

Geopolitics of Pan-Amazonia: Brazil's role and the transformative power of its strategic hubs*

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Géopolitique de la Pan-Amazone : le rôle du Brésil et le pouvoir transformateur de ses noyaux stratégiques

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Abstract

Pan-Amazonia is a vast transboundary region in northern South America. It encompasses areas belonging to nine countries and includes the Amazon Rainforest, which stands out as a strategic zone with significant environmental, social, and geopolitical relevance. This region is notable for its ethnological diversity, abundant water resources, and a wealth of strategically important natural assets, all enriched by unique biodiversity. These characteristics attract the interest of various international actors while simultaneously posing complex transboundary challenges. Therefore, this article primarily aims to analyze the transformative power of Brazil's strategic hubs (industry, academia, and government) as the main drivers for fostering the development of Pan-Amazonia as a whole. The underlying hypothesis is that the strategic articulation among companies, universities, and the Brazilian State is crucial to convert Pan-Amazonia's potential into tangible power for all countries in the region. Brazil is poised to lead this strategic alliance, within the broader concept of the Grand Strategy of the Triple Triad (Góes, 2024), as the key

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to a prosperous future for the region. This exploratory and qualitative research is based on bibliographical sources and official documents, proposing a Pan-Amazonian Grand Strategy under Brazilian leadership.

Keywords: geopolitics, Pan-Amazon, strategic centers.

Resumo

A Pan-Amazônia é uma ampla região transfronteiriça situada na porção norte da América do Sul, englobando áreas pertencentes a nove países e abrangendo a Floresta Amazônica, que emerge como uma zona estratégica, com grande relevância ambiental, social e geopolítica. Essa região se sobressai pela diversidade etnológica, pela abundância de recursos hídricos e pela presença de recursos naturais estratégicos, enriquecida por uma biodiversidade singular. Tais características despertam o interesse de diversos atores internacionais, ao mesmo tempo em que impõem complexos desafios de caráter transfronteiriço. Dessarte, este artigo tem como objetivo principal analisar o poder transformador dos núcleos estratégicos (indústria, academia e governo) do Brasil como os principais vetores para impulsionar o desenvolvimento da Pan-Amazônia como um todo. Nesse sentido, parte da hipótese de que a articulação estratégica entre empresas, universidades e o Estado brasileiro é decisiva para converter o potencial da Pan-Amazônia em poder concreto para todos os países da região. Cabe ao Brasil liderar esta aliança estratégica, no âmbito da concepção mais ampla da *Grande Estratégia da Trílice Tríade* (Góes, 2024), como a chave para um futuro de prosperidade para a região. Esta pesquisa, exploratória e qualitativa, fundamenta-se em referências bibliográficas e documentos, propondo uma Grande Estratégia Pan-Amazônica sob liderança brasileira.

Palavras-chave: geopolítica, Pan-Amazônia, núcleos estratégicos.

Resumen

La Pan-Amazonía es una amplia región transfronteriza situada en la parte norte de América del Sur, que abarca territorios pertenecientes a nueve países e incluye la Selva Amazónica, la cual se erige como una zona estratégica de gran relevancia ambiental, social y geopolítica. Esta región destaca por su diversidad etnológica, la abundancia de recursos hídricos y la presencia de recursos naturales estratégicos, enriquecida por una biodiversidad singular. Tales características suscitan el interés de diversos actores internacionales, al tiempo que plantean complejos desafíos de carácter transfronterizo. En este sentido, el presente artículo tiene como objetivo principal analizar el poder transformador de los núcleos estratégicos (industria, academia y gobierno) de Brasil como los principales vectores para impulsar el desarrollo de la Pan-Amazonía en su conjunto. Se parte de la hipótesis de que la articulación estratégica entre empresas, universidades y el Estado brasileño es decisiva para convertir el potencial de la Pan-Amazonía en poder concreto para todos los países de la región. Corresponde a Brasil liderar esta alianza estratégica, en el marco de la concepción más amplia de la Gran Estrategia de la Trílice Tríada (Góes, 2024), como clave para un futuro de prosperidad para la región. Esta investigación, de carácter exploratorio y cualitativo, se fundamenta en referencias bibliográficas y documentos, proponiendo una Gran Estrategia Pan-Amazónica bajo liderazgo brasileño.

Palabras clave: geopolítica, Pan-Amazonía, núcleos estratégicos.

Résumé

La Pan-Amazone est une vaste région transfrontalière située dans la partie nord de l'Amérique du Sud, englobant des territoires appartenant à neuf pays et comprenant la Forêt amazonienne, qui se présente comme une zone stratégique de grande importance environnementale, sociale et géopolitique. Cette région se distingue par sa diversité ethnologique, l'abondance de ses ressources hydriques et la présence de ressources naturelles stratégiques, enrichie par une biodiversité singulière. Ces caractéristiques suscitent l'intérêt de divers acteurs internationaux, tout en posant de complexes défis de nature transfrontalière. Ainsi, le présent article vise principalement à analyser le pouvoir transformateur des noyaux stratégiques (industrie, université et gouvernement) du Brésil en tant que principaux vecteurs pour stimuler le développement de l'ensemble de la Pan-Amazone. L'hypothèse de départ est que l'articulation stratégique entre les entreprises, les universités et l'État brésilien est décisive pour convertir le potentiel de la Pan-Amazone en pouvoir concret pour tous les pays de la région. Il revient au Brésil de diriger cette alliance stratégique, dans le cadre de la conception plus large de la Grande Stratégie de la Triple Triade (Góes, 2024), en tant que clé pour un avenir prospère dans la région. Cette recherche, de nature exploratoire et qualitative, s'appuie sur des références bibliographiques et des documents, et propose une Grande Stratégie pan-amazonienne sous leadership brésilien.

Mots-clés : géopolitique, Pan-Amazone, noyaux stratégiques.

1 INTRODUCTION

Pan-Amazonia is an extensive region located in the northern portion of South America, encompassing territories belonging to nine countries: Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela, and French Guiana (an overseas territory of France). It is the cradle of the world's largest tropical rainforest and the planet's richest reservoir of biodiversity, constituting a geopolitical space endowed with a vast ecological heritage that has yet to be adequately harnessed by the Amazonian countries that share it. Transforming this immense potential—spanning energy resources, environmental/green assets, aquifers, biodiversity, the ancestral knowledge of Indigenous peoples, and natural resources—into tangible power requires coordinated action by the true drivers of development: strategic hubs, namely firms, universities, and Brazilian state institutions, articulated in partnership with their counterparts across the other Amazonian countries.

Indeed, Pan-Amazonia will only be able to fully realize its geopolitical potential if synergistic actions are undertaken by its strategic hubs, whether Brazilian or from the other countries of the region. Innovative firms, universities that generate technological knowledge, and governments acting as financing and regulatory authorities – within each Amazonian nation and in close regional cooperation – will be the transformative actors capable of ensuring a future of development and social well-being for the region and its peoples.

The emergence of the environmental movement between the 1960s and 1970s brought natural resources and the environment to the center of economic, social, and political debates. Its critique of the prevailing development model revealed not merely a tension, but a potential contradiction between economic growth and environmental sustainability (Damasceno *et al.*, 2011).

In this context, in 1978, Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela formalized the Amazon Cooperation Treaty with the aim of promoting balanced regional development. The agreement sought to ensure an equitable distribution of economic benefits and to reconcile growth with environmental preservation through multilateral cooperation. In Brazil, the treaty was incorporated into domestic law on 18 August 1980 through Decree No. 85,050, consolidating its status as a significant milestone in environmental diplomacy in the region.


A fundamental concept that emerges in the context of the Treaty is that of Pan-Amazonia, referring to the Amazonian territory shared by the countries that are signatories to the Amazon Cooperation Treaty. This notion goes beyond the purely geographical dimension, encompassing an integrated vision of sustainable development and the cooperative management of natural resources among the participating nations. Such an approach enables an equitable distribution of the benefits arising from this development among them.

From the same perspective, Souza (2014) defines Pan-Amazonia as an idea that:

[...] arises from the aggregation of all areas belonging to the drainage of the Amazon Basin and characterized by dense, humid forests. However, this concept, which originally derives from natural features, has expanded into the social sphere following the recognition of similar problems that have given rise to territorial conflict, thereby strengthening ethnic-based geopolitics centered on resistance to the socio-environmental impacts of developmentalist policies in the region (Souza, 2014, p. 59).

Pan-Amazonia encompasses the world's largest tropical forest biome and the most extensive hydrographic system on a global scale, covering an area of approximately 7.8 million square kilometers distributed across the territories of nine countries. From a geopolitical and economic standpoint, it is noteworthy that this biogeographical microregion – whose spatial concentration is predominantly within Brazil, which accounts for 67.8% of the total area – confers upon Brazil a position of marked preponderance in the regional context. This contrasts with the participation of other nations, such as Peru, whose Amazonian territorial share is limited to 13% of the total (Penna Filho, 2013).

According to the Ministry of Foreign Affairs of Brazil (2025):



The Amazon Region is an unavoidable subject in contemporary international debates on natural resources, sustainable development, climate change, and biodiversity. With a population of approximately 38 million people, the Amazon occupies about 40% of South American territory and hosts the world's largest megadiverse forest, serving as the habitat for roughly 20% of all known fauna and flora species. The Amazon Basin contains around 20% of the planet's surface freshwater. The Amazon Hydrological Cycle sustains a complex system of aquifers and groundwater, which may extend over an area of nearly 4 million square kilometers (Brasil, 2025).

Given the strategic importance of the Amazon, the countries that comprise this ecosystem face significant challenges while, simultaneously, encountering substantial opportunities. In this vein, and with the aim of harmonizing and intensifying regional cooperation, the signatory states to the Amazon Cooperation Treaty (ACT) approved, in Caracas, the Protocol of Amendment to the Treaty two decades after its signature. This initiative led to the establishment of the Amazon Cooperation Treaty Organization (ACTO), an international institution endowed with a permanent structure and its own funding (Brasil, 2025).

In December 2002, the Brazilian Government and the Amazon Cooperation Treaty Organization (ACTO) signed an agreement establishing Brasília as the seat of the Organization's Permanent Secretariat. It is noteworthy that, to date, ACTO remains the only multilateral international organization headquartered in Brazil (Brasil, 2025).

For the attainment of the objectives pursued by ACTO member states, the adoption of a strategic-hub culture oriented toward sustainable economic development is indispensable – one that respects environmental preservation while promoting the well-being of local populations. Accordingly, this article seeks to examine how coordination among firms, universities, and state entities in Pan-Amazonia constitutes a necessary condition for consolidating this pan-Amazonian space as a vector of geopolitically relevant power at the regional level, in conformity with the principles of sovereignty, sustainable development, and South American integration.

In fact, building upon the concept of strategic hubs or actors – here conceived as an expansion of the traditional triple helix model (firms, universities/research institutions, and government) – which, acting in full synergy, are expected to promote national development, eliminate poverty and marginalization, and reduce social and regional inequalities within a free, just, and solidaristic society, as set forth in items I to IV of Article 3 of the Federal Constitution.¹

¹ Thus, *strategic nuclei* are understood as all those actors, entities, companies, or segments—whether private or state-owned, and whether economic, commercial, technological, academic, scientific, financial, regulatory, or industrial—provided that they are capable of participating effectively in international competition under the influence of global production, knowledge, and value chains, with or without investment from the Brazilian State (Góes, 2022, p. 70).


In this context, the consolidation of the Amazon Cooperation Treaty Organization (ACTO) is aligned not only with the provisions of Article 4, sole paragraph, but, more importantly, with Article 3, items I to IV, of the 1988 Constitution (Brasil, 2024). These constitutional provisions establish as objectives of the Federative Republic of Brazil the economic, political, social, and cultural integration of the peoples of Latin America, aimed at the formation of a Latin American community of nations, as well as the foundations of national development anchored in the pursuit of reducing social and regional inequalities, eradicating poverty and marginalization, and promoting a dignified life for all Brazilians.

This means that the formulation of a “Grand Pan-Amazonia Strategy” must provide for synchronized strategic actions by the State aimed at fostering the creation of firms and strengthening universities and research centers in the region. In other words, enhancing the resilience and expansion of the region’s triple helix (industry–academia–government) holds the potential to constitute the primary pathway for safeguarding the fundamental rights of Pan-Amazonian Indigenous and riverine populations. In fact, the design of such a strategy may prove crucial to the protection of these communities, which maintain a deep connection to the land and depend upon it for the preservation of their cultural, linguistic, and biological diversity. Ensuring their rights is therefore not only a matter of social justice, but also a strategic necessity for Brazil, including the significant positive gains that its international projection may achieve within the Global Governance System.

Moreover, the strategy has the potential to play a meaningful role in the environmental preservation of Pan-Amazonia, one of the world’s richest and most diverse ecosystems, whose protection is vital to global climate regulation and to the overall health of the planet. Its central challenge lies in constructing a strategic archetype capable of identifying an equilibrium between the imperatives of environmental conservation and the region’s economic and social development.

Accordingly, in order to harmonize these constitutional values—which place national development and environmental protection in tension—the Grand Pan-Amazonia Strategy should be guided by the principle of *practical concordance*, which presupposes mutual concessions between constitutional provisions of equal normative dignity.

In sum, it should be emphasized that these constitutional precepts constitute a fundamental geopolitical guideline for Brazil’s Grand Strategy. Nonetheless, while Latin American integration represents the most promising pathway in the long term, its implementation faces complex structural and political challenges. In this context, the Amazon Cooperation Treaty Organization (ACTO) emerges as a more viable strategic mechanism in the



regional setting, as it focuses on Pan-Amazonia - an area of shared interests and tangible priorities for its member states.

Against this backdrop, it therefore falls to Brazil, as the natural custodian of the largest territorial share of Pan-Amazonia, to assume the mission of conducting this geopolitical orchestra—fine-tuning its Strategic Hubs and synchronizing diplomatic instruments to achieve a successful concert. Ultimately, this situation is distilled into the following aphorism: “Either Brazil assumes its natural leadership in South America, or it becomes geopolitically subordinate to one or more centers of power, particularly China or the United States” (Góes, 2024, p. 38).

2 THE GEOPOLITICS OF PAN-AMAZONIA AND THE CONSTRUCTION OF A BRAZILIAN MULTILATERAL GRAND STRATEGY

From the earliest stages of colonization to the present day, the Amazon has been the object of strategies of economic exploitation and territorial occupation primarily oriented toward meeting exogenous demands. Sovereignty over this region has consistently constituted a crucial element of Brazilian foreign policy, as evidenced as early as the colonial period by the Portuguese expansion beyond the limits established by the Treaty of Tordesillas – a decisive geopolitical movement to secure Lusitanian control over the Amazon Basin (Aguiar Cavalcante, 2025).

From this perspective, the contribution of Bertha Becker (2005) is particularly noteworthy, as her geopolitical approach emphasizes that:

Geopolitics has always been characterized by the presence of pressures of various kinds, including interventions in the international arena ranging from the most moderate forms to wars and territorial conquests. Initially, these actions identified the State as their fundamental subject, since it was understood as the sole source of power and the exclusive embodiment of politics, and disputes were analyzed only among States. Today, however, geopolitics operates primarily through the power to influence State decision-making regarding the use of territory, given that territorial conquest and colonial domination have become prohibitively costly (Becker, 2005, p. 71).

From the same analytical perspective, Ferreira (2024) positions the Amazon as a structuring axis of national development policies from the standpoint of central power, arguing that:

The Amazon, more intensively than other regions of Brazil, given its strategic, geopolitical, and environmental significance, has been – and continues to be – the object of multiple government plans aimed at its process of occupation and the use of its territory. These initiatives result from geopolitical planning intended to ensure the effective incorporation of this vast region into the national territory, with the purpose of integrating it into the national economy and encouraging migration (Ferreira, 2024, p. 29).

However, in the formulation of transnational policies for the Brazilian Pan-Amazonian area, there is a discernible predominance of commercial interests and productive economic development over social, environmental, and collective security dimensions (Souza Leite Garcia *et al.*, 2024). This strategic region encompasses transboundary water systems, including the international basin of the Amazon River, the *Alter do Chão* Aquifer, lacustrine complexes, and groundwater reserves. It also possesses hydrological logistical infrastructure, with fluvial waterways that are essential for the transportation of people (population mobility), local agricultural production, and natural resources extracted from the territory. Finally, the region stands out for its unique ecological heritage, endowed with terrestrial biomes of global relevance and ecosystems that are fundamental to environmental balance.

In the view of Kourliandsky (2023), interest in the Amazon region has its roots in the sixteenth century:


The Amazon corresponds to a European imaginary that was subsequently Westernized. This imaginary, although multifaceted, was constructed by Spanish, French, and Portuguese colonizers from the sixteenth century onward. It was later “enriched” by the imperial powers of the nineteenth century and, in contemporary times, by the powers of the G7 and their non-governmental organizations (Kourliandsky, 2024, p. 60).

As early as 1938, Mário Travassos emphasized the need for Brazil to recognize the geographical magnitude of the Amazon region. From this standpoint, Pan-Amazonia – formed by the nine countries that share the Amazon biome, namely Brazil, Bolivia, Colombia, Ecuador, Guyana, Peru, Suriname, Venezuela, and French Guiana – constitutes one of the world’s most strategic regions from environmental, economic, cultural, and geopolitical perspectives.

In light of growing international pressure for environmental preservation, combined with internal challenges related to socioeconomic development and regional integration, it becomes indispensable for Brazil to exercise proactive and responsible leadership in the formulation of a multilateral Grand Strategy for Pan-Amazonia.

It is in this vein that this study seeks to underscore the region’s geopolitical relevance for Brazil, as well as the need to harmonize environmental preservation with sustainable development and, above all, the urgency of consolidating a multinational grand strategy under Brazilian leadership, with the Amazon Cooperation Treaty Organization (ACTO) serving as the primary institutional platform.

Accordingly, the Amazon Cooperation Treaty Organization (ACTO) presents itself as the most appropriate multilateral mechanism for coordinating convergent interests and mediating tensions among the Amazonian countries. As previously noted, established in 1978



and revitalized in recent years, the Organization possesses the legitimacy and the legal-institutional scope required to host a Pan-Amazonian Grand Strategy capable of articulating environmental, economic, security, and social policies under a framework of shared sovereignty and regional solidarity.

Brazilian leadership within ACTO should not be confined to the defense of national interests; rather, it should assume responsibility for building consensus and designing a long-term strategy that seeks equilibrium between environmental conservation and socioeconomic development. This necessarily entails harmonizing the constitutional principles of promoting national development and protecting the environment through the principle of *practical concordance*, thereby avoiding normative hierarchies and privileging integrative solutions.

Pan-Amazonian integration faces complex challenges, including economic disparities among member countries, political instability, insufficient transportation and communication infrastructure, as well as divergent extraregional geopolitical interests. Nevertheless, the region also offers unique opportunities for scientific cooperation, the development of sustainable value chains, and the recognition and valorization of traditional knowledge.

The coordination of joint research projects on climate change, the sustainable management of natural resources, and food security – combined with professional training programs and digital inclusion initiatives – has the potential to transform Pan-Amazonia into a global laboratory for sustainable development and socio-environmental innovation.

For example, Marine Spatial Planning (MSP), which, according to the theoretical framework advanced by Andrade and Carvalho (2025), is characterized as:

[...] an internationally recognized tool for the organization and governance of maritime spaces and of the activities – economic or otherwise—conducted within them. As a public process involving the mapping and analysis of maritime areas that encompasses multiple interests, actors, and factors, it constitutes a complex undertaking. Marine Spatial Planning (MSP) is a necessity for the Brazilian State, consistent with the commitments assumed by Brazil before the international community (Andrade; Carvalho, 2025, p. 6).

In light of the growing complexity of global security dynamics and Brazil's strategic role in the sustainable development of the Amazon, the country must implement a multidimensional approach that combines active diplomacy, integrated strategies, and multilevel cooperation among the members of the Amazon Cooperation Treaty Organization (ACTO).

To conclude, in this regard, it is worth highlighting the perspective advanced by Spader (2024) on this issue:

[...] Brazil has implemented public policies across multiple spheres of National Power to promote environmental protection in the Legal Amazon,

with a view to maintaining territorial sovereignty. These initiatives aim to strengthen environmental governance; increase the State's presence in the North; combat deforestation and illegal mining; promote research and innovation; and ensure the sustainability of the Legal Amazon. Furthermore, multilateral solutions fall within the scope of Brazilian environmental security, wherein the importance of international cooperation in addressing socio-environmental challenges in the region is duly recognized" (Spader, 2024, p. 14).

Pan-Amazonia constitutes a singular geopolitical space in which complex challenges and strategic opportunities intersect, requiring Brazil to exercise proactive and responsible leadership. Such engagement must be guided by national and regional interests, in accordance with constitutional principles and the international commitments undertaken, while reconciling sustainable development with the preservation of the Amazon biome.


3 PAN-AMAZONIA AS A CORE PILLAR OF THE SOUTH AMERICAN TRIAD IN BRAZIL'S GRAND STRATEGY FOR THE TWENTY-FIRST CENTURY

Brazil's positioning within the emerging multipolar order constitutes a fundamental strategic challenge for the country in the twenty-first century. In light of the reconfiguration of global power, two options present themselves: to assume a leading role in shaping this new international architecture or to occupy a peripheral position, acting merely as a spectator within the global context.

Brazil urgently requires a Grand Strategy—a project that goes beyond the National Defense Strategy (END), the National Defense Policy (PND), or isolated economic plans. Such a comprehensive vision must integrate all instruments of national power – political, economic, military, and diplomatic – in order to achieve the nation's permanent objectives, as enshrined in the Constitution of Brazil.

As masterfully articulated by Meira Mattos, Brazil's concept of development is profoundly democratic and rooted in the traditions of Christian philosophy. Far from being confined to mere economic growth, genuine development, to be authentic, must be integral; that is, it must simultaneously promote all people in their fullness and each individual in his or her entirety (Mattos, 1975).

In this sense, in order to examine Pan-Amazonia as one of the pillars of the South American Triad, it is first necessary to understand the foundational bases of the Grand Strategy of the Triple Triad (Góes, 2024), which structures the country's international projection around three interdependent triads—South American, Atlantic, and World Power – within a broader and more integrated vision of Brazil's strategic priorities. These triads reflect Brazil's principal



internal and external challenges on the global stage, as well as its geopolitical ambitions to position itself among the world's five leading powers.

The first strategic axis – **the South American Triad** – posits South America as Brazil's vital space (*Lebensraum*), a fundamental sphere of influence for projecting its power and consolidating its leadership within the new configuration of the postmodern global order. Consequently, the central challenge of Brazil's Grand Strategy lies in the synergistic articulation of South America's three core geopolitical axes: the Amazon Arc, the Andean Pact, and the Southern Cone. Within this tridimensional framework, the possibilities for Brazil's projection toward the Pacific Ocean are likewise examined.

The second structuring dimension of Brazil's Grand Strategy is the **Atlantic Triad**, conceived as a fundamental pillar of national ocean policy. This strategic axis integrates three essential components: the Blue Amazon (Brazil's sovereign maritime area); strategic projection toward West Africa and the Lusophone space, particularly through the Community of Portuguese Language Countries (CPLP); and presence along the Antarctic Front. In parallel with the role of the South American Triad as a vector for expansion toward the Pacific, the Atlantic Triad also incorporates the projection of Brazilian interests toward the Arctic Ocean, thereby completing the spectrum of the country's oceanic engagement.

Thus, on the premise that oceanopolitics represents the maritime dimension of global geopolitics, Brazilian oceanopolitics may be understood as the strategy for employing oceanic spaces as a vector of national development and a means of projecting the power of the Brazilian State.

The third structuring axis – the **World Power Triad** – articulates Brazil's strategic relations with the three principal global power centers: the United States, Europe, and China, without prejudice to relations with other relevant powers such as Russia, India, and Japan. Within this framework, Brazil's full and competitive integration into global value chains—including supply, production, and innovation—requires a tripartite approach that simultaneously engages North American, European, and Asian markets, with particular emphasis on China's dynamism.

As the central axis of this triad of global influence, the imperative stands out to formulate an autonomous Brazilian Grand Strategy, capable of engaging with these hegemonic poles without geopolitical subordination, while preserving national decision-making independence.

The diagram below (Figure 1) outlines the fundamental pillars of Brazil's Grand Strategy for the twenty-first century, with emphasis on the integrated development of the

innovation ecosystem—namely, the productive articulation among the industrial sector, academic institutions, and governmental policies in Brazil

Figure 1 - Brazil's Triple Triad Strategy



Source: Adapted from Góes (2024); free translation by the translator.

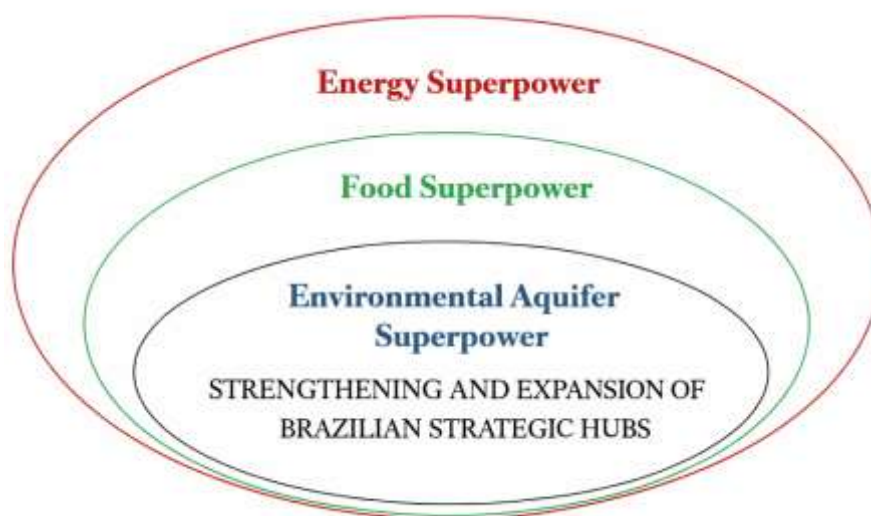
According to Góes (2024), Brazil's National Grand Strategy is grounded in three essential premises:

- a) the first premise is that its inherent objectives are the fundamental objectives of the Federative Republic of Brazil, duly codified in the Constitution; that is, the objectives of Brazil's Grand Strategy correspond to those set forth in Article 3, items I to IV, of the 1988 Federal Constitution;
- b) the second premise is that the Grand Strategy must be formulated with the inescapable commitment to fulfill the categorical imperative of Brazilian geopolitics: to elevate the Nation to a position of prominence among the world's five leading powers;
- c) the third premise is that priority must be given to strategic actions intrinsically linked to Brazil's four major geopolitical archetypes, which confer upon the country the condition of a superpower in the energy, food, environmental, and aquifer domains (Góes, 2024, p. 44–45).

Therefore, the third strategic axis for the twenty-first century is consolidated through the prioritization of national development grounded in four fundamental geopolitical archetypes that project Brazil as an energy superpower, a food superpower, an aquifer superpower, and an environmental superpower (Figure 2).

In this context, Brazil's strategic vocations as a hydrological and environmental superpower are intrinsically linked to the Pan-Amazonian biome integrated into its national territory.

Figure 2 - Foundational Geopolitical Archetypes of Brazil's 21st-Century Grand Strategy



Source: Adapted from Góes (2024); free translation by the translator.

Within this strategic framework, emphasis is placed on applying an expanded conception of the triple helix—firms, universities, and government—as the structuring axis for the creation of regional strategic hubs. The synergistic action of these actors, organized through platforms of regional and transnational cooperation, can foster economic development, technological innovation, and social inclusion, while reducing inequalities and strengthening Latin American integration, as established in Article 3, items I to IV, of the 1988 Federal Constitution of Brazil.

This methodological approach proposes not only the strengthening of local teaching and research institutions and the creation of firms oriented toward the bioeconomy, renewable energy, and environmental services, but also the implementation of public policies capable of safeguarding the rights of traditional and Indigenous communities, whose symbiotic relationship with the forest is essential to the preservation of the knowledge, cultures, and practices that sustain the region's biological and cultural diversity.

Here lies the foundational basis of Pan-Amazonian geopolitics—namely, the articulation of actions by firms, universities, and Amazonian countries oriented toward the challenges of sustainable regional development. To achieve this objective, it is therefore essential to understand the historical process of occupation of this region as one of the pillars underpinning sustainable development in the Amazon.

Brazil, as the largest holder of Amazonian territory and a prominent actor on the international stage, exercises decisive influence in South America. The policies adopted by the

country over time serve not only as references but also as lessons for other nations—either as models to be followed or as cautions regarding potential missteps (Rito, 2024).

In this sense, to secure recognition as an international steward of the Amazon, Brazil must undertake a critical assessment of its historical policies of territorial occupation and regional development, identifying both advances and inherent contradictions in this process. From such an evaluation, it will be possible to derive theoretical and empirical insights capable of underpinning a sustainable governance model adapted to the region's biogeographical and sociocultural complexities.


In sum, to convert its immense potential into real power, it is necessary to formulate a multinational Pan-Amazonian strategy in which the role of the business and industrial sector is crucial for developing high value-added, low environmental-impact value chains. It is therefore urgent to anchor investments in the bioeconomy (pharmaceuticals, cosmetics, bioproducts), as well as in green technologies and environmental services (such as carbon credits), capable of generating wealth directly within the region, creating qualified jobs, and promoting the replacement of deforestation and illegal mining.

In this vein, national and regional firms, supported by strategic actions undertaken by Amazonian states, act as the architects of the transformation of natural resources into globally competitive products, establishing a solid economic base that strengthens the geopolitical position of the Amazonian countries.

Universities and research centers, in turn, constitute the vectors of the knowledge required to uncover and rationally harness Amazonian potential. They are indispensable for mapping biodiversity and ecosystems across the Amazon Arc; developing technologies directly related to regional specificities; and training highly qualified human capital to operate in these emerging sectors of the green economy.

Within a Pan-Amazonian strategic framework, it is imperative to preserve and valorize the traditional knowledge of Indigenous communities by integrating it with innovative, duly patented technological solutions. Such scientific and technological knowledge should be generated through networked cooperation with foreign institutions and counterparts from other Amazonian countries, thereby establishing a robust foundation for the development of new green products.

Similarly, public authorities at all levels—federal, state, and municipal—acting in Pan-Amazonian cooperation, must be capable of formulating and implementing measures within a Pan-Amazonian Grand Strategy oriented toward sustainable development and the protection of the biome. To this end, it is essential to establish attractive regulatory frameworks that



encourage foreign direct investment in the responsible use of natural resources, as well as investment in critical infrastructure, including logistics, communications, clean energy, and sanitation.

It must be acknowledged that genuine transformative capacity derives from the synergy of the Pan-Amazonian triple helix, led by the Brazilian triple helix. The urgent task, therefore, is to convert natural endowments into tangible wealth, consolidate a sustainable forest-based economy as a pillar of national and regional power, and strengthen both sovereignty and the collective bargaining capacity of Amazonian countries in the face of global challenges and external interests.

Ultimately, Pan-Amazonia will only fully realize its potential as a source of strategic power for Brazil and the other Amazonian countries through the determined and coordinated action of their strategic hubs. Innovative firms and start-ups, universities that generate technological knowledge, and governments acting as financiers and regulators are indispensable agents for catalyzing this paradigmatic transformation of the Amazon region. The challenge is undeniably substantial; nonetheless, sustained synergy among enterprises, universities, and state institutions is essential to translate Pan-Amazonia's strategic potential into real power for all countries of the region.

Such a perspective not only consolidates technological autonomy but also projects the Amazonian countries as a cohesive bloc with enhanced resilience to juridical warfare (*lawfare*) perpetrated by external actors. In doing so, it enables the preservation of Pan-Amazonia as a global ecological heritage while, simultaneously, affirming it as a pillar of the region's tangible geopolitical power—particularly that of Brazil.

4 CONCLUSIONS

Pan-Amazonia is, above all, a space of challenges and opportunities that requires Brazil to exercise responsible leadership by articulating national and regional interests in accordance with constitutional principles and international commitments.

The formulation of a Pan-Amazonian Grand Strategy—anchored in the expanded triple helix and operationalized through the Amazon Cooperation Treaty Organization (ACTO)—would enable the construction of collective solutions to the region's environmental, social, and economic challenges, thereby consolidating national sovereignty and enhancing Brazil's international projection within the Global Governance System.

In this sense, harmonizing environmental preservation with socioeconomic development is not merely an ethical and constitutional requirement; it also represents a geopolitical opportunity for Brazilian leadership in one of the most sensitive and strategic issues of the twenty-first century.

For Brazil—whose Legal Amazon accounts for approximately 60% of national territory—Pan-Amazonia constitutes a domain for affirming sovereignty, advancing international projection, and consolidating security and regional integration policies. The growing internationalization of environmental discourse and exogenous interests directed at the region place upon the country the responsibility to lead a strategy that safeguards national and regional sovereignty while upholding global commitments to environmental preservation and sustainable development. This is the paramount challenge facing Brazilian strategists on the horizon to 2050.

The Amazon transcends its environmental significance and assumes the character of a first-order geopolitical asset. Encompassing approximately 7.8 million km² and hosting the world's largest tropical rainforest, this territory plays a decisive role in global climate regulation, biodiversity stocks, and freshwater resources. At the same time, it faces long-standing socioeconomic vulnerabilities, including high poverty rates, social exclusion, and inadequate infrastructure.

As demonstrated, Pan-Amazonia stands among the most strategic territories on the planet, combining unparalleled environmental wealth, traditional peoples, and high-value economic potential—hence its relevance to the realization of the four major geopolitical archetypes that position Brazil as an environmental, energy, food, and aquifer superpower.

Comprising Amazonian territories distributed across nine South American countries, Pan-Amazonia holds environmental, economic, and geopolitical significance that extends beyond regional boundaries to a planetary scale. Heightened international mobilization around Amazon conservation, coupled with structural challenges of integration, development, and security, compels the Amazonian countries—particularly Brazil—to formulate coordinated and effective strategies.

Accordingly, this article has reflected on the region's geopolitical importance for Brazil and has argued for the formulation of a multilateral Grand Strategy under Brazilian leadership, with ACTO serving as the coordinating platform. Drawing on the methodology of strategic hubs—an expansion of the triple helix model—it proposes the creation of synergistic arrangements among firms, universities, and local governments as a means to ensure sustainable development, safeguard social rights, and protect Pan-Amazonia's environmental heritage.

Within this framework, a Pan-Amazonian Grand Strategy led by Brazil is advanced to reconcile socioeconomic development with environmental preservation through multilateral mechanisms and synergies among strategic actors.

Ultimately, a Brazil-led Pan-Amazonian Strategy breaks with the neocolonial logic of primary commodity exportation and advances a geopolitical renewal of the region grounded in archetypes that valorize the resilience of established strategic hubs while catalyzing the creation of new firms, research centers, and state institutions capable of effective insertion and competitiveness in the international system. It follows, therefore, that integrated governance and a balanced relationship between economic use and sustainability are essential to the region's future.

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