ISSN 2178-8839

Artigo Rev. Conj. Aust. | v.13, n.62 | abr./jun. 2022

Historical relations between Brazil and Paraguay: negotiations and quarrels behind Itaipu Dam

Relaciones históricas entre Brasil y Paraguay: negociaciones y disputas detrás de Itaipú Binacional

DOI: https://doi.org/10.22456/2178-8839.116432

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Abstract

In the context of Brazil-Paraguay historical relations, the construction of the Itaipu hydroelectric dam on the Paraná River - on the border between the two countries - was one of the most important initiatives (in political, economic and energy terms). The events between Brazil and Paraguay involving the Itaipu project are part of South America's geopolitics. In this sense, the present article will focus on the negotiations that preceded and continued throughout the construction of the plant and the treaties and main events and agreements that established the criteria for the operation of the hydroelectric power plant. The Itaipu Treaty, signed in 1973, provides for the revision of financial clauses by 2023. Thus, the present work aims to examine the relations between Brazil and Paraguay throughout history and analyze the impacts of the Itaipu Dam on this relationship. This article is qualitative research, from the perspective of International Relations and Political Geography, enriched with cartography created by the authors with Arc GIS software.

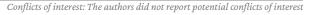
Keywords: Itaipu Dam; Brazilian foreign policy; Paraguay.

Resumen

En el contexto de las relaciones históricas entre Brasil y Paraguay, la construcción de la central hidroeléctrica de Itaipú Binacional, en el río Paraná – en la frontera entre los dos países - fue una de las iniciativas más importantes (en términos políticos, económicos y energéticos). Los eventos entre Brasil y Paraguay relacionados con el proyecto de Itaipú son parte de la geopolítica de América del Sur. En este sentido, el presente artículo enfocará los principales eventos y negociaciones que precedieron y continuaron a lo largo de la construcción de la central hidroeléctrica y los tratados y convenios que establecieron los criterios para su operación. El Acuerdo de Itaipú, firmado en 1973, prevé la revisión de las cláusulas financieras para el año 2023. En este sentido, el presente trabajo tiene como objetivo examinar las relaciones entre Brasil y Paraguay y analizar los impactos de Itaipú Binacional sobre ellas. Se trata de una investigación cualitativa, desde la perspectiva de las Relaciones Internacionales y de la Geografía Política, enriquecida con cartografía creada por los autores con el software Arc GIS.

Palabras clave: Itaipú Binacional; Política exterior de Brasil; Paraguay.

Received: 02 July 2021 Accepted: 28 March 2022





Introduction

In 2020 Itaipu Dam was the world leader in hydroelectric power generation. The plant supplies 10.8% of the energy consumed in Brazil and 88.5% of the energy consumed in Paraguay. The Itaipu Dam project was the largest Brazilian hydroelectric project, demanding a complex articulation with neighboring countries with whom Brazil shared the middle course of Paraná River. A project that was marked by the Argentine opposition, which lasted until 1979, when the Tripartite Agreement was signed.

It is important to point out that the origin of the hydroelectric power plant dates back to the Brazilian military regime period (1964-1985), when the geopolitics of the Southern Cone opposed Brazil and Argentina in the dispute for hegemony in the subcontinent. At that time, part of the strategy drawn up by the Brazilian government to bring Paraguay into its orbit of influence was the construction of the Itaipu hydroelectric plant; the Friendship Bridge; the inauguration of BR-277 highway, between the port of Paranaguá and Foz do Iguaçu (on the border with Paraguay); the granting of credits to Paraguay for road infrastructure works (paving roads and building bridges); the establishment of a Brazilian colonization company in Department of Nueva Asunción, among other measures (LAINO, 1979; MENEZES, 1987; MELLO, 1996).

The construction of the Itaipu hydroelectric dam triggered territorial transformations that set up new cross-border regional spaces in the heart of the Río de La Plata basin (figure 1). The power plant can be considered a milestone in the regional integration process that would give rise to MERCOSUR in the 1990s (ESPÓSITO NETO, 2020).



Figure 1 – Río de la Plata basin map and the strategic location of Itaipu Dam

Source: Created by the authors

One of the main factors of the cross-border activity in the Tri-Border Area between Brazil-Argentina-Paraguay, the Itaipu Dam, besides being an important tourist attraction and substantial source of income, has a great political and social weight in the region. In its headquarters, activities of conception, planning and control of a wide area where its facilities and companies are located are carried out. The Itaipu Dam influences the daily life of a region that goes beyond Foz do Iguaçu and Hernandarias, cities that house the dam and its facilities. The power station affects several aspects of the economic, political and social life of the Tri-Border Area (LIMA, 2006).

Regarding the company's importance in terms of power generation, in 2019, one of the driest years in its history, the electricity produced by the Itaipu hydroelectric plant supplied 11.3% of Brazil's demand and 88.1% of Paraguayan demand (ITAIPU BINACIONAL, 2021a), thus configuring one of the main sources of electricity of the two countries and an important source of foreign exchange for Paraguay, which gives, through monetary compensation, the electricity that it owns and that is not used to Brazil (ITAIPU, 1973). In view of these considerations, it is important to emphasize that a crucial point for the future of the plant, which is strategic for both countries, is the renegotiation of the treaty of use, which expires in 2023 - Annex C of the Itaipu Treaty. Until then, both countries will need to sign a new deal to determine the distribution of energy of Itaipu Dam.

In order to analyze the process of creation of the Itaipu hydroelectric dam and to assess its key role in Brazil-Paraguay relations and in the balance of power in the Río de La Plata basin, this article initially provides a historical analysis of relations between Brazil and Paraguay throughout the 19th and early 20th centuries and the main episodes of border disputes, highlighting the project to build a hydroelectric plant in Salto de Sete Quedas, also known as Seven Falls of Paraná River, or Salto del Guairá (in Spanish). A project that would undergo changes in its location and would eventually result in the construction of Itaipu Dam.

In this study, we opted for the qualitative research and the inductive approach based on the historical-descriptive procedure method, which aims to "lead to conclusions in which the content is much broader than the premises on which they were based" (MARCONI; LAKATOS, 2003). For this purpose, a bibliographical review and an analysis of documentation and official data were carried out; the theoretical framework of Raymond Aron's classical realism (2002) was selected, especially in the construction of a Brazilian preponderance in the region (MELLO, 1996) to explain the reasons for the construction of Itaipu Dam and its impacts. As for the 2023 renegotiations, the "role theory" is used (GUIMARÃES; MARTIN, 2017; OLIVEIRA E SILVA; LABRIOLA, 2019) and Robert Putnam's (1988) two-level game in the attempt to build the Brazilian leadership in South America (BURGES, 2016; ESPÓSITO NETO; PAULA, 2015).

The article then addresses the Brazilian geopolitical context in the 1960s when the Ata das Cataratas was signed followed by Argentina's opposition to the construction of a hydroelectric dam between Brazil and Paraguay, with Buenos Aires evoking the principle of "prior consultation". The text also includes the negotiations that preceded and continued throughout the construction of the plant and the treaties and agreements that established the criteria for the operation of the hydroelectric power plant (relating to energy generation capacity and number of turbines, among others), the composition of the board of directors and the division of posts between Brazilians and Paraguayans. Finally, the last section of the work is dedicated to the renegotiation of the Itaipu Treaty, which expires in 2023.

The issue is still on the bilateral agenda today. On one side, Paraguay intends to obtain a series of trade-offs, such as an increase in the amount paid and direct sales to Brazilian consumers. To accomplish this, Paraguayan negotiators appeal to nationalism. On the other hand, Brazil seeks to keep its status as a regional leader, maintain its energy supply, and reduce, as much as possible, the energy tariff. It is important to emphasize that the current negotiations (in 2021) continue to be surrounded by secrecy on both sides.

Historical relations between Brazil and Paraguay

After Brazil's independence, in 1822, the first official contact with Paraguayan authorities took place in 1825, in the middle of the Francia dictatorship, with Brazil being the only country to have a delegation received by the government of Asunción, albeit in a cold manner (ALCALÁ, 2005; LYNCH, 2009; RAMOS, 1976).

Although relations between the two countries were satisfactory in diplomatic terms, the border issue has always been a nuisance. After Francia's death and the rise of Lopez and Alonso, some interactions began to change and new agreements emerged, in addition to the recognition of Paraguay's independence, which had a negative impact on

Argentina. Despite this, Brazilian imperial diplomacy has also led other countries to recognize Paraguayan independence in a positive way (BARRIO, 2010).

The Brazilian Empire through the celebration of more treaties (friendship, limits, trade, navigation, etc.) drove the new relations with Asunción and diplomacy between the two countries became increasingly stable, especially in military matters. This situation began to deteriorate as border issues began to be discussed. The Republic of Paraguay was calling for the demarcation from the Paraná River, claiming as an international limit the Salto Sete Quedas, but the Empire of Brazil (CALÓGERAS, 1998) pushed this discussion into the background.

In addition to the issue mentioned above, some incidents such as that of Morgenstern in 1849, involving the dispute over Argentine territories, would make bilateral cooperation even more difficult, which worsened the following year with the decision of Mato Grosso province's president to build a fortification on the border, controlling the entry and exit of natives, which was seen by Asunción as an act contrary to its sovereignty. In view of the situation, the Paraguayan government sent 600 men to the border to expel the Brazilians (RAMOS, 1976).

Despite these disagreements, the two countries signed the Alliance Treaty in 1850, which provided for reciprocal commitments, in addition to free navigation between the Paraná and La Plata rivers, in the event of war against Buenos Aires (ESPÓSITO NETO, 2020). Two years later, the Brazilian Empire again discussed the boundary treaty, since the relationship between Argentina and Paraguay was satisfactory and coherent. The Brazilian Empire suggested new negotiations on the Río de La Plata basin and the question of limits, which was refused by the Republic of Paraguay. The Brazilian response to the Paraguayan denial led to numerous conflicts and insinuations that resulted in the expulsion of the Brazilian representative from Asunción and the imposition by Paraguay of numerous obstacles to navigation on the Paraná River (RAMOS, 1976).

Years went by and the geopolitical situation of the Río de La Plata basin resulted in an alignment of political groups in Brazil and Argentina with their peers in Río de La Plata basin, culminating in an international intervention in Uruguay's foreign policy. With this, Paraguay, through an official note, broke diplomatic relations with the Brazilian Empire and began to prohibit the navigation of Brazilian ships in Paraguayan waters. In turn, the government of Uruguay broke off relations with Paraguay, which invaded Brazil and Argentina, starting what would be the biggest conflict in South America's history. The union of forces between Argentina, Brazil and Uruguay, with the signing on 1 March 1865 of the Triple Alliance Treaty against the Paraguayan advance, would name the Triple Alliance War (1864-1870). The bloodiest armed conflict in Latin America (the lowest estimates of deaths are: 100,000 Brazilians, 30,000 Argentines, 10,000 Uruguayans and 300,000 Paraguayans (DE RE MILITARI, 2020), which caused a wave of hunger and disease, resulted in the death of half the Paraguayan population (the country lost more than 2/3 of the male population) (DORATIOTO, 2002).

At the end of the war, in 1869, Paraguayan citizens, opposing López, installed a provisional government in Asunción. The draft new constitution was approved on November 18, 1870 and the electoral process and the work of the Constituent Assembly were accompanied by representatives of the Triple Alliance countries, which at that time occupied various parts of Paraguayan territory (SALUM-FLECHA, 2006). The allies aimed at ensuring the formal independence of the Republic of Paraguay and opening peace negotiations. The negotiations on border issues and the other terms for establishing peace would take place two years later (DORATIOTO, 2002; 2011).

In 1872, the resumption of Brazilian-Paraguayan diplomacy took place under the Treaty of Peace and Perpetual Friendship (Loizaga - Cotegipe Treaty), which stipulated the payment of compensation by the Paraguayan state for the imperial government's war expenses and damage to public and private property. The treaty also reaffirmed the freedom of navigation on the rivers of the Río de La Plata basin (GARCIA, 2008).

The border negotiations gained momentum in 1872 with the Complementary Boundary Treaty. The demarcation took place in the Leap of Seven Falls, a fact that had a negative impact on Argentina (ESPÓSITO NETO, 2020). As the years went by and the Brazilian position hardened, relations between Brazil and Paraguay deteriorated and it was only in the second quarter of the 20th century, 1927, that dialogues between the Brazilian and Paraguayan governments on the subject began, which resulted in the Complementary Boundary Treaty of 1872, which became effective on December 3, 1929 (ACCIOLY, 1938).

The two-year delay in the execution of protocol procedures in the executives and legislatures of both countries was the result of a border incident on an island near Porto Murtinho, when Brazilian troops displaced a group of Paraguayans who were colonizing a region "not demarcated" by Paraguay (ESPÓSITO NETO, 2020).

With the 1929 treaty, the border issues that had been the subject of the Joint Commission's attention for many years and that caused several problems in Brazilian-Paraguayan relations in the 19th century were apparently resolved. However, the old problems would reappear in the 1960s as a result of the Guaíra Falls project by Marcondes Ferraz (FERRAZ, 1993). According to Cotrim (1999), there are records on the interest of Brazilian authorities in exploring the potential of the Sete Quedas (Seven Waterfalls) hydroelectric plant since 1908. However, of the many projects presented, only the small Guairá plant, known as "Capelinha," was completed and it supplied the region with energy. The Brazilian project of 1962, which envisioned the construction of a hydroelectric plant at the Sete Quedas of the Paraná River, revived the differences over the Brazil-Paraguay border.

Shortly after the study and Marcondes Ferraz's preliminary draft were released in 1962, the Paraguayan authorities sought the Brazilian representatives about the study and reopened discussions about the borders between the two countries based on a "reinterpretation" of the 1872 treaty (MENEZES, 1987; BARBOZA, 1992). It is worth mentioning that Marcondes Ferraz had defended the construction of the Sete Quedas dam in exclusively Brazilian territory for technical reasons. However, he understood that Paraguay should be entitled to a portion of the energy produced, due to the international character of the Paraná River.

The Itaipu Treaty and the binational hydroelectric plant

The Brazilian studies for the construction of the hydroelectric plant began in the late 1930s and early 1940s (during the Third Brazilian Republic, 1937-1945), but were refuted by the rulers, in addition to involving the border problem, given that the Itamaraty (Ministry of Foreign Affairs of Brazil) stated that there was no demarcation at Salto de Sete Quedas (COLMÁN, 2019).

In order to build the dam, it would be necessary to analyze the course of the Paraná River and the potential of the Guaíra Falls. Therefore, the Brazilian Ambassador José Jobim requested some studies. Over the years and the studies carried out, it was discovered that up to 7 million kilowatt-hours could be generated on the site. The government of Jânio Quadros (1961) even manifested its intention to build what would be the largest hydroelectric dam in the country and the second largest in the world and then the border problems began to become public. After Jânio's resignation, the project of the hydroelectric plant was published in the newspapers of the city of São Paulo during the government of his successor, Goulart (1961-1964) and throughout some subsequent governments, and was presented as a landmark of modernity for Brazil (COLMÁN, 2019).

The signing of the Iguaçu Act in 1966 promoted closer ties between Brazil and Paraguay, something that was noted with qualms on the part of Argentina. The Argentinean political elites, influenced by the geopolitical ideas of General Juan Enrique Guglialmelli and Admiral Isaac Rojas, feared that Paraguay would enter the Brazilian zone of influence, causing a break in the balance of power in the Río de La Plata basin in favor of Brazil and to the detriment of Argentina (GUGLIALMELLI, 2007). According to this perspective, the construction of the Itaipu hydroelectric dam would consolidate Brazil's preponderance in South America's heartland, which is why Buenos Aires vigorously opposed the work.

In order to limit Brazilian influence and prevent the construction of the dam at Sete Quedas, the Argentine strategy was to evoke the principle of "prior consultation" in international river law. According to this principle, in case of works on an international river, the upstream countries must obtain the consent of the downstream countries, which would give them the right to voice and veto any works (CAUBET, 1991). According to the principle of "prior consultation", Argentina, being at the mouth of Río de La Plata, could voice its opinion and veto any works upstream in the Río de La Plata basin, which is formed by a large number of rivers, such as Paraná, Paraguay, Uruguay and even Tietê. With this, the Casa Rosada could create numerous objections to the Brazilian hydroelectric program and hinder Brazilian economic development (MENEZES, 1987).

To support the precept of "prior consultation," Argentine authorities claimed that the Brazilian hydroelectric program - especially the Itaipu, Ilha Solteira and Jupiá dams - would bring consequences such as: alteration of the water regimes of the Río de La Plata basin, which could obstruct navigation and the construction of other dams downstream; river pollution, which would prevent fishing and water consumption; and the spread of diseases such as schistosomiasis (BARBOZA, 1992; GEISEL, 1997).

It is important to note that, at first, Argentina did not offer Brazil and Paraguay feasible alternatives to meet Brazil's energy needs and Paraguayan development demands. Brasilia considered the principle of "compulsory prior consultation" an affront to national sovereignty, as it could threaten not only the Brazilian hydroelectric program, but also the entire national economic development (AZEREDO DA SILVEIRA, 2010).

The clash between the Argentinean and Brazilian-Paraguayan positions occurred at the regional and global multilateral levels. Amidst the climate of tension, on 27 February 1967, the foreign ministers of Argentina, Bolivia, Brazil, Paraguay and Uruguay met in Buenos Aires to discuss strengthening political and economic cooperation in the Río de La Plata basin. This approach would result in the creation of the Río de La Plata Basin Treaty, signed in Brasilia on 23 April 1969. The agreement, which came into force in 1970 (LOPES, 2013).

As for the choice of site, an international consortium was responsible for the technical studies that indicated the best point for the construction of the dam. The work, which began in 1971, analyzed several sites along the Paraná River between the mouth of the Iguaçu River and the municipality of Guaíra. Due to the topographic and geological conditions, the technicians decided to implement the dam at the height of the island of Itaipu (figure 2), where the deviation and closure of the Paraná River would be more convenient (ITAIPU BINACIONAL, 2021b).

After negotiations between the governments of Brazil and Paraguay, on April 26, 1973, the Itaipu Treaty was signed, which contemplated a political and legal framework for the hydroelectric exploitation of the region of Sete Quedas. President Médici would postpone the decision on the constitution of the binational company and the beginning of the works, handing over the problem to the next administration (AZEREDO DA SILVEIRA, 2010).

The final decision to build the Itaipu power plant was made by President Ernesto Geisel (1974-1979). In favor of the decision to build the plant, there were several arguments: the impacts of the First Oil Shock of 1973; the transformation of the energy issue into a primary issue of national security; the risk of an energy shortage in Brazil; the national and regional integration that the work would provide; the risk of Brazilian discredit for not fulfilling what had been agreed; the projection of the country abroad; the economic benefits of the work, such as low cost of the energy generated; the development of important sectors of the economy, such as engineering and civil construction of high complexity and the electromechanical industry, among others (MONTEIRO, 2000).



Figure 2 - Itaipu Dam and Tri-Border Area map

Moreover, there were factors contrary to the construction of the plant, such as the lack of means and experience of Paraguay in the construction of works of the size of Itaipu Dam; the fact of leaving a significant amount of energy production in the hands of a foreign country, with a long history of political instability; the distance of the construction from the major consumer centers of the country; the existence of other hydroelectric projects capable of meeting the demand; the complexity and cost of the project; the opposition of Argentina, among others.

The first step in the implementation of the 1973 Treaty did not occur until September 1974. It concerned the payment of US\$ 100 million from the share of Itaipu Dam. The Brazilian state electricity company *Eletrobrás* invested \$150 million from the Federal Electrification Fund; the Paraguayan state electricity company *Administración Nacional de Electricidad* (ANDE) borrowed \$150 million from Banco do Brasil (BRAZIL, 1989).

By Annex C of the Itaipu Treaty, the parties agreed to the financial terms of the undertaking. On the one hand, Paraguay accepted that the energy, produced by Itaipu and not used by Paraguay, would be given away, preferentially, at cost price to the Brazilian market. On the other hand, the Brazilian State accepted to pay royalties and a remuneration for the energy produced and ceded by Paraguay. Furthermore, the Brazilian Treasury financed the Paraguayan part at a fixed interest rate of 6% per year. This interest rate was much lower than the international credit market. In fact, during the debt crisis (1982), Brazil raised funds at 21% per annum for the enterprise and passed on Paraguay's share at a fixed rate. It was up to the Brazilian taxpayer to pay the difference.

The first major problems between Brazilians and Paraguayans were the formation of the Board of Directors and the choice of names for the positions. Composed by twelve members, six of them appointed by Brazil and six by Paraguay, the board is the most important organ of Itaipu and has as main attributions to decide on: the fundamental guidelines of the power plant's administration; the internal regulations; the basic services organization plan, among other attributes (PARAGUAY, 1989). The Executive Board, for its part, was established under the rule of being composed by an equal number of nationals from both countries.

Right after the beginning of the plant's works, the engineers realized the need to "adjust" the project to the geological, topographical and hydrological characteristics of the region. The electrical sector authorities of the two countries suggested some changes in the project, the main one being the increase in the number of turbines, from 14 to 18. The number of turbines set out in Annex B was amended twice again until the Tripartite Agreement (1979), when Brazilian and Paraguayan representatives agreed on the third major change in the number of turbines, which were reduced from 20 to 18. However, the space for the installation of two more turbines was preserved. The plant's capacity returned to 12.600 megawatts (GUERREIRO, 1992). The reasons for the changes in Annex B are not only found in the technical-economic field, but also in the political arena, especially regarding relations with Argentina and Paraguay, which raised the problem of cycling and the gold clause.

Besides the main construction work, the governments of Brazil and Paraguay have carried out several complementary projects, such as the construction of roads, lodgings, hospitals, to make the construction of the plant feasible (WASMOSY, 2008; LIMA, 2006). The complementary buildings deeply transformed the region around Salto de Sete Quedas: between 1975 and 1978 Itaipu Binacional enterprise built more than nine thousand houses for its employees (MONTEIRO, 2000).

The rapid economic growth, its benefits and its evils were already factors expected by Brazil's and Paraguay's administrations, since from the beginning they expressed their intention to turn the plant into a driver of growth and investment in both countries. Both also organized the Itaipu Electromechanical Consortium (CIEM), responsible for supplying the turbines, generators and other heavy electrical materials. It is estimated that over 23 billion dollars were spent on the construction of Itaipu Dam (ESPÓSITO NETO, 2020).

The construction of Itaipu Dam was financed mainly by private banks. This was due to the Itaipu-Corpus issue, as Argentina successfully pressured multilateral financial bodies such as the Inter-American Development Bank (IDB) not to finance the Itaipu project while before the Argentine-Brazilian-Paraguayan impasse of Itaipu-Corpus was solved and an international legal framework was defined for the use of international rivers in the Río de La Plata basin.

In the late 1970s, the Tripartite Agreement brought the demands of Buenos Aires and the proposals of Brasilia, so the disputes between the three countries, especially between Brazil and Argentina, were solved (FERRES, 2004). The Tripartite Agreement consolidated a legal framework for hydroelectric exploitation in the Río de La Plata basin and also influenced Brazilian foreign policy and interstate power relations around the construction of the Itaipu hydroelectric dam (MELLO, 1996).

The social and economic impacts of Itaipu Dam on the Tri-Border Area

The Brazilian government's policy regarding Itaipu Dam was decisive in the current composition of the population of the Tri-Border Area between Brazil, Argentina and Paraguay. In terms of demography, the construction of the plant has drastically changed the landscape of the Tri-Border Area, configuring the most important initiative in the process of settlement of the cross-border region, motivating population growth and an occupation guided by government policies. Today the two main cities in the region, Foz do Iguaçu (Brazil) and Ciudad del Este (Paraguay) have respectively: 258 thousand and 304 thousand inhabitants (IBGE, 2019; DGEEC, 2020).

Besides the cities on the Brazilian and Paraguayan sides of the border, the impacts of the construction of Itaipu Dam were also felt in the Argentine city of Puerto Iguazú, which did not participate in the project, but whose population increased from 3,001 inhabitants in 1970 to 57,623 in 1991 and is estimated to total 100,000 individuals in 2020 (INDEC, 2020).

The migratory movement of Brazilians towards the Paraguayan border zone was the result of attraction and repulsion factors. According to Firmeza (2007), among the repulsion factors are the lack of agrarian policies in Brazil, the high price of land and, in the case of the Tri-Border Area, the construction of the Itaipu lake, which resulted in the expulsion of 40,000 Brazilian farmers.

Alongside the population increase, one of the greatest impacts caused by the construction of the plant was the flooding of native peoples' land. People who had already been suffering the consequences of the expansion of the agricultural frontier and were forced to leave their lands. Among the main groups affected in the region of the Tri-Border Area are the Guarani and Kaingang native peoples, who today inhabit smaller areas compared with those they inhabited half a century ago (LIMA, 2006).

Moreover, the Itaipu hydroelectric dam, located between the Brazilian city of Foz do Iguaçu and Paraguayan Hernandarias, is the second tourist attraction of the Tri-Border Area in terms of number of visitors, receiving about 1 million tourists per year (average before the COVID-19 pandemic). In 1995, the North American Association of Civil Engineers (ITAIPU BINACIONAL, 2021b) elected the plant one of the Seven Wonders of the Modern World. In 2021, it was considered the world's largest hydroelectric power plant (ITAIPU BINACIONAL, 2021a).

It should also be noted that the transformation of the Tri-Border Area with the arrival of a significant contingent of migrants in the years of construction of the plant has boosted the economy and brought new infrastructure, reflecting even in the improvement of the hotel network and tourism services.

In addition to the tourist attractions represented by the world's largest hydroelectric power plant and the Iguaçu Falls, the border Brazil-Argentina-Paraguay still has the shopping tourism attraction of Ciudad del Este and the business tourism that in the second decade of the twentieth century surpassed the first as a result of the increased inspection by the Brazilian Internal Revenue Service, giving rise to the reconversion of the region's service sector, especially the hotel sector (CARNEIRO, 2016).

In recent years, the Brazilian media have announced a new infrastructure for the Tri-Border Area. A project financed by Itaipu Dam, concerning the construction of a second bridge between Brazil and Paraguay over the Paraná River, between the cities of Foz do Iguaçu and Puerto Presidente Franco. The work aims to relieve the traffic of the Friendship Bridge. This is a controversial project due to the location of the new bridge, which will be installed next to the Three Borders Landmark, disfiguring the third most important postcard in the region (CARNEIRO 2016).

Regarding the performance of Itaipu Dam in the Tri-Border Area, Rafagnin (2013 apud CARNEIRO, 2016) states that the company's policy is not always beneficial to the region. Itaipu Binacional enterprise has excessive supremacy in the decision-making processes of Foz do Iguaçu and the Tri-Border Area, having even influenced the appointment of the president of the Economic and Social Development Council of Foz do Iguaçu, besides subsidizing numerous institutions on the border region.

Renegotiation of the Itaipu Treaty

Due to the strategic importance of Itaipu Dam, both in energy, economic and geopolitical terms, the renegotiation of the Itaipu Treaty is today one of the main issues of foreign policy in Brazil. The renegotiation of the Annex C of the treaty, which expires in 2023, has already been moving the diplomats of the two countries.

It is worth remembering that the Iguaçu Act (1966) had as its objective the equal division of energy produced by the hydroelectric plant between the two South American countries, so they would have the autonomy to designate the destination of electric energy at a fair price. If one of the countries did not use the 50% of all energy produced, the other would be obliged to buy this surplus (but due to the debt between the two South American countries, Brazil always paid less for this energy, so Paraguay paid its debt through the purchase and sale of the energy).

With the inauguration of Itaipu Dam in 1984, the ongoing re-democratization in the Southern Cone in the 1980s and the beginning of a new relationship between Brazil, Paraguay and Argentina, diplomatic relations between Brazilia

and Asunción have improved greatly. After that, with the arrival of Lula da Silva in power in 2003, Brazil began to privilege cooperation with South America, seeking more autonomy and diversity in Brazil's foreign policy, based on the idea that regional development would stimulate national development (PAULA, 2013).

During the Lula da Silva administration (2003-2010), Paraguay went through different governments and the arrival of Fernando Lugo in power in 2008, which brought to an end more than sixty years of Colorado Party hegemony, gave new directions to the country's international relations and opened a debate about the renegotiation of the Itaipu Treaty.

Paraguayan claims

With President Fernando Lugo in power in Paraguay, the country has pushed for further renegotiations by increasing the price paid by Brazil for Paraguayan energy. The Lugo administration also demanded a new analysis of the external debt generated by the construction of the hydroelectric power plant (with respect to the increase in international interest rates), in addition to the revision of Annex C of the Itaipu Treaty, which concerns financial and service information. Although the points in question were scheduled to be reviewed only in 2023. This deadline, discussed numerous times, caused Paraguaya a dependence of half a century on Brazil and hindered the Paraguayan government's plans for social renewal (BORBA et al., 2009).

The biggest problem for Paraguay was the payment of the foreign debt to Brazil. Since the first turbine started operations, Paraguay has used only 5% of all production, and one of the objectives of the construction was the equal division of energy – however, if one of the countries did not use all percentages the other would have to buy it. Thus, Paraguay sells more than half of all its energy produced in Itaipu Dam to Brazil (PAULA, 2013).

The new 2008 agreement contained some of Paraguay's requirements, which were: the sale of energy production to third parties, sale of energy to Brazil at a fair price with the revision of the debt, a new direction in Itaipu Dam, which was being commanded mostly by Brazilians. A priori, President Lula da Silva and members of the government did not consider any kind of negotiation but were willing to listen to Paraguay's demands.

In July 2009, a new agreement was signed on the sale of energy, which provided for a three-fold increase in the value of Paraguay's energy purchases, freedom of negotiation between Paraguay and other Brazilian companies, and a new possibility for Paraguay to sell its energy surplus to a third party from 2023. This agreement was approved in both countries (in Paraguay still in 2009 and Brazil in May 2011), being considered historic by Paraguayans and being viewed with bad eyes by the Brazilian media (PAULA, 2013).

The image of Brazil in Paraguay and the new treaty

Regarding the image of Brazil in Paraguay, Benvenuto (2017) recalls that the war of 1864-1870 left in Paraguayan society resentment towards Brazil that reverberated in relations between the two countries still today. For the author, the excessive attachment to historical facts is not healthy and becomes politically relevant, giving rise to ghosts and hostile thoughts of insecurity between Paraguayans and Brazilians.

In Paraguayan society, the issue concerning the energy of Itaipu Dam has reborn "anti-Brazilian" feelings and a xenophobic nationalism, whose roots lie in the memory of the horrors of the defeat of the Triple Alliance War and in the belief in the myth of the foreigner who plunders the Guarani riches. With the Treaty signed in 1973, Paraguay assumed a series of obligations, which, for a large part of the Paraguayan elite, is something harmful to the country. One example is the obligation of the preferential transfer of unused Paraguayan energy to *Eletrobrás*. According to Codas (2008), this constitutes an affront to Paraguayan sovereignty.

It is worth noting that the sale of energy at cost price to Brazil results from the payment of the debt generated by international negotiations and loans made for the construction of the plant. This was due to Paraguay, at the time of the signature, not being able to raise guarantees and demonstrate the capacity to carry out the works, which would make the project impossible. Moreover, the debt terms were renegotiated in 1993 and Brazil assumed, once again, a large part of the debt escalation burden (WASMOSY, 2008).

Despite this, Paraguay believes it has been harmed because the price of energy from Itaipu Dam has not kept pace with the increase in international energy prices. In the country, the use of the term "give energy" instead of "sell energy" has spread, since sales are made at cost price, which would favor only Brazilian industrial elites (TOLEDO, 2015). However, a FIRJAN (2011) survey argues that, although generation costs are adequate, other factors, such as the high incidence of taxes and charges, make Brazilian electricity very expensive for the final consumer, whether industrial, commercial or residential.

In his government, President Lugo has defended controversial positions on socio-political issues such as land reform and the renegotiation of the terms of the Itaipu Treaty, which had a profound social appeal in Paraguay. These flags were contrary to Brazilian interests (ESPÓSITO NETO; PAULA, 2015). Amidst the turbulent context, marked by legal insecurity and political uncertainty, the number of agreements between Brazil and Paraguay began to decrease and the approximation between Brasília and Asunción, which until then had been driven by Lula's government, lost intensity.

It is worth remembering that in 2005 Lula's and Frutos's governments had already sealed an agreement that imposed an increase in the amount paid for Paraguayan energy transfers to Brazil, whose multiplier factor had been expanded from 4.0 to 5.1. However, in 2009, in the agreement between Lula da Silva and Lugo, there was a three-fold increase in the amount paid for the transfer of Paraguayan energy, from US\$2.8 to US\$8.4 MWh (approximately), meaning that the multiplier factor of the amount paid for the transfer of energy would increase from 5.1 to 15.3. In addition, the agreement gave Paraguay the freedom to negotiate with Brazilian companies other than Eletrobrás (ESPÓSITO NETO; PAULA, 2015).

One point under discussion in Brazil was what would be the motivation of the Lula da Silva administration to significantly increase the amount paid to Paraguay for the Itaipu Dam energy at one time, bearing in mind that there could be new negotiations by the year 2023 (PAULA, 2013). In this regard, Menezes (2013) recalled that the strengthening of Brazil's presence in South America and the diplomatic discourse that elevated the subcontinent to the status of a priority in the Brazilian foreign policy agenda under Lula da Silva's administration were aimed at consolidating Brazil's regional leadership in South American space. According to Cervo (2008), the Lula da Silva administration was guided by the paradigm of "official cordiality" in dealing with neighbors. Table 1 presents the results of the negotiations. Paraguay's earnings were US\$874 million/year, a significant result for the country.

During Dilma Rousseff's administration (2011-2016), the regional integration process maintained several of the previous administration's initiatives, but with less impetus (CORNETET, 2014). In the case of Paraguay, the coup d'état suffered by President Fernando Lugo and the reactions of the Mercosur countries, with the suspension of Paraguay and the accession of Venezuela without Paraguayan support, relations became distant until the election of Horacio Cartes (2013 - 2018).

Table 1 - Economic Results of the Negotiations between Brazil and Paraguay

Table 1 - Economic Results of the Negotiations between Brazil and Paraguay						
CONCEPT	CURRENT	ADDED VALUE	TOTAL ANNUAL	TOTAL VALUE IN 10 YEARS	EXTRA INVESTMENTS	
1)Increase of compensation for transfer of energy to Brazil	US\$ 120 million/year	US\$ 240 million/year	US\$ 360 million/year	US\$ 3.600 million	-	
2)Paraguayan energy commercialization of Itaipu Dam in Brazil initially for 300 MW. In 10 years for 3000 MW.	US\$ 20 million (net income)	US\$ 20 million/year (net income) US\$ 200 million/year (net income)	US\$ 200 million/year (net income)	-	-	
3)Paraguay's energy supply in Brazil (initial)	-	US\$ 10 million/year (net income)	US\$ 10 million/year (net income)	US\$ 100 million (net income)	-	
4)Energy commercialization of hydroelectric plants of inland rivers of Paraguay (in 10 years)	-	US\$ 50 million/year (net income)	US\$ 50 million/year (net income)	US\$ 500 million (net income)	-	
5)ANDE, ELETROBRÁS and ITAIPU operating agreement	-	US\$ 180 million/ year	US\$ 180 million/year	US\$ 1800 million	-	
6) Electromechanical works. Itaipu Binacional Right Bank Substation	-	US\$ 30 million	-	-	US\$ 30 million	
7) Civil Works	-	US\$ 20 million	-	-	US\$ 20 million	
8) Investments in hydroelectric projects in inland rivers of Paraguay (in 10 years)	-	US\$ 1000 million	-	-	US\$ 1000 million	
9)Royalties	US\$ 245 million/year	_	US\$ 245 million/year	US\$ 2450 million	-	
10) Refund	US\$ 19 million/year	-	US\$ 19 million/year	US\$ 190 million	-	
Total	US\$ 384 million/year	-	US\$ 874 million/year	US\$ 8840 million	US\$ 1050 million	

Source: Organized by the authors with data from Gamón (2009).

However, from 2016 onwards, with Temer's government (2016-2018), Brazilian foreign policy has taken a sudden turn, giving priority to relations with traditional partners (the United States, in particular), with lower interaction with South American neighbors (ACTIS, 2017). This policy guideline was further developed in Bolsonaro's government (2018-2022), but it is now evaluated in a very negative way at the international level.

In July 2020, the president of ANDE, engineer Pedro Ferreira, denounced a secret agreement unfavorable to Paraguay, which would imply an increase in the price of electricity to be paid by the Paraguayan consumer. The new document was supported by President Abdo Benítez, an ally of Bolsonaro's government. The complaint led to a series of protests across the country and the closing of the Friendship Bridge.

The crisis almost toppled the government of Abdo Benítez. Faced with increased support for the impeachment, pressured by the streets and by Congress, the Paraguayan government backed off, and obtained support from the Brazilian government, so that the agreement was canceled by the parties. In March 2021, the foreign ministers of Brazil and Paraguay decided to postpone the renegotiations of Annex C of the Itaipu Treaty until after the COVID-19 pandemic.

Conclusion

The historical relations between Brazil and Paraguay, presented throughout this article, reveal part of the historical resentment against Brazil, still present in Paraguayan society today. The memories of the Triple Alliance War, the border disputes and the rules established by Brazil in the purchase and sale of energy produced by Itaipu Dam, as well as in the management of the company, are elements that must be taken into consideration by the Brazilian authorities at the time of the renegotiation of the Itaipu Treaty.

Amidst a weakening of regional integration in South America and in the world, aggravated by the COVID-19 pandemic, Brazil and Paraguay are having an adverse scenario in the renegotiation of the Itaipu Treaty. Nevertheless, despite the unfavorable situation involving the renegotiation of its use agreement, Itaipu continues to play a key role in the South American regional integration, constituting a strategic energy source and being an element of first importance in the Southern Cone's balance of power.

It is important to stress that Itaipu Dam is a political-economic instrument with relevant social and economic impacts on the Tri-Border Area, mainly by promoting public policies and regional development, which makes the region one of the most prosperous in South America.

Currently, as Brazil and Paraguay prepare for the new rounds of negotiation of Annex C of the Itaipu Treaty, Paraguay's demands remain the same as in the renegotiation, but they do not find resonance with Brazil's political and economic elites. Negotiators on both sides will lack much skill and imagination to find creative solutions that leverage cooperation rather than discord.

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