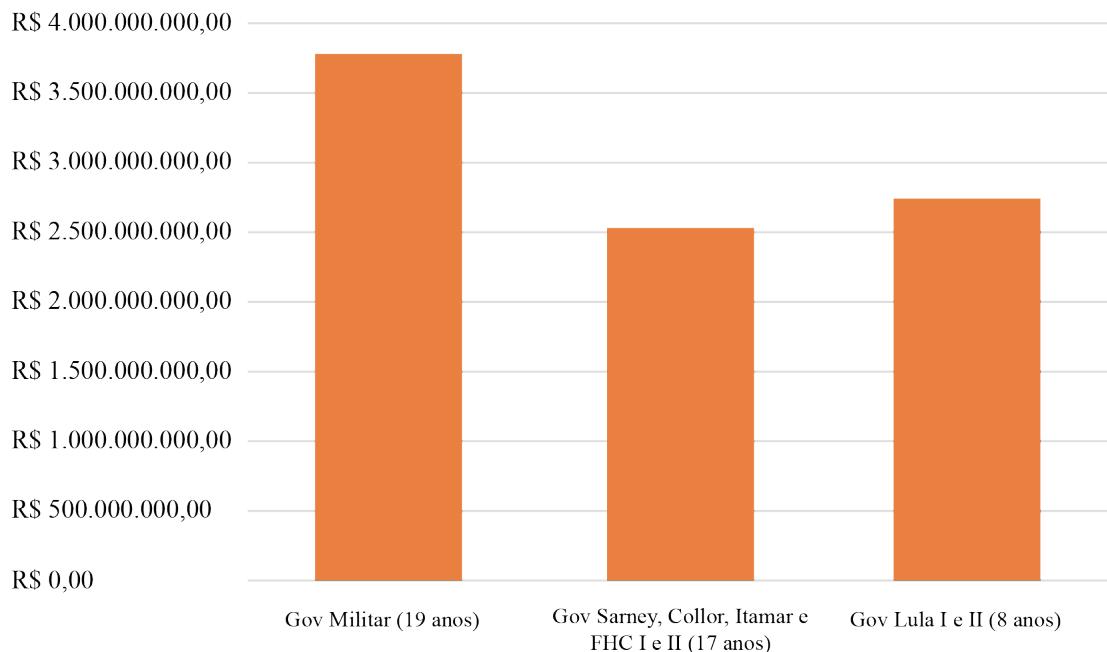
Table 1. Resources for Projects by Military Construction Organization/2004 and 2005

Army Corps of Engineers	Resources received		No. of Works	
	2004	2005	2004	2005
Total	R\$ 128,269,709.80	R\$ 431,708,472.14		
Total/Dec 2010*	R\$ 169,163,440.12	R\$ 542,635,964.06	36	53

* Values updated to December 2010.

Source: prepared by the author with data from SIAFI.

During the eight years of President Lula's two terms, the Army received two billion seven hundred million reais from ministries other than the Ministry of Defense. These resources were transferred to the execution of works, such as airports, roads, canals, ports, and bridges, among others. The financial amount represented 200 million more than the total of all resources transferred during the 18 years of previous civilian administrations (Graph 1). Moreover, it accounted for 73% of the resources transferred during the 20 years of military administration.

Graph 1. Total resources per period

Values updated to December 2010.

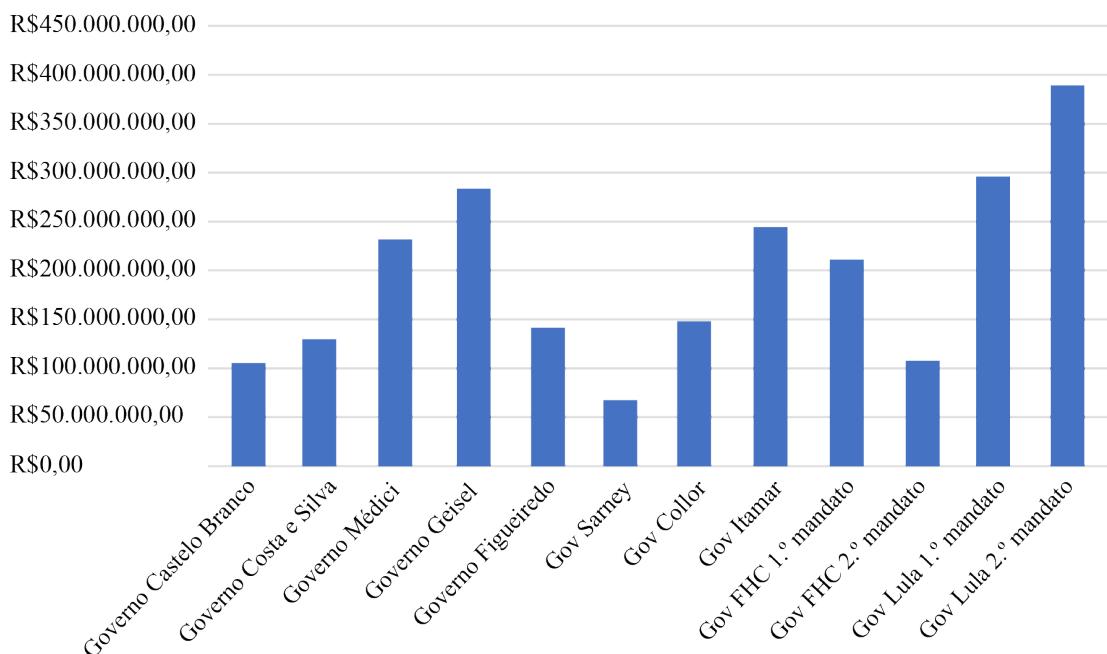
Source: prepared by the author.

These numbers alone highlight the scale of the resources allocated to the employment of military personnel in various civil projects. However, it is important to emphasize the distinction

of President Lula's administration in comparison with various political and economic moments over the 46 years analyzed.

Throughout the eight years of President Lula's administration, the Army Corps of Engineers received an average of R\$ 341 million per year, even considering the year 2003, when budget restrictions allowed for the transfer of only R\$ 77 million. Analyzing only Lula's second term, this average increased further, reaching R\$ 387 million. Compared to previous administrations, the highest annual average was reached during Ernesto Geisel's government (1974–1978), with R\$ 280 million, whereas the lowest was during José Sarney's government (1985–1989), with R\$ 66.8 million (Graph 2). It is worth noting that the estimation of the average for the Castelo Branco administration (1965–1966) was affected by the lack of data for 1964.

Graph 2. Annual averages of resources for projects by administration



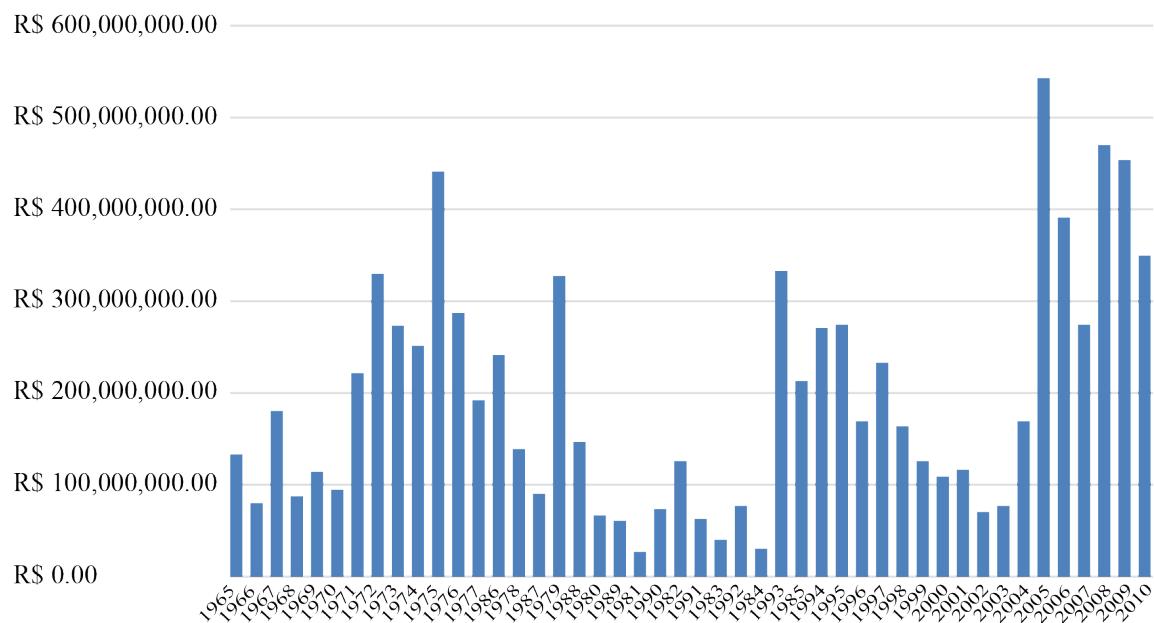
Values updated to December 2010.

Source: prepared by the author.

Returning to the year 2005, with a total of R\$ 542 million (Graph 3), there was a significant increase compared to 2004, when the amount was R\$ 169 million (Graph 3). Following this shift, the values slightly decreased but remained high compared to the previous period, as seen in the annual average of the second term (Graph 2). As a result, when estimating the annual average for Lula's administration, excluding the years of 2003 and 2004, the average is

R\$ 414 million. This amount represents more than a budget increase; it signifies a break with all the periods analyzed.

Graph 3. Resources for joint construction projects (1965–2010)

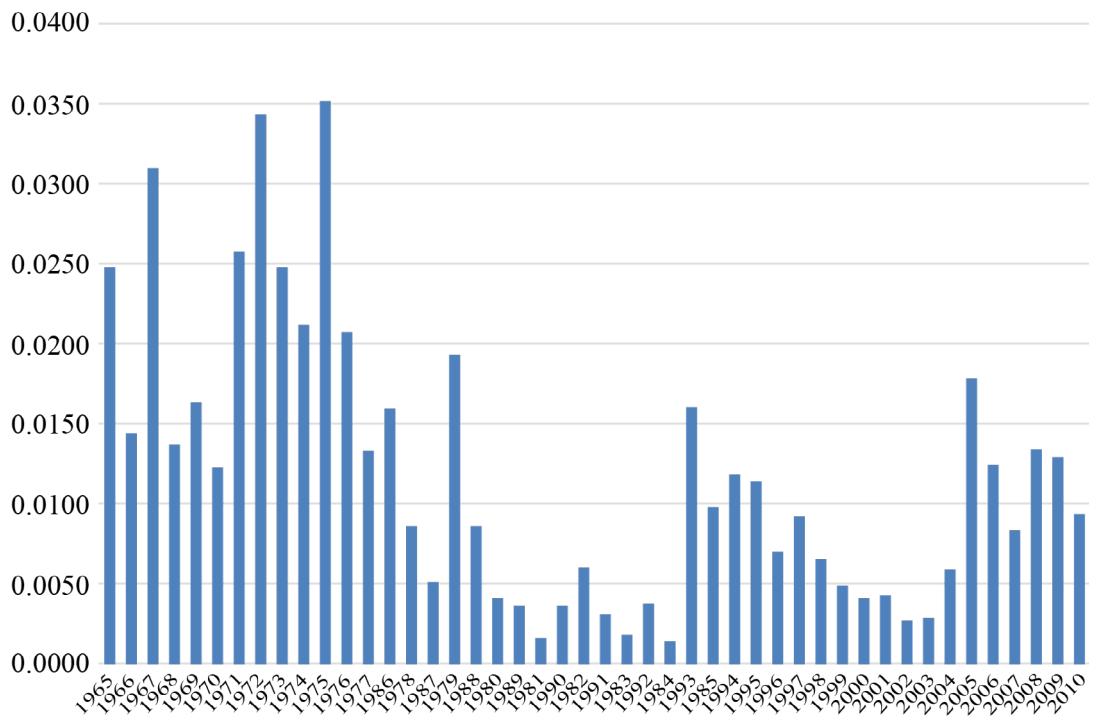


Values updated to December 2010.

Source: prepared by the author.

As the dependent variable began to rise in 2005 and remained high in the following years, the Army started deploying more Engineer Construction Battalions for projects. Initially, the PISF and the BR-101/NE highway projects employed all the Engineer Construction Battalions of the 1st Brazilian Army Corps of Engineers (1st, 2nd, 3rd, and 4th Battalions). Then, with the BR319/AM and BR163/PA highway projects, the 2nd Army Corps of Engineers also employed all its battalions (5th, 6th, 7th, and 8th Battalions), which was joined by the 9th Battalion, headquartered in Cuiabá and not subordinated to that group. The ports of Santa Catarina employed the 10th Battalion (current 1st Railway Battalion). The only battalion not directly employed in these large projects was the 11th (now the 2nd Railway Battalion), which received numerous minor projects and the mission of implementing an instruction center that could improve the SOC workforce (Figueiredo, 2014).

Another relevant aspect to analyze is the percentage of Gross Domestic Product (GDP) allocated to these projects (Graph 4), as a gradual increase can be observed compared to previous trends, although it never reached the levels seen during the military governments (except for the Figueiredo administration). Such a finding paves the way for another hypothesis.

Graph 4. Percentage of GDP per year employed by the Brazilian Army Corps of Engineers

Source: prepared by the author.

2.2 Explanatory model based on the multiple streams framework

The second objective of this study is to explain why such a large volume of budgetary resources was allocated to the Army for the execution of civil projects. To this end, the multiple streams framework and policy windows model proposed by John Kingdon (1995) was employed as an analytical tool for public policies. These windows emerge from the convergence of the problem streams policy, which addresses the recognition, interpretation, and categorization of issues that require some form of government action; the policies stream, which leads to public policy proposals (from the so-called policy primeval soup) put forth by a community of experts with their formulations and refinements of solutions; and the political stream, which involves the political environment, the context, such as public opinion preferences, election results, administrative changes, political parties, and interest groups. After identifying these three streams, the key to achieving results that explain the subject of study in this method lies in understanding the process of their integration, or in other words, their coupling into an applied solution.

This public policy window, which opens with the coupling of the streams, is not permanent, and it is at this point that the theory stands out as an analytical model. The window does not exist as a function of a specific stream, but rather as the junction of them. Moreover, the time factor is crucial, as the opportunity depends on the availability of the streams and the presence of a catalyst to trigger the opening of the window. This catalyst is named the policy entrepreneur, as described by Kingdon (1995).

The key question—regarding the substantial resources allocated to the Army's involvement in major infrastructure projects during the Lula administration—is: What was done, why was it done, and what impact did it have? This question is directly related to the concepts developed by Thomas R. Dye (2017) in the field of Public Policy. For him, policy analysis is the description and explanation of the causes and consequences of government action. Therefore, the analysis aimed to identify how the political process that led the government to employ the Army in civil projects took place.

Based on Kingdon's model (1995), the analysis process was developed in four parts. The first three parts are composed of the three streams: politics, problems, and policies. The last part, on the other hand, comprised the interaction of the three streams with the public policy window.

2.2.1 Problems Stream

Starting with the problem streams proposed by Kingdon (1995), we seek to discuss how problems gain government attention within the discussion agenda. In this context, problems can be identified by the following means: indicators, significant events, crises or highly impactful symbols, and feedback mechanisms. Thus, this study addresses the problem streams by analyzing three major projects that were identified as emblematic of the sharp increase in resources allocated to the Army during the Lula administration: The São Francisco river integration project, the duplication of BR-101/NE highway, and the expansion of Guarulhos Airport.

São Francisco River Integration Project

The São Francisco River Integration Project with the Hydrographic Basins of the Northern Northeast (PISF) aimed to ensure water security for a population of 12 million in the semi-arid regions of Ceará, Paraíba, Pernambuco, and Rio Grande do Norte. The semi-arid region of the Northern Northeast, where the project is located, provides approximately 400 m³ per capita annually, supplied via reservoirs built on intermittent rivers and aquifers that face limitations in water quality and/or quantity. This availability does not meet the minimum needs established by the United Nations (UN), which is 1,500 m³ per capita annually.

The project was never a point of consensus among the various stakeholders, including expert communities, different levels of government—such as state and municipal authorities—the public prosecutor's office, as well as religious and artistic leaders. From 2005 to 2007, protests and actions opposing the project increased significantly. An important challenge was made by the Brazilian Bar Association — Sergipe Branch (OAB/SE) in 2007, which filed an Original Civil Action with the Supreme Federal Court against the project (“OAB de Sergipe ajuíza ação popular ambiental contra integração do rio São Francisco,” 2024). This action was dismissed in 2022 (Supremo Tribunal Federal, 2024).

In September 2005, on the same day, the Brazilian National Water Agency (ANA) granted the Water Sustainability Certificate to the transposition project, a prominent religious leader from the rural area of Bahia, Catholic Bishop Dom Luiz Flávio Cappio, began a hunger strike that lasted 11 days. It only ended when Minister Jaques Wagner visited the bishop. With that act, Bishop Cappio became a symbol of the opposition to the water

diversion project. At the end of 2007, with the start of the construction work, the bishop resumed his hunger strike, which only ended after 23 days due to his physical weakness, leading to his hospitalization.

In addition to these events in Bahia, Minas Gerais was another state that saw significant protests against the project, including support from the local government. In 2007, the Government of Minas Gerais, the State Legislature, and the Minas Gerais Water Management Institute held the 6th Water Forum for the Development of Minas Gerais. At the forum, the lecture by the State Secretary of the Environment was against the transposition project. Also in 2007, the Federal Supreme Court (STF) overturned injunctions from the Federal Public Ministry, the State of Bahia, and the State of Minas Gerais that were opposed to the PISF (Loureiro; Teixeira; Ferreira, 2014). This accumulation of actions against the project brought great difficulties to its implementation.

Returning to public policy theory, the obstacles and problems of implementation are classified into three types (Silva; Melo, 2000):

- Results of the institutional incapacity of the implementing agents.
- Political difficulties of the programs.
- Resistance and boycotts conducted by groups or sectors affected by the project.

In the case of the PISF, after the political decision was made to implement it, the main issues that arose fit into the third type, as was demonstrated by the events described above.

BR-101/NE

The second project was the works on the BR-101/NE highway in the section that runs through the states of Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, and Bahia, passing through their capitals, except for Salvador. The project aimed to improve the highway via duplication and restoration. To this end, DNIT launched the public procurement No. 334/2004-DNIT, with an initial budget of R\$ 1.75 billion for the eight construction lots along the 398.90 km stretch between Natal (RN) and Palmares (PE), excluding the metropolitan stretch of Recife, which had already been duplicated (Brasil, 2005a).

However, due to an action by the Brazilian Federal Court of Accounts (TCU) regarding potential irregularities in the budget, which revealed discrepancies in the estimated prices, the budget was reduced to R\$ 1.51 billion (02/03/2005), 15.6% less than the previous amount. Additionally, the bidding date was postponed three times, with the last one being indefinite (*“sine die”*). These postponements aimed to await the final decision of the TCU, which ultimately occurred in a fragmented manner. In April 2005, Decision 490/2005 (Brasil, 2005a) approved the works for lots 1, 5, and 6, and in May 2005, Decision 616/2005-Plenary (Brasil, 2005b) approved lots 2, 3, 4, 7, and 8.

Considering the TCU's fragmented decision, DNIT issued two tenders for the BR-101/NE. The first, Tender 0122/05-DNIT (Brasil, 2005c), covered lots 1, 5, and 6, whereas the second, Tender 0155/05-DNIT (Brasil, 2005d), covered the remaining lots. However, the project suffered new issues to start. The results of the tenders were subject to several legal challenges filed by the participating companies. Each of them was contested by eight of the 27 participating companies. As a result of these difficulties, the first tender was annulled in the Official Gazette No. 206, on 10/26/2005, and the second was annulled in the Official Gazette No. 21, on 01/30/2006. It should be noted that the Army did not participate in these bids.

The case of the BR-101/NE was yet another public policy that faced serious implementation difficulties. Using the same typology previously presented (Silva; Melo, 2000), it can be concluded that the types of problems faced by the government, in this case, were due to the institutional incapacity of the implementing agents, with the involvement of the TCU, as well as resistance from private groups whose interests were not being met.

Guarulhos Airport

The third and last project analyzed was the Guarulhos Airport expansion project. This airport was inaugurated in 1985 to meet the needs of the metropolitan region of the country's largest city, as Congonhas Airport could no longer fulfill that role. Throughout its 39 years of existence, the airport has consistently undergone expansion in various sectors, such as runways, aprons, and passenger terminals. However, the expansion works, which were scheduled to begin in 2004, faced several irregularities in their bidding process, as outlined in Decision 2350/2007 – Plenary (Brasil, 2007a), which hindered the continuation of the work initiated by the winning consortium Galvão/Constran/Serveng. Among these irregularities, the lack of budgetary forecasting and the adoption of a technical bidding criterion instead of a minimum price criterion were the most notable. This situation remained unresolved, since a new Decision in 2008, 2617/2008-Plenary (Brasil, 2008), it maintained the criticisms previously observed.

Due to its inability to meet the demands of the TCU, in 2008, Infraero had to suspend the expansion, including the works of the first phase, which had already begun. However, the contract with the consortium was only terminated in May 2009. This situation characterized a problem in the implementation phase of public policies. Similar to the BR-101 case, the issue stemmed from the institutional difficulties between the responsible agency, in this case, Infraero, oversight bodies, such as the TCU, and the executing consortium.

2.2.2 Policies Stream or Solutions Stream

The policies stream is also the solutions stream. It is from this stream that ideas emerge, which then become solutions to the problems defined by the previous stream. According to the model adopted in this work, ideas are not necessarily linked to the perception of the problem (Kingdon, 1995), but rather to the communities of specialists in areas covered by public policies. The criteria for selecting a solution largely depend on the ability of its proponents to argue in favor of their proposals.

As seen earlier, the involvement of the military in infrastructure projects has a long tradition in the history of independent Brazil. However, there was a decline in their involvement during the 1980s, 1990s, and early 2000s. Starting in 2002, several initiatives emerged intending position the Army as a key actor in executing significant civil construction projects, which will be outlined below.

In December 2002, at the end of Fernando Henrique Cardoso's presidency, the Army approved the Construction Policy (Exército Brasileiro, 2002a) and the Strategic Guideline for Construction (Exército Brasileiro, 2002b). The ordinance that approved this policy defined it as a component of the Land Military Policy, a document of the highest level within the Army.

In 2003, General Enzo Martins Peri took over as head of the DEC, having previously served as the deputy head of that agency. Throughout his career, the officer held most of his positions in the construction field and also held a degree in Military Engineering from the Military Institute of Engineering (IME). Thus, his appointment as head of the DEC placed a specialist in charge of Engineering, after ten years of leadership by non-specialists. The last general from the Army Corps of Engineers had been General Luiz Gonzaga de Oliveira, who occupied the position in August 1993.

Starting in the second half of 2003, the DEC began seeking to establish cooperation agreements with various public agencies, companies, and even private enterprises. Starting in 2003, with the approach of key resource managers via cooperation agreements, the DEC began preparing management tools that could respond to this forward-looking vision for the Army. The first action consisted of structuring an agency that would bring together transportation specialists from both the Brazilian Army and the Ministry of Transport, which materialized with the creation of the *Centro de Excelência em Engenharia de Transportes* (Center of Excellence in Transport Engineering – CENTRAN) between the Ministry of Defense and the Ministry of Transport, officially established in March 2005 (Brasil, 2005e).

In 2004, a management tool named “*Macroprojeto Obras de Infraestrutura*” (Macroproject for Infrastructure Works) was devised, with the Chief of the DEC serving as its Executive Manager. The scope of the macroproject consolidated ideas characteristic of a public policy entrepreneur—in this case, the Army. It aimed to enhance engagement with public agencies to increase resource acquisition; establish a systematic approach for executing military works and projects under the *Programa Calha Norte* (PCN – Northern Arc Program); implement a system for disseminating knowledge and improving the technical and operational training of personnel involved in construction activities; and propose changes to policies, both civilian and military, to better meet the needs of infrastructure construction activities. The presentation of all these data demonstrates how the Army, via the DEC, prepared itself to respond to the opportunities that were about to arise.

2.2.3 Politics Stream and the Employment of the Brazilian Army Corps of Engineers during the Lula Administration (2003–2010)

This section will discuss the politics stream while integrating it with the two previously presented streams. Thus, it will be possible to infer that the distinct role of the Army in civil infrastructure projects during the Lula administration (2003–2010) was a result of this multiple streams model.

The final stream in Kingdon’s (1995) model is the politics stream, which plays a crucial role in shaping the government agenda. This stream encompasses politicians, elections, political forces and parties, administrative changes, and national sentiment regarding various issues. It can be stated that this represents the contextual and structural environment, which serves as a framework encompassing the problems and solutions that shape public policy.

During Lula’s first term, there was an increase in the state’s participation in economic processes, particularly via investments in Petrobras, official bank credit lines, and pension funds (Filgueiras, 2010). In this way, the Lula administration began a return of the State as an economic inducer.

For the new administration, the way to increase the growth rate would be by expanding public investments. According to a 2005 report from DNIT (Brasil, 2005f), the government was concerned about the decline in public investments and its impact on Brazil's competitiveness. To support this thesis, government studies, in collaboration with the World Bank, demonstrated the positive effects of infrastructure investments on the country's growth rate. As a result of these studies, the government sought an agreement with the International Monetary Fund to exclude 2.9 billion reais from the primary surplus requirements. This amount would be invested in projects aimed at increasing the competitiveness of the Brazilian economy and the consequent rise in tax revenue. Most of these funds were allocated to public investments in the transportation sector, particularly highways.

Although the new administration consistently advocated for the need to increase public investment and the role of the state as a growth inducer, its projects in this area only began after nearly two years. Starting in the second year, public investment projects in economic and social infrastructure sectors, such as the *Bolsa Família* aid, began to be organized. However, the success achieved in social programs was not matched by those of infrastructure.

The two largest infrastructure projects launched during the first term of the Lula administration faced implementation issues. The duplication of BR-101/NE and the PISF struggled to begin their constructions, as previously mentioned. Thus, the government had a defined agenda, but it failed to materialize as intended. These projects were defined in 2004 but only began their implementation in mid-2005.

Thus, the political stream created an environment conducive to public investments in infrastructure during the first term of the Lula government. However, it was not enough to open the public policy window to the Army. This can be demonstrated by the fact that the three projects exemplified in this study did not initially involve the Army Corps of Engineers, as previously mentioned.

The various implementation problems began to be addressed following a change in the federal administration. Due to the *Mensalão* scandal in 2005, José Dirceu, the Minister of the Civil House, was replaced in June 2005 by Minister Dilma Rousseff, who had previously served as Minister of Mines and Energy (Alencar, 2005), in which she had successfully implemented several changes to prevent the country from experiencing an energy crisis similar to the one in 2001. Additionally, she had been the coordinator of the infrastructure team during President Lula's transition government.

Soon after Dilma assumed her second ministry, the BR-101 and PISF projects began to take shape, with funds being allocated. At this point, it is important to highlight the political role of the Minister, as despite the tradition of the Brazilian Ministry of the Civil House being a political coordinator, there was a shift in focus. As those who make decisions carry their preferences and affinities with them, the choices made by politicians are inevitably influenced by subjective factors (França, 2007). Thus, it was natural for the Minister to link her new role to activities she was more familiar with, such as infrastructure projects. This situation became so clear that in the second term while holding the same position, she was responsible for the *Programa de Aceleração do Crescimento* (PAC – Growth Acceleration Program), which was the key element in the country's new economic policy.

Thus, the changes in the problem streams reached their peak in the third year of Lula's first term, in 2005, when the vision of the state as an active agent in infrastructure investments was consolidated, the change in the Ministry of the Civil House occurred, and, finally, the need to overcome the various implementation issues that were hindering the progress of the planned projects. A window of public policy was open.

The open window alone does not mean that it will be used but rather represents an opportunity for public policy entrepreneurs to present their solutions. Therefore, when problems arose in the implementation of the government's infrastructure projects in 2005, the Army had its solution ready to be offered to the government.

The collaboration of various agencies involved in infrastructure projects during the previous years allowed the military solution to the emerging problems to be placed on the agenda. Additionally, the government's need to address the diagnosed infrastructure needs brought it closer to the Army. This is because by employing the Army, various procedures related to procurement legislation could be bypassed. This situation was demonstrated in the three cases illustrated in this article, as partnership instruments were used between the agencies holding the budgetary resources and the Army Department of Engineering and Construction, avoiding the need to launch new bidding processes. Thus, it is possible to agree with the statement that governments are more susceptible to ideas that are feasible to implement, meaning those that align with the values of the expert community as well as the values of the government itself (França, 2007).

3 FINAL CONSIDERATIONS

Over 46 years, the use of the Army in the execution of civil works remained a tradition in Brazil's military reality. However, the resources allocated by various governments for the execution of such projects varied greatly. Thus, the comparison between them revealed that the Lula administration marked a distinct moment in relation to the democratically elected governments following the military period. In addition, when compared to the military governments, it also stood out in some aspects.

From 2005 onwards under the Lula government, the constant increase in financial resources passed on to the Army to carry out civil infrastructure works using the Army Cooperation Works System made it possible to compare these years with the height of the Economic Miracle under the military governments.

The comparison made with the financial variable as the main focus of the study confirmed a distinct increase in the Brazilian Army Corps of Engineers' involvement in such projects. This is because, according to the results gathered for the previous years, this military area was subjected only to small-scale projects and low financial resources for civil construction.

The comparison shows that the Lula administration allocated more financial resources to infrastructure projects than the military governments did during their peak years. However, unlike the previous period, the percentage of GDP allocated to the military was lower, which suggests that the increased budget for these projects had an insignificant impact on the government's overall budget planning.

The expanded role of the Army Corps of Engineers in major infrastructure projects throughout President Lula's two terms marked a paradigm shift in Brazil. Military personnel, who had been sidelined from major infrastructure projects since the 1980s, regained significance.

The explanatory model outlined in *Agendas, Alternatives, and Public Policies* (Kingdon, 1995) aligned seamlessly with the data gathered in this documentary research. From the analysis of various collected sources, numerous data, and facts were identified that fit perfectly into Kingdon's (1995) Multiple Streams framework, characterizing the phenomenon as a Window of Opportunity leveraged by both the Lula administration and the construction sector of the Army Corps of Engineers. Therefore, it is worth reiterating that, by aligning itself with various agencies involved in infrastructure projects, the military solution to the challenges faced in implementing civil works became an understandable approach adopted by the Lula administration. In addition, the government's need to address the infrastructure demands facilitated the use of the Army to overcome various issues related to procurement legislation at that time, as effectively demonstrated in the three cases presented in this article.

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