



## **WILL THE AMAZON BE A GRAIN SILO OR A DATA BANK?<sup>1</sup>**

French Guiana and Brazil share a 730 km border sketched out by the Oyapock River. Although a bridge has been built over Guiana's frontier watercourse, it is still barely crossed. Ever since the French Huguenots' short-lived settlement attempt in Rio de Janeiro between 1555 and 1560, France and Brazil's respective histories appear to have unfolded separately until globalised communications brought the two countries into contact. Today, these two major agricultural powers hold a singular place at the United Nations and have close links with the same partners, especially Algeria. Although France and Brazil are cooperating on a number of industrial projects, there are still a few tensions between the two nations and it is perhaps not entirely coincidental that these revolve around the Amazon region. From a geoeconomic perspective, the future of this area is being hotly debated by parties with different interests. The rainforest could become a grain silo destined to feed a growing population; but it could also become an exceptional conversation area for those wanting to use artificial intelligence to study biological data. This fork in the road has triggered significant tensions among economic powers, while simultaneously downgrading the crucial role this vast forest plays in regulating our global climate to a second-tier concern. Because it has been opaqued by antagonistic political discourse, the central economic issue is only identifiable if we first examine Brazil's global geopolitical stance, the singular role played by the Amazon region, and the economic disruption caused by the development of biomimetics in the rainforest.

### **Brazil: Walking a Diplomatic Tightrope Towards Greater Power**

Brazil is a rising power with global ambitions. It has claimed sovereignty over a section of the Antarctic, entered into a rivalry with Argentina, attempted to make satellites of its weakest neighbours (such as Paraguay) and usurped Portugal's influence on former African colonies<sup>2</sup> (Angola and Mozambique). As the richest and best-armed country in Latin America, Brazil has a permanent seat at the United Nations Security Council. Brazil's diplomatic policy is focused on securing international recognition as a great power, hence the subtle equilibrium it is pursuing by forging closer links with the United States' geopolitical

---

<sup>1</sup>Thomas Flichy de La Neuville, Chair of Geopolitics at Rennes School of Business.

<sup>2</sup> During Lula da Silva's presidency, Brazil presented itself as a culturally African nation that naturally aspired to a presence across the continent. As part of his inauguration speech in Brasilia on 1 January 2003, Lula made his ambition clear: "we will reaffirm the profound ties that bind us to the entire African continent and our readiness to actively assist it as it develops its enormous potential." At present, nearly 90 million Brazilians state they have African origins.

adversaries while maintaining good relations with its powerful northern neighbour. By forming closer relations with China under President Lula, Brazil expressed its openness to land-based powers that are hostile to America's domination of the seas. Lula led 450 Brazilian businessmen and women on a state visit to China. When the BRICS Summit was held in Brazil in 2010, several cooperation agreements were signed, a significant number of which were related to farming, infrastructure<sup>3</sup> and artificial intelligence.<sup>4</sup> Five times more bilateral trade was undertaken in 2009 than in 2003. Brazil has also forged closer ties with Iran, the second member of an anti-American geoeconomic formation known as the 'new Mongol Empire'; for example, when Brazil chose not to adopt a conciliatory posture regarding the Iran nuclear issue, trade between the two boomed. In 2003, the National Iranian Oil Company granted Petrobras the rights to explore the Persian Gulf's vast offshore oil reserves. To avoid sanctions, a triangular trade network has been formed: Brazilian products, such as sugar and beef, stop off in Dubai or the United Arab Emirates, before travelling on to Iran. Russian-Brazilian relations have also been bolstered, particularly in the fields of space and military technology. The two countries consider each other strategic partners and technological allies. Russia imports Brazilian pork and beef. This triple rapprochement with China, Iran and Russia has not prevented Jair Bolsonaro – who is sometimes referred to as the 'Trump of the Tropics' – from simultaneously courting the United States and Israel in the hope of protecting his country's independence.

### **The Amazon: Nerve Centre for the Construction of the Brazilian State**

The Amazon rainforest appears to be something of a special geopolitical case to which Brazil and the international community assign radically divergent roles. From an outside perspective, the Amazon is a land apart with a globally important contribution to make in protecting our climate's greatly imperilled equilibrium. From the inside, however, the Amazon has long been conceived as an unproductive virgin space, the conquest of which is key to driving the nation towards its future. Like the Chinese Empire, Brazil is turning its geopolitical gaze inwards to a zone that represented danger or vulnerability to its long-ruling military regime. Once it has been conquered and domesticated, the Amazon could even lend the country regional leverage within future pan-Amazonian plans. Brazil's military regimes have emphasised the threat of foreign intrusion into the strategic Amazonian region for many years. It was colonised by military authorities, who made it easier for herds of cattle to penetrate the forests by crisscrossing them with roads and building dams. Ironically, the Amazon rainforest pumps out vital oxygen into our planet's atmosphere but, from 1895 onwards, it has been systematically exploited to provide the polluting car industry with latex. The Amazon basin now represents half the world's permanent tropical rainforest. It is deliberately set alight on a regular basis, more often affecting man-made, selectively farmed forests than old virgin growth. In 1986, satellites detected 8,000 fires in a single day, sparking an international outcry which the regime would go on to denounce as 'foreign intrusion'. New records were set in 2004 (270,000 fires) and 2007 (208,000 fires). The fires of summer 2019 sat at the upper end of the average bracket compared to the previous decade, even if they led some Brazilian regions to declare a state of emergency. However, the appreciation France has

---

<sup>3</sup> In 2005, China, Brazil and Peru teamed up to construct a transcontinental train line linking the Atlantic and Pacific Oceans.

<sup>4</sup> A Chinese-Brazilian satellite programme was launched in 1999. It inventoried Brazil's natural resources, enabling China to gather a large amount of data about the country.

had for the rainforest since the Napoleonic era<sup>5</sup> stands in stark contrast to the Brazilian vision of a jungle hellscape that yields no property tax and is taxed in other ways.

### **The Amazon Sundered By Two Competing Visions**

From a historical perspective, the Amazon rainforest has been subjected to agrarian colonisation since the 16th century. The fashionable motto of the 1950s was to “conquer the Amazon with cattle hooves”. It was farming that truly benefited from the land being deforested, as only 12% was used for agriculture. Brazil’s farmers have found a natural market supplying our soon-to-be-overpopulated world with meat. Compared to Europe and North America (both already highly productive) or (mostly unstable) Africa, Brazilian agriculture offers huge advantages, including space, sunlight, water, labour and, most importantly, a very effective agro-food industry. The multinational meat and dairy sectors, attracted by inexpensive cattle production, have carved out supply bases in the heart of the Brazilian rainforest, where 50 million cattle graze on 70 million hectares of grassland. Tereza Cristina Corrêa da Costa Dias, Brazil’s current Minister of Agriculture, played an important role in President Bolsonaro’s election and has links to agribusiness. However, competing industrial interests also occupy the field. Certain businesses are very keen to stake a claim in the world’s biggest biological data bank for themselves. Environmental NGOs are sometimes suspected of working to preserve the forest for major Western mining or pharmaceutical companies. Its 3.5 million km<sup>2</sup> of tropical rainforest make Brazil the world’s most biodiverse country and home to 50% of all documented species. And in terms of chemical prospecting, the 21st century Amazon might be for biotechnology what the 20th century Arabian Peninsula was for oil. The idea is to patent genetic resources so that they can be transformed into goods, hence the interest of major pharmaceutical groups.

Over the coming decades, competition between meat production and biological data harvesting will continue inexorably. In an era when artificial intelligence could easily model and map out fire hotspots, the number of fires should start to fall as soon as farming in the Amazon commands a lower price than digitalising and studying the world’s biggest biological data bank.

---

<sup>5</sup>According to Alfred Maury in *Histoire des grandes forêts de la Gaule* (1850): “The forests are striking first and foremost for their majestic appearance, their impressive scale and the various colours with which they paint the landscape. They are the most remarkable parts of nature’s vast tableau. The vegetation that admirably adorns our planet has no more beautiful example. Trees are the plant kingdom’s most exalted species, as man is to the animal kingdom.”