

# Integrating climate and defense: an analysis of Lula's presidential terms

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## Executive summary

In this *policy paper*, we examine how the intersection between climate and defense has evolved throughout President Luiz Inácio Lula da Silva's first two terms in office (2003–2010) and part of his third term (2023–2025). By comparing these distinct political moments, we aim to identify shifts, continuities, and possible tensions between environmental and defense strategies. Our central goal is to explore how—and to what extent—these two agendas have been (or could be) better aligned. We argue that strengthening this connection is not just necessary to respond to current challenges, but also to ensure that Brazil's development and security policies are consistent with its international climate commitments and domestic vulnerabilities.

In recent decades, climate change has ceased to be viewed solely as an environmental issue and has increasingly been recognised as a broader security challenge, affecting both individuals and states. Its consequences extend beyond rising temperatures and erratic weather patterns; they also include indirect and complex effects, such as forced displacement, food insecurity, and the potential to fuel local and regional conflicts (Penny, 2018; Scott and Ku, 2018). In this sense, climate risks are now part of international security debates, and institutions such as the United Nations Security Council have begun to consider their implications for global peace and stability (McDonald, 2018).

This reframing is not exactly new. It began to take shape in the 1970s, during the United Nations Conference on the Human Environment, also known as the Stockholm Conference. It gained further traction with the 1994 Human Development Report, which introduced the notion of human security and highlighted how environmental degradation could directly affect human lives and livelihoods (Nascimento, 2014). Since then, various countries and organisations have developed distinct narratives around climate and security. Some emphasise the risks to territorial integrity and sovereignty, while others highlight the vulnerabilities of populations exposed to extreme events and structural inequalities (Dalby, 2013; McDonald, 2013, 2018).

The way a state frames climate risks influences how it responds to them, whether through defense strategies, foreign policy, or development planning. In Brazil, this debate intersects with particular challenges. The country has recently faced intense climate events with devastating

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consequences, such as the 2024 floods in Rio Grande do Sul. At the same time, institutions such as the Armed Forces continue to be called upon to act in disaster response operations, humanitarian assistance, and even infrastructure recovery (Simões, 2025; Soberania e Clima, 2023). These developments raise questions about the role that climate risks play in national security planning and whether existing policies are adequately equipped to address them in a structured, long-term manner.

To respond to these challenges, we outline the following policy recommendations, which are further elaborated in the concluding section of this *policy paper*.

Recommendations:

- Strengthen the connection between climate and defense agendas.
- Integrate climate risks strategically into national security planning.
- Improve institutional coordination between defense, public security, and humanitarian actors.
- Develop a national plan for managing climate-induced disasters.
- Foster continuous dialogue among academia, legislators, civil society, and international entities.
- Formally incorporate climate risks into defense strategies.

**Keywords:**

Climate Change; Defense; Lula; National Security.

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## 1. Brazil in context: climate change and security agendas

The growing impact of climate change on Brazil’s territory and population has gradually brought the subject into the state’s security and defense agenda. As Gomes Filho (2024) notes, phenomena such as increased temperatures, altered rainfall patterns, and rising sea levels have led to both severe droughts and intense flooding, such as those witnessed in Rio Grande do Sul in early 2024. These events go beyond environmental consequences, affecting economic stability and social well-being. According to the report by Soberania e Clima (2023), such transformations are already altering the living conditions of millions of Brazilians. Despite this, Brazil continues to face difficulties in strategically integrating these climate risks into national security planning.

In practice, the Armed Forces have had to respond to these challenges on the ground, particularly in humanitarian and logistical operations. Simões (2025) highlights that missions such as *Operação Acolhida* exemplify the military’s role in infrastructure support and disaster relief. Still, the World Climate and Security Report 2020 warns that without coordination and planning, climate responses may overload military capacities and compromise environmental and regional stability. This observation relates to Gomes Filho’s (2024) argument that addressing the implications of climate change in Brazil requires institutional coordination between defense, public security, and humanitarian sectors, coordination that remains lacking.

While various countries have updated their national security strategies to include climate elements, such as the U.S., Spain, France, Germany, and China, Brazil lags behind. According to Silva (2022), the categorization of documents as white papers, policies, or strategies does not change their function as public policies defining national security. Vogler (2023) observes that since 2007, following the IPCC’s Fourth Assessment Report, references to climate have appeared in many such documents. However, the Brazilian context reveals inconsistencies in the prioritization and updating of these frameworks.

Duarte (2023) underscores this institutional stagnation by tracing the delays in processing and approving Brazil’s main defense documents: the National Defense Policy (*PND - Política Nacional de Defesa in Portuguese*), the National Defense Strategy (*END - Estratégia Nacional de Defesa in Portuguese*), and the White Paper on National Defense (*LBDN - Livro Branco Nacional de Defesa in Portuguese*). The 2012 versions faced major setbacks in Congress; the 2016 drafts stalled without presidential sanction; and the 2020 documents were only approved by the Senate in 2022, still awaiting action by the Chamber of Deputies. This bureaucratic slowness reflects a persistent low prioritization of strategic issues such as climate change, which often remain marginalized in security debates despite their growing urgency.

Compounding this is Brazil’s economic structure, which is highly dependent on natural resources. Pereira and Viola (2021) argue that agribusiness, the country’s primary export sector, relies heavily on favorable climatic conditions and water availability, while also driving deforestation and greenhouse gas emissions. Viola and Franchini (2013) note that although technological improvements have enhanced productivity and emissions efficiency, dominant political and economic forces continue to oppose more ambitious environmental policies. This dynamic, rooted in a belief that Brazil’s wealth lies in food production and fossil fuel extraction, clashes with any agenda that seeks to align environmental and security priorities.

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Institutional fragmentation further complicates the incorporation of climate into defense planning. As Simões (2025) emphasizes, Brazil continues to operate reactively, without a national plan to manage climate-induced disasters. This lack of integration between civil defense, local authorities, and humanitarian institutions prevents the country from building long-term resilience. Claro and Reis (2025), when analyzing the issue through the lens of climate displacement, highlight the legal and political invisibility of people forced to migrate due to climate-related events. Their absence from national and international legal frameworks creates a vacuum that prevents coordinated, rights-based responses.

These gaps lead to fragmented and ad hoc government action. Claro and Reis (2025), who contributed to the webinar “Climate Change and Human Mobility: Paths to Climate Justice in Brazil,” note that responses depend on the spontaneous mobilization of different agencies, without a permanent structure or strategic foresight. Experts consulted in the same webinar argue that a more effective response requires ongoing dialogue between academia, legislators, civil society representatives, and international entities, something Brazil has yet to institutionalize in the climate-defense area.

Despite institutional challenges, Brazil has historically maintained an active role in international environmental diplomacy. Puppim de Oliveira (2011) recalls that Brazil was the first country to sign the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and played a decisive role in designing mechanisms such as the Kyoto Protocol’s penalty fund. This engagement aimed to balance environmental responsibility with economic development and South-South cooperation. However, as Vieira (2024) points out, the country’s involvement in international environmental programs is often shaped as much by financial incentives as by environmental concern.

Even so, Brazil’s international image has shifted depending on the political orientation of its leaders. During the Bolsonaro administration (2019–2023), the country adopted an openly anti-environmental stance, undermining previous diplomatic positions (Pereira and Viola, 2021). At the same time, Closs (2024) notes that a broader crisis in multilateralism, intensified by the return of Donald Trump to power in 2024, has created a hostile environment for international cooperation, particularly in environmental governance.

In this context, countries in the Global South face growing difficulties in mobilizing political support within multilateral organizations. According to Closs (2024), the erosion of international legitimacy, funding shortages, and geopolitical polarization all hinder the formation of new coalitions to address the climate crisis. Brazil is especially affected by this shift, as declining cooperation reduces its ability to influence the global regime and secure resources for environmental initiatives.

This fragility reinforces the need for Brazil’s defense documents to emphasize cooperation and multilateralism. Duarte (2022) argues that a unified institutional stance is necessary to enhance the country’s deterrent capacity and international credibility. Yet internal resistance remains. Pereira and Viola (2021) explain that Brazil long resisted even voluntary emission-reduction targets and continues to interpret the principle of common but differentiated responsibilities (CBDRRC) in ways that justify minimal engagement.

**“(...) The contextualization of climate and defense agendas in Brazil reveals a complex web of political, institutional, and economic obstacles.”**

Within the Armed Forces, the climate agenda is still often seen as a vehicle for external interference. As Duarte (2023) observes, the Ministry of Defense tends to view climate threats as indirect justifications for traditional security concerns. When it comes to the Amazon, this perception is even more pronounced. Pereira and Viola (2021) argue that the fear of foreign intervention and concern over economic exploitation have prevented a more explicit recognition of the link between climate and security. As a result, Brazil has yet to follow the example of other countries that have formally incorporated climate risks into their national defense strategies.

In sum, the contextualization of climate and defense agendas in Brazil reveals a complex web of political, institutional, and economic obstacles. While the empirical effects of climate change on Brazilian territory are increasingly evident, their strategic treatment remains frag-

mented, slow, and politically contested. The documents, actors, and dynamics reviewed here demonstrate that the path to climate-security integration in Brazil is not only technical; it is fundamentally political.

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## 2. Lula's first term (2003-2006)

During his first presidential term (2003–2006), Luiz Inácio Lula da Silva's administration implemented new environmental policies alongside continuity in defense strategy, though with limited integration between the two agendas. On the climate front, Brazil adopted measures to combat deforestation, particularly in the Amazon, while also seeking to play a more active role in global climate negotiations. However, these efforts were often undermined by economic pressures and political compromises. Meanwhile, defense policy saw modest industrial advancements but no major shift toward environmental security, reflecting a traditional view of national security that had yet to incorporate climate risks.

One of the most notable environmental achievements of Lula's first term was the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm), launched in 2004. This initiative combined satellite monitoring (via the DETER system), increased law enforcement, and incentives for sustainable development, leading to a sharp decline in deforestation rates – from 27,772 km<sup>2</sup> in 2004 to 14,286 km<sup>2</sup> in 2006 (INPE, 2006). The plan demonstrated Brazil's capacity for technologically driven environmental governance, yet critics argued that enforcement remained weak due to budget constraints and political resistance from agribusiness interests (Fearnside, 2005). Additionally, infrastructure projects such as the paving of the BR-163 highway facilitated deforestation in some regions, revealing contradictions in the government's approach (Greenpeace Brasil, 2006).

Internationally, Brazil took part in rainforest conservation debates, advocating for mechanisms such as the Reducing Emissions from Deforestation and Forest Degradation (REDD) at UN climate forums (Viola, 2013). However, Lula's government resisted binding emissions targets, reflecting a balancing act between environmental commitments and economic development priorities. This duality was further evident in the expansion of soy and cattle farming, which drove deforestation even as the government promoted sustainability rhetoric. The tension between environmental protection and agricultural expansion would remain a defining challenge throughout Lula's presidency.

On the defense front, Lula's first term saw no radical departures from previous military policies, though there were incremental advancements in defense industrialization. Projects such as the ASTROS II missile program and the modernization of Embraer's Super Tucano aircraft signaled a commitment to strengthening Brazil's defense capabilities (Ministério da Defesa, 2005). However, budget limitations prevented more ambitious reforms, and the military's role remained focused on traditional security tasks rather than climate-related missions (Zaverucha, 2005). The Armed Forces continued to play a key role in Amazon surveillance, but environmental protection was not yet framed as a core national security issue.

Diplomatically, Lula's government pursued South-South cooperation, signing defense agreements with countries such as South Africa and India (Amorim, 2006). This aligned with Brazil's broader foreign policy strategy of asserting autonomy from U.S. influence, particularly in military affairs (Hurrell, 2007). Yet, despite growing global discourse on climate security, Brazil's defense establishment did not meaningfully incorporate environmental risks into strategic planning. The military's involvement in the Amazon was primarily about territorial control rather than ecological preservation, highlighting a missed opportunity for early integration of climate and defense policies.

In retrospect, Lula's first administration revealed structural limitations in addressing the intersection of environmental governance and national security. While initiatives such as the

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PPCDAm contributed to a measurable decline in deforestation rates, these advances proved vulnerable to reversal, as they were heavily dependent on short-term political will, budgetary allocation, and enforcement capacity. The persistence of economic pressures from agribusiness, mining, and infrastructure projects highlighted the absence of a consistent strategy capable of reconciling environmental protection with developmental imperatives. On the defense front, the government did little to move beyond traditional security frameworks, leaving environmental risks largely absent from strategic planning. Although military institutions played a visible role in surveillance of the Amazon, their engagement remained focused on territorial sovereignty and order maintenance rather than ecological sustainability. Diplomatic discourse during the period suggested an intention to project Brazil as a responsible environmental actor internationally, yet the refusal to accept binding emission targets and the simultaneous expansion of soy and cattle frontiers weakened the credibility of this stance. Consequently, Lula's first term can be interpreted less as a moment of coherent environmental-security integration than as a fragmented set of initiatives, constrained by political compromises and economic priorities. The administration's approach demonstrated Brazil's capacity to implement technologically sophisticated monitoring and enforcement mechanisms, but also exposed the fragility of these measures when confronted with entrenched developmental logics and the lack of institutionalization within the defense sector. These contradictions not only limited the effectiveness of the policies at the time but also set precedents that complicated efforts to build a more sustainable and security-oriented environmental agenda in subsequent years.

### 3. Lula's second term (2007–2010)

During the period from 2007 to 2010, Brazil saw both the consolidation of earlier environmental policies and the emergence of contradictions as Brazil's economic ambitions clashed with its climate commitments. While deforestation rates remained below early-2000s peaks, they began creeping upward again after 2008, a troubling reversal that exposed the limits of command-and-control enforcement without deeper structural reforms (INPE, 2010). The government expanded the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) framework but struggled to contain pressures from agribusiness expansion and significant infrastructure projects, such as the Belo Monte dam (Fleury and Almeida, 2013). Internationally, Brazil assumed a more assertive role in climate negotiations, culminating in its voluntary emissions reduction pledge at the Copenhagen Climate Summit (COP15) in 2009, a landmark moment that nonetheless revealed tensions between its global leadership aspirations and domestic development priorities (Viola, 2010).

#### 3.1 Environmental policy: progress and pushback

The second term began with strong momentum from the PPCDAm's early successes. By 2007, deforestation in the Amazon had decreased, indicating that Brazil's environmental policies were beginning to have an impact. In the following year, however, there was an increase in deforestation, which raised concerns about the actual stability of the gains. Following this, between 2009 and 2010, deforestation rates declined again, reaching some of the lowest levels in years (INPE, 2010). This back-and-forth pattern made it clear that, while progress had been made, the fight against deforestation still depended on strong institutions and constant political commitment. In this context, and still in 2008, the government launched the country's first National Plan on Climate Change, followed by the approval of a national climate law in 2009 and the regulation of five sectoral mitigation plans in 2010 (Pereira and Viola, 2021)

Internationally, Brazil's climate diplomacy reached its pinnacle with the Copenhagen Accord (2009), where Lula pledged a reduction of over 36% in projected emissions by 2020,

primarily through curbing deforestation (UNFCCC, 2009, Viola, 2010; Viola and Franchini, 2013). This move positioned Brazil as a bridge-builder between developed and developing nations. However, the government's simultaneous push for oil exploration (pre-salt fields) and hydroelectric megaprojects, such as Belo Monte, highlighted unresolved tensions between climate rhetoric and energy nationalism.

### 3.2 Defense policy: incremental shifts toward strategic autonomy

In the defense sector, Lula's second term saw a greater emphasis on industrial policy, particularly through the 2008 National Defense Strategy (END). This document explicitly linked military modernization to Brazil's broader geopolitical ambitions, calling for reduced foreign dependency in defense technology (Ministério da Defesa, 2008). Key programs included the Nuclear program (under Navy responsibility), the Space Program (under Air Force responsibility), and the Cyber Program (under Army responsibility). However, these projects still face chronic underfunding and bureaucratic delays, revealing gaps between strategic vision and implementation. Despite growing global discourse on climate security, Brazil's defense establishment has not systematically incorporated environmental risks into its planning. The 2008 END mentioned environmental monitoring, especially via satellites, only three times in the document, focusing instead on traditional territorial defense (Ministério da Defesa, 2008).

Lula's second term consolidated Brazil's climate leadership but exposed structural weaknesses in reconciling environmental and development goals. On defense, the rhetoric of strategic autonomy outpaced real institutional change, with climate considerations remaining peripheral to military agendas such as cyber, nuclear, and space activities (Brazil, 2008). The period's central paradox was that Brazil could commit globally to emissions cuts while still prioritizing high-carbon infrastructure domestically, a tension that would loom larger in later years.

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## 4. Lula's third term (2023–present)

Lula's return to the presidency in 2023 marked a renewed commitment to environmental governance and Brazil's reintegration into global climate diplomacy. Even before officially taking office, he attended the COP27 Climate Conference in Egypt in November 2022, where he declared that “Brazil is back” and emphasized that climate change would be central to his administration's agenda. During this conference, he pledged to eliminate deforestation by 2030 and announced that Brazil would host COP30 in the Amazon region in 2025. This conduct was a symbolic gesture aimed at repositioning the country as a leader in global climate discussions (Fernandes and Fernandes, 2024).

In the early months of his third term, Lula moved quickly to reverse several environmental rollbacks implemented under former president Jair Bolsonaro. One of the most significant actions was the reinstatement of the Amazon Fund, which was reactivated with renewed support from international partners, including Germany and Norway (Rodrigues, 2023c). At the same time, the administration initiated a major institutional reorganization. New government bodies were created, and ministerial responsibilities were redefined, most notably, the Ministry of the Environment was renamed the Ministry of Environment and Climate Change, reflecting the new government's broader climate mandate.

Among the key initiatives of Lula's initial agenda was the relaunch of the PPCDAm, a policy first introduced during his earlier presidency. The updated version of the plan, released in 2023, contributed to a 43% reduction in deforestation between January and July 2023 com-

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pared to the same period in 2022 (Proksch, 2025). On the international stage, Lula’s administration has taken an active but critical stance in environmental and trade negotiations, particularly concerning the EU-Mercosur agreement. Brazil has expressed firm opposition to proposed climate-related clauses that could result in trade sanctions, viewing them as potentially protectionist measures. This position reflects both the country’s renewed environmental commitment and its resistance to what it perceives as unfair external pressures, especially from European actors such as France (Fernandes and Fernandes, 2024).

Regarding the defense sector, although Brazil’s core strategic documents, the National Defense Policy (PND), the National Defense Strategy (END), and the White Paper on National Defense, have not seen significant updates, the Lula administration in its third term is steering both its narrative and operations toward integrating environmental and climate issues into the Armed Forces’ agenda. This shift is evident in new internal guidelines, increased military participation in responding to environmental disasters, and bolstered regional cooperation for protecting the Amazon, especially under the framework of the Amazon Cooperation Treaty Organization (ACTO) (Mello, 2025; Silva, 2023).

## 5. Final considerations

In this context, hosting COP30 in Belém do Pará presents a timely opportunity for the Lula government to reaffirm national sovereignty, showcase the Brazilian state’s institutional capacity, and strengthen its commitment to global climate initiatives. In this effort, the defense sector should be recognized as a proactive player, capable of taking on roles that go beyond its traditional functions. The conference offers a stage to highlight a distinctly Brazilian model of integrated climate response, one that relies on close coordination between the defense sector, the Ministry of the Environment, and subnational governments (Mello, 2025).

While Lula’s third term is still underway and a full assessment must wait until its conclusion in 2027, the first two and a half years already reveal a meaningful reorientation of Brazil’s environmental and defense policy. The government has pursued international reengagement, institutional rebuilding, and the restoration of Brazil’s environmental credibility, all of which are key foundations for building stronger synergies between climate and security agendas.

Taken together, the evolution of these agendas across Lula’s three terms demonstrates both continuity and transformation. While earlier efforts were limited by institutional inertia and economic pressures, the current administration faces the challenge, and the opportunity, of translating renewed political will into lasting structural change. The convergence between environmental governance and defense policy remains a work in progress, but it already signals a broader understanding that climate resilience is not peripheral to national security; it is integral to it.

### Policy Recommendations

#### • Strengthen the connection between climate and defense agendas

- Action: Establish a permanent inter-ministerial working group linking the Ministry of Defense and the Ministry of Environment and Climate Change.
- Key actors: Ministry of Defense, Ministry of Environment and Climate Change, Presidency.
- Timeline: Within the next 2 years, to ensure institutional consolidation after COP30 (2025).

#### • Integrate climate risks strategically into national security planning

- Action: Include climate-related risks explicitly in the next revision of the PND, END, and LBDN.
- Key actors: Ministry of Defense, Armed Forces Joint Staff, National Congress.

- Timeline: By 2027, aligned with the next defense policy cycle.
- **Improve institutional coordination between defense, public security, and humanitarian actors**
  - Action: Develop joint protocols for climate disaster response, modeled after Operação Acolhida.
  - Key actors: Ministry of Defense, Ministry of Justice and Public Security, and National Civil Defense.
  - Timeline: First pilots by 2026, with full integration targeted for 2028.
- **Develop a national plan for managing climate-induced disasters**
  - Action: Draft and approve a National Climate Disaster Management Plan.
  - Key actors: Presidency, Ministry of Integration and Regional Development, Ministry of Defense.
  - Timeline: 2025–2027, so that it can serve as a legacy of COP30 and be operational during the current administration.
- **Foster continuous dialogue among academia, legislators, civil society, and international entities**
  - Action: Institutionalize an annual Climate and Security Forum under the framework of COP30 legacy initiatives.
  - Key actors: Ministry of Foreign Affairs, National Congress, Universities, and civil society organizations.
  - Timeline: Launch in 2026, with continuity ensured through legislation.
- **Formally incorporate climate risks into defense strategies**
  - Action: Revise defense training curricula to include climate-related security risks.
  - Key actors: Ministry of Defense, Armed Forces training academies.
  - Timeline: 2026–2028, beginning with pilot modules in the Brazilian Army Command and General Staff College (ECEME) and the Brazilian Defense College (ESD) and later extending across other academies. ■

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