

THE PUBLIC INSTITUTIONAL INTEGRITY OF THE AMAZON FUND

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1. ABSTRACT

The Amazon Fund was established by the Brazilian government in 2008 to receive donations for the results achieved in the reduction of carbon emissions coming from deforestation and support projects. From 2023 onwards, the Amazon Fund has the potential to enter a new phase in its history, attracting millions of dollars in donations. For this, it must maximise its trustworthiness. The theory of public institutional integrity supports the Fund in identifying how it could improve its trustworthiness. The results of the assessment of public institutional integrity in this paper demonstrate that the Fund is operating with suboptimal levels of integrity, particularly because of inadequacies of the articulation of its purpose, consistency, efficiency, and robustness. Based on this results, the policy recommendations for the Fund are to: 1) reinstate internal rules, 2) restore relationships with historical donors and seek new donors, 3) improve the project selection process, 4) ratify the Amazon Fund in law, and 5) reform the Theory of Change to consider the Fund's results in deforestation prevention and emissions.

2. INTRODUCTION

The Amazon Fund was established by the Brazilian government in 2008 to receive donations for the results achieved in the reduction of carbon emissions coming from deforestation. Between 2009 and 2018, the Fund received USD 1.288 billion in donations coming from Norway, Germany and the Brazilian oil company, Petrobras. Using the donations received, the Fund provides grants to projects that prevent deforestation and promote the sustainable use of the biome. This way, it supports the Brazilian government in the costly endeavour of halting illegal deforestation. The first disbursements occurred in 2010. Until the first semester of 2022, the accumulated support from the Fund amounted to USD 581 million. The Fund is a pioneer in the application of results-based financing to climate change policies and is internationally well-regarded, having served as an inspiration to establishing analogous strategy in the Paris Agreement and similar funds around the world. Domestically, the Fund is part of the ecosystem of environmental institutions in Brazil. It differentiates itself by the strong and essential connections with the international community and the focus in the Amazon biome.

Between 2019 and 2020 the Fund's institutional structure was distorted so deeply that it since then has been unable to receive donations and support new projects. The concomitant uptake in deforestation rates in the Amazon and the consequent rise in greenhouse gas emissions damaged the country's trustworthiness, leading donors to suspend their relationship with the Fund. Without being able to perform its basic operations and having lost the support from all historical donors, the future of the Fund had been at risk ever since. The recent election of Lula da Silva to the presidency of Brazil in the end of October/2022, together with his explicit commitments of cooperating with the international community to address climate change and deforestation control in the Amazon, diametrically changed the Fund's prospects – from a policy under threat of being shut down, to a most-relevant policy in Brazil. International donors have already replied positively to the signalling from president-elect and expressed their intentions of resuming collaborations with the Fund.

Considering the importance of the Fund in the national and international efforts of reducing deforestation and mitigating carbon emissions, this working paper aims to address the following policy question: **What are the paths for recovering and sustaining the Amazon Fund in the long term?**

I address this challenge by assessing the Fund's public institutional integrity and suggesting policy recommendations. The assessment is carried out using the Fund's documental evidence, as well as previous policy analysis and research conducted by independent actors. Improving the Fund's integrity addresses the policy challenge because (a) being

a trustworthy institution is what allows the Fund to receive donations from international partners and is a necessary condition for it to be a productive part of the Brazilian policy ecosystem, and (b) the more effective the Fund is, the more donations it receives.

The in-depth institutional assessment of the Fund calls attention to several deficiencies in the Fund's institutional integrity, particularly in terms of purpose, consistency, efficiency, and robustness. The assessment helps to identify areas of conflict, weakness, and potential risks that might arise in a new phase of the Amazon Fund, from 2023 onwards. Based on the results of the assessment and the goal of supporting a thriving Fund, five policy recommendations are drawn to strengthen the Fund's integrity:

- 1) Reinstate internal rules
- 2) Restore relationships with historical donors and build new relationships
- 3) Improve the project-selection process
- 4) Ratify the Amazon Fund in law
- 5) Reform the Theory of Change to consider the Fund's results in deforestation prevention and emissions

The recent presidential election signals that a political shift is under way – from the documented dismantlement of environmental policy institutions carried out in the past four years to the rebuilding of institutional capacity to control deforestation from 2023 onwards. In this context, the findings of this brief provide valuable insights into the efforts of recovering and enhancing the Amazon Fund. Equivalent policies around the world that base their institutions on the Brazilian experience with the Amazon Fund can also gain from this in-depth analysis.

3. LITERATURE REVIEW

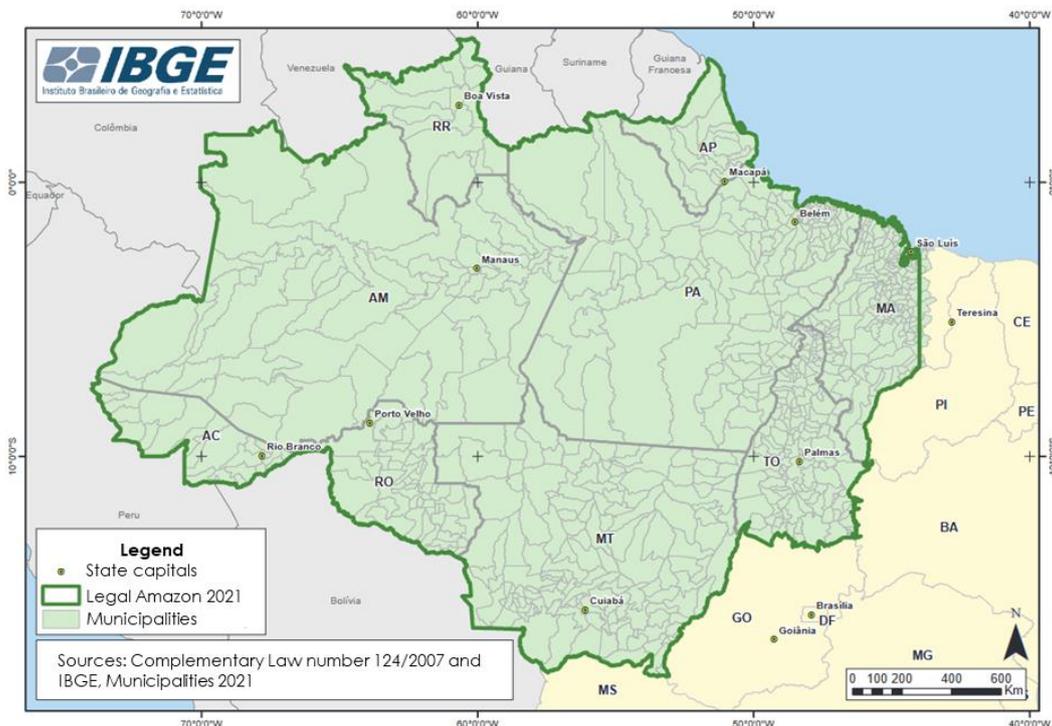
3.1. Background information

3.1.1. The Brazilian Amazon

The Amazon covers 49.5% of the Brazilian territory and is present in nine States – Acre (AC), Amapá (AP), Amazonas (AM), Maranhão (MA), Mato Grosso (MT), Pará (PA), Roraima (RR), Rondônia (RO), and Tocantins (TO) (1). This vast region presents complex demographic characteristics, where the biome interacts with urban and rural settlements, conservation units, indigenous lands, and vast areas that still have a use to be defined (public lands) (2).

Apart from the border of the Amazon biome itself, another important region to keep in mind is the Legal Amazon. The Legal Amazon is an even larger area (58.9% of the Brazilian territory) (3) defined to be the recipient of public policies specific to the Amazonian region, such as projects of the Amazon Fund (4). Figure 1 illustrates the Legal Amazon.

Figure 1 – The Legal Amazon

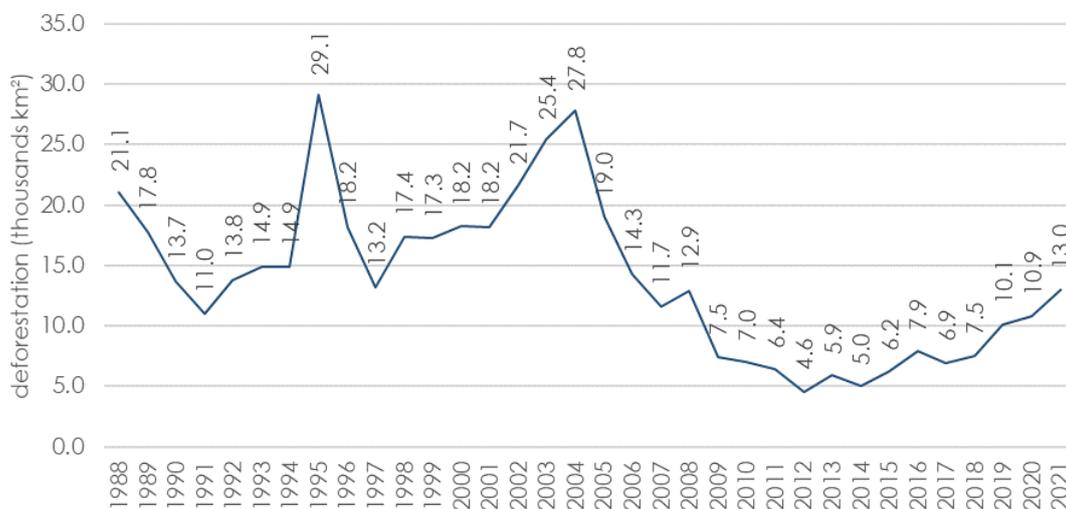


Source: (5), translated by the author

3.1.2. Deforestation and emissions

Recent deforestation history in the Amazon can be divided into four phases: (i) as a means to an end (until 2004), (ii) successful deforestation control (2005-2012), (iii) stagnation (2013-2018), and (iv) increase (2019-2021¹). The yearly deforestation rates are available in Figure 2.

Figure 2 – Yearly deforestation of the Legal Amazon



Source: created by the author based on (6).

Concerns around deforestation in the Amazon and policies to control it are relatively new. Until 1988, when the military government was replaced by a democratic system, the Amazon was a region to be conquered. Deforestation was the means to achieve this goal (7). Only four years after democratisation, Brazil hosted the United Nations Conference on the Environment and Development, Rio 92. The Conference and the recent democratisation provided a fertile ground for the establishment of an environmental movement in the country, as well as new public policies for conservation (7) – the Ministry of the Environment, for instance, was created in 1992 (8). In the late 1990s and early 2000s, climate institutions were also created, though still as answers to international pressures and as attempts to decouple emissions from deforestation (9; 10). It is interesting to notice that even though the history of conservation, and thus of climate discussions, is polarised in the country (9), Brazilians have a strong preference for conservation. A 2014 study points out

¹ Data from the first semester of 2022 indicates that 2022 is likely to be another record breaker year (109).

that most Brazilians (72%) prioritise environmental conservation over economic growth. The preference is even stronger among Amazonian residents (80%) (11).

Deforestation of the Amazon follows an economic logic of land-use change. The first step in the illegal transformation of land is to select and cut down trees with high economic value. After that, fires clear the area to allow for cattle ranching or soy plantations (12). These illegal practices are most common on public lands (2), which lack a designated use and are thus easy targets for land-grabbing (13). The exact size of such areas is unknown, but it is estimated to cover around 14% of the Legal Amazon² (14; 13). Public works are also vectors of deforestation, particularly road development, installation of hydropower plants, oil and gas exploration, and mining (7; 2).

As domestic and international markets increasingly oppose the purchase of commodities associated with deforestation, major players in the soy and beef industries have reduced illegal deforestation practices. The products are still closely linked to deforestation, nonetheless, with small holdings' deforestation on the rise (7; 10). The legal land use of the biome, on the other hand, is restricted. Since 1996 private landowners in the biome are required to preserve 80% of their properties (7; 15). The level of control of this requirement varies in time and space. According to the most salient local interests of the moment, local governmental institutions support or limit the enforcement of environmental law and long-term conservation goals (11).

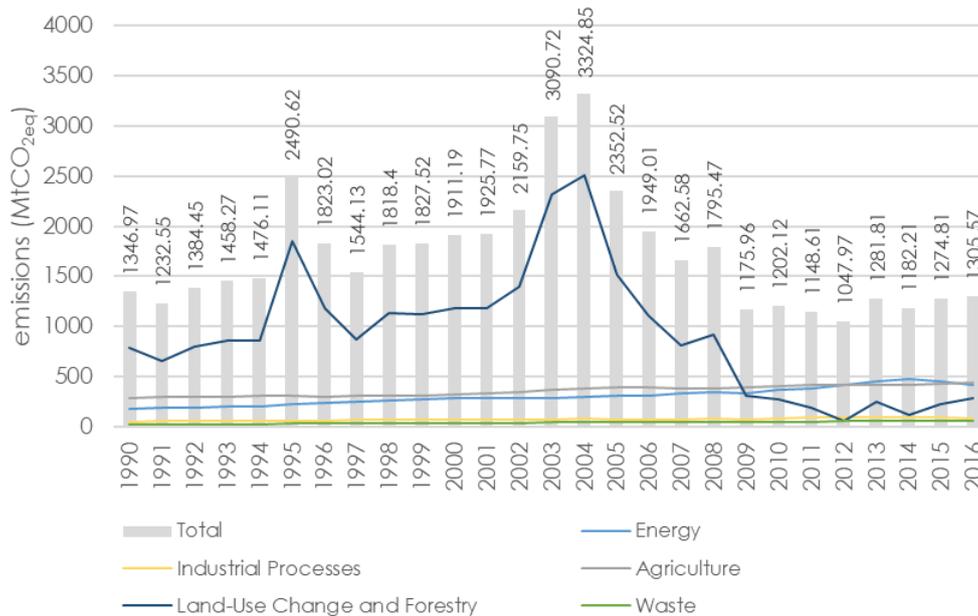
Despite strong political and ideological opposition, from 2005 to 2012 Brazil experienced a steep reduction in deforestation (7; 10). The Amazon Fund is a direct result of the leverage Brazil enjoyed in climate negotiations during this period (16). In 2012, when the country registered a record low, the yearly deforestation rate was one-fourth (4.6 thousand km²) of the mean rate of deforestation from 1988 until 2004 (18.4 thousand km²) (6). Since 2013, however, deforestation has been stagnant or increasing. Deforestation rates during the Bolsonaro administration (starting in 2019) were decade record breakers year after year. 2021 rates are equivalent to those of 2006, fifteen years before (6).

The main source of Brazil's GHG emissions is the conversion of the Amazon Forest into agricultural land (13). Figure 3 documents the country's emission history. Because deforestation is the major component of Brazil's GHG (greenhouse gas) emissions, the success in controlling deforestation is reflected in the successful abatement of carbon emissions (10). While deforestation is still the most historically significant source of emissions, by 2009 it had lost the position of the top yearly emitter sector to agriculture and energy (17). Official metrics for the most recent uptake in deforestation are not available, but a

² Estimates by (14): 54.6 million ha. Estimates by (13): 70 million ha. Legal Amazon: 502 million ha (3).

re-rise in relevance is most likely. The emissions from land-use change and forestry predominantly originate from the Amazon biome, though they are not restricted to it (18).

Figure 3 – Brazil's yearly GHG emissions by source and total



Source: created by the author based on (17).

Taking both deforestation and emissions data into consideration, reducing deforestation is both an essential climate and forestry policy in Brazil (10). The current challenge is controlling the recent uptake in deforestation and taking steps towards achieving the zero illegal deforestation target in 2028, set in the Brazilian National Determined Contribution (NDC) to the Paris Agreement (19). The Amazon Fund is an essential source of financial resources for the Brazilian government to be able to cover the high costs involved in achieving this goal (2). Controlling deforestation, on the other hand, is a must if the Amazon Fund is to receive any new donations, as discussed in items 3.2.1 and 3.2.2. Even though the recovery of environmental policy and public organisations impaired during the Bolsonaro government is essential to controlling peak deforestation rates of the past years (20), specialists also highlight that supporting a forest-friendly growth agenda for the Amazonian region is essential for zero-deforestation goals to be sustainable in the long-term (7; 21).

3.1.3. Application of results-based financing to reduce forest emissions

Results-based financing (RBF) is an umbrella term to describe a policymaking tool in which the payment (in money or in-kind) for the policy implemented is conditional and posterior to the measurable and demonstrable results the policy achieves (22; 16; 23). The usage of RBF as a policymaking tool is extensive (16), with numerous examples around the world and across many sectors, such as conditional cash transfers, payment for health and education services (22; 24), and environmental governance (16). One potential benefit of RBF over other formats of policy delegation is that RBF is expected to reduce principal-agent problems (25). Principal-agent relationships are those where the principal delegates to agents the authority to take a certain action. Both principal and agent attempt to maximise the return they acquire from this relationship. Principal-agent problems arise when there is a conflict of interest between these actors (26). The theory is that in RBF both principal (e.g.: a health ministry) and agent (e.g.: an NGO contracted out to manage a hospital) have their interests aligned – the better the agent performs the actions delegated to them by the principal (e.g.: increase coverage of vaccination among children), the more the agent will accrue in payment (25). This way, RBF presents a clear financial incentive and because of this is expected to yield an efficient performance (16).

Applying RBF to reduce carbon emissions from forest degradation and deforestation has been discussed in the Conferences of Parties (COPs) of the United Nations Framework Convention on Climate Change (UNFCCC) since the early 2000s (27). Under the UNFCCC, reduction of emissions coming from the forest sector is a mitigation strategy (23) that entails the (i) reduction of emissions from deforestation, (ii) reduction of emissions from forest degradation, (iii) conservation of forest carbon stocks, (iv) sustainable management of forests, and (v) development of forest carbon stocks. These are the activities carried out in the scope of Reducing Emissions from Deforestation and Forest Degradation (REDD+) (28). UNFCCC negotiations around REDD+ initiatives resulted in the establishment of multiple initiatives³ for RBF applied to REDD+ - of which the Amazon Fund is a pioneering example (7), in the Warsaw Framework for REDD+ in 2013 (COP 19) (29), as well as in the inclusion and recognition of RBF as a strategy in the Paris Agreement (article 5) to conserve forests and reduce forest-related emissions (30). The final goal of the REDD+ strategy is to incentivise developing countries to reduce emissions coming from forests through RBF – via RBF, developing countries can access payment for results in REDD+ initiatives achieved (23; 31).

³ Examples are available in the UNFCCC's REDD+ web platform under the topic "REDD+ MRV and results-based payments": <https://redd.unfccc.int/submissions.html?topic=18>.

I highlight three justifications for the importance of applying RBF to finance REDD+ initiatives. Firstly, RBF supports the financing of the costly policies involved in the reduction of deforestation and forest degradation (2). This is particularly important in the case of protection of natural forests (like the Amazon), that were previously not supported by other climate finance mechanisms (27). Secondly, payment coming from developed to developing nations bridges the financial gap in the transition toward a low-carbon and climate-resilient global development (32). Finally, as an RBF, it is expected to yield positive results. The logic of RBF in developing nations lies in the clear financial incentive of the tool (the more you reduce forest emissions, the more you are able to receive payments from RBF) and its potential positive feedback loop (the larger the volume of resources, the more you can invest in your REDD+ strategy, and the better your results will be) (33).

3.2. The Amazon Fund

3.2.1. Brief history

The Amazon Fund is the largest (in terms of financial resources) and most durable RBF initiative applied to REDD+ in the world (33). It is a product of global climate change discussions and international cooperation between developed and developing nations under the “common but differentiated responsibilities” established by the UNFCCC (34). From a global perspective, stopping deforestation is a key component in reducing the GHG emissions that cause climate change. The idea of a system of compensation for deforestation reduction was first introduced at a side event with Brazilian NGOs and government officials during the 2003 United Nations Climate Change Conference in Milan (COP 9) (7). The concept of RBF continued to be discussed in the following COPs, with Brazil as one of its protagonists. The discussions culminated with the Fund's announcement – to the surprise of Brazilian officials that did not believe such a mechanism would be viable⁴ (7) –during the 2007 United Nations Climate Change Conference in Bali (COP 13), as an agreement between Brazil and Norway to pilot an RBF for a REDD+ initiative in the Amazon (35; 7).

Following the announcement, which provided the essential support of a donor, the Fund was formally established in August 2008 by the Presidential Decree number 6,527/2008 (36), giving an institutional destination to the potential financial resources⁵. The Fund's

⁴ They did not believe developed countries would donate to the Fund but would only be interested in buying carbon credits to offset their own emissions (7; 21). The Brazilian government opposed this idea because it would allow developed nations to maintain their high emission levels (37).

⁵ (7) shares in detail the complex domestic negotiations that led to the approval of the Fund, from the ideation phase to its institutionalisation. What the Ministry of the Environment managed to demonstrate

goals remain the same since its establishment – the application of non-refundable monetary resources to (i) prevent, monitor, and tackle deforestation, as well as (ii) promote the conservation and sustainable use of the Legal Amazon (36). To perform its activities, the Fund counted on a multi-stakeholder governance structure consisting of a steering committee (COFA)⁶, responsible for defining the criteria for project selection, a technical committee (CTFA)⁷, that accredits carbon credits from deforestation reduction, and the Brazilian Development Bank (BNDES), which managed the Fund and selected the grant-recipient projects (36).

The establishment of the Amazon Fund was a significant policy innovation for environmental policy in Brazil. The country, which historically opposed any commitments regarding deforestation was now encouraged to pursue reductions (7). More than that, Brazil was being financially compensated for its past and current efforts (16). The Fund also remains a policy that does not dictate how the financial resources should be applied or require binding commitments on future deforestation reduction for Brazil. These characteristics would be interpreted by Brazil as threats to its sovereignty (37), and so avoiding them was essential in securing the initial agreement for the Fund in 2007 (7; 16). Overall, from the Brazilian government's perspective, the Fund is a triumph.

The first donation to the Fund came in 2009, by Norway. Germany and the Brazilian petrol company Petrobras are the other donors and joined the Fund in 2010 and 2011, respectively. Norway is the primary funder, having donated USD 1,212.4 mi (94.1% of the total donations) since 2009. It is followed by Germany with USD 68.1 mi worth in donations (5.3%) and Petrobras, which donated USD 7.7 mi (0.6%) (38). The distribution of yearly donations is available in Figure 4. The motivation of each donor to join the Fund is slightly different. To donor countries, the donation to the Fund is formally development aid. What they gain from their participation is an improved reputation in the climate mitigation efforts and political debates, particularly around the implementation of the Paris Agreement (16). Petrobras, on the other hand, donates to the Fund to reduce its environmental fines (39).

The international donations are conditioned⁸ to the reduction of GHG emissions from deforestation and forest degradation in Brazil, as well as the maintenance of the

with the Fund was that deforestation and emissions reduction could be compatible with economical gains for the country.

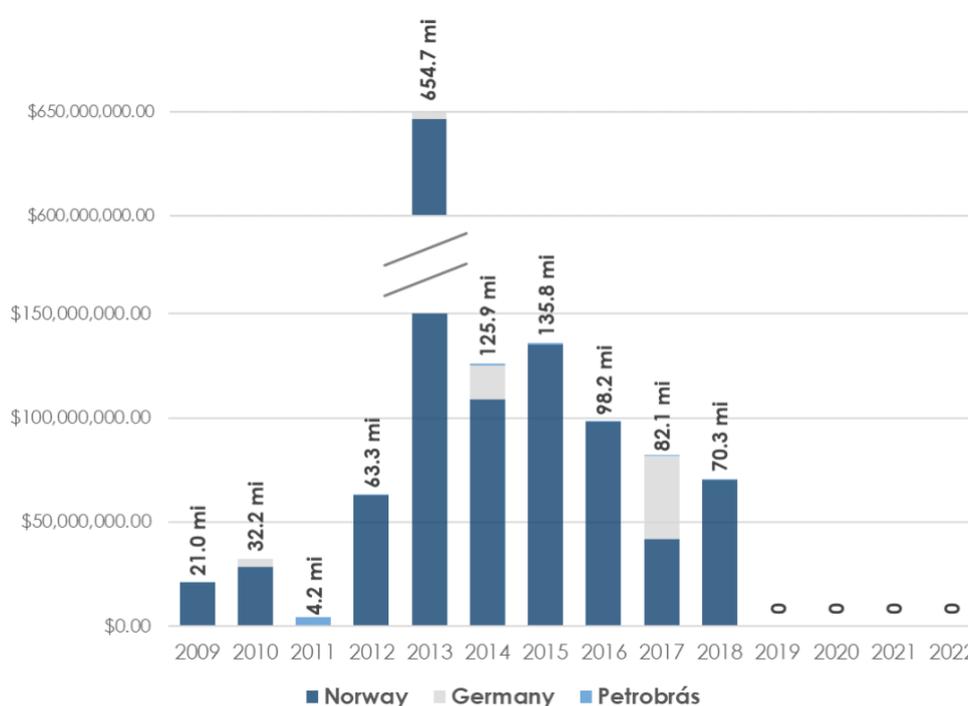
⁶ Acronym for “Comitê Orientador do Fundo Amazônia”, in Portuguese.

⁷ Acronym for “Comitê Técnico do Fundo Amazônia”, in Portuguese.

⁸ As an RBF mechanism, the Amazon Fund could theoretically receive donations without any conditionalities. The only logical requirement would be the achievement of results to generate credits. Nonetheless, conditionalities are imposed by donors in other RBF initiatives as an attempt to increase the efficiency of the resources used (16).

partnership's agreement, which includes satisfactory financial management, publication of annual reports, and the governance structure of the Fund, established in the Decree 6,527/2008 (40; 41). The freezing of additional donations from 2019 onwards is related to breaches in the conditionalities and is discussed below. Of the USD 1.288 bi donated (38), USD 571 mi or 44.3% were disbursed (42)⁹. The disbursements have supported 102 projects (38). More information on the results achieved by the Fund is available in item 3.2.3.

Figure 4 – Yearly donations to the Amazon Fund (USD)



Source: created by the author based on (38).

The creation via Presidential Decree instead of law is an important aspect of the Fund. It allows for the Executive to change the policy (by altering or revoking the original decree) without passing through a vote in the Legislative, which would be the case if it were a law. The Fund's legal text has been updated five times so far. The first alteration was still in 2008 and changed a few terms related to BNDES's management (43). The second was done by President Dilma Rousseff in 2016 via Presidential Decree 8,773/2016. Although Dilma had historically opposed the Fund and challenged the development path of the Amazon (relaxing forestry regulation with the New Forest Code in 2012 and inaugurating

⁹ The resources that have not yet been disbursed are invested by BNDES in conservative securities to preserve the Fund's value (50).

hydropower plants in the Amazon, for example) (7), the Fund was not disrupted. A highlight of the 2016 update is the mentioning of the Fund as a way for BNDES to access RBF for REDD+ (44). This alteration links the Amazon Fund to the newly instituted National Commission for REDD+, which coordinates the UNFCCC REDD+ strategy in Brazil (45). Instituting a strategy is a requisite for Brazil to access a more diverse portfolio of RBF resources coming from the UN REDD+ programme (29; 28), which Brazil has indeed successfully accessed (46).

The remaining and most important updates were made during Bolsonaro's presidency. Whereas internationally the protection of the Amazon is thought of as a climate change policy, domestically the deforestation of the Amazon is embedded in forestry and land-use discussions (10; 9). The context of the actions taken by the government reflect the rhetorical opposition, as defended by the president, between conservation and economic development (10). In this context, the lack of gridlock from the Legislative that a Presidential Decree enjoys resulted in harmful reforms in the Fund's ability to operate (20).

The first and decisive change happened in April 2019, when presidential decree 9,759/2019¹⁰ extinguished all committees in the federal government, including the Fund's (COFA and CTFA) (47). The committees were essential aspects of the governance structure created by the original decree and of the partnerships with Norway and Germany (48; 40; 49; 41). The Ministry of the Environment was responsible for submitting to the presidency that COFA and CTFA were relevant and should be restored. It abstained from doing so (50). Even though in paper the committees were still in place, as the original decree was revised only later on, in practice the attributions performed by them were blocked. The reaction from donors was immediate (50). After the unilateral change in the Fund's governance structure and the rising deforestation rates – conditionalities of the partnership (40; 41) –, in August 2019 both governments suspended further donations to the Fund (51; 52; 53). The decision was met with mockery by the president (51; 53). Failing to follow the conditionalities of the partnership with Norway and Germany, the Fund did not receive any additional donations between 2019 and 2022 (recall Figure 4) (38). In the following month, Norway suspended the usage of Norwegian resources for new projects. Without COFA and CTFA or the substitution of them in a new governance structure approved by the donors, selection of new projects has been suspended by BNDES since 2019 (50). This has led the third and last donor, Petrobras, to also suspend new donations in favour of other (active) policies (39). The only activity maintained by the Fund since

¹⁰ This decree extinguished every federal government committee not created by law before the 1st of January 2019.

2019 is the payment of previously approved projects (20; 54; 50). Donors have not demanded the return of unused donations yet, but this remains a contractual possibility (50; 48; 41).

Instead of retreating, in November 2019, the Executive published a new presidential decree. Decree 10,144/2019 formalised the extinction of CTFA by altering the Fund's original decree. Additionally, the decree cancelled BNDES' fundraising attribution (55; 36). Without fundraising capacity, from 2019 onwards the Fund was blocked from entering into new donation agreements (50). Finally, in February 2020, presidential decree 10,223/2020 extinguished COFA from the original decree (56) and dissolved the formal connection between the Fund's activities and broader policies in the Amazon, namely the Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) and the National Strategy for REDD+ (article 5)¹¹ (36). The Fund is thought to have been particularly targeted by the current federal administration because civil society organisations were part of its managerial structure and recipients of some of the disbursements (10) (more information available on items 3.2.2 and 3.2.3). The decision did not consider the effects on the relationship with the donors and the execution of policies to prevent deforestation. For instance, in 2019, when new projects were blocked, nine projects would assist state governments in the control and prevention of deforestation (50).

It is also worth differentiating the Fund's resources from other structures of the Federal Government. Even though the budget for environmental policies, in general, has been cut (20), the Fund's resources are not part of the national budget¹² (36). Therefore, even in times of budgetary crisis, the application of the Fund's resources could be maintained. This makes the freezing of the Fund a deliberate political decision (20), not a consequence of budgetary pressure. Two figures help to put the resources of the Fund into perspective. Firstly, the idle resources. Estimated to be worth R\$ 3.583 bi (57), they are greater than the 2022 annual budget of the Ministry of the Environment (planned at R\$ 3.010 bi) (58). Secondly, from 2018 to 2021 the annual disbursements of the Amazon Fund were comparable to the budget of the Brazilian Institute of Environment and Renewable Natural Resources (Ibama)¹³ for the prevention and control of forest fires, deforestation,

¹¹ PPCDAm was abandoned in 2019 and substituted by the new "Operational Plan 2020-2023" – which carries "2020" in its name even though was published in 2021 (110). The National Strategy for REDD+ (Presidential Decree 8,576/2015) was reformed in 2019 by the Presidential Decree 10,144/2019 (55).

¹² The Fund is part of BNDES's budget, which is not part of the public budget (107). The public budget is established in law using two complementary instruments – the Annual Budget Law (or LOA in the acronym in Portuguese) and the Pluriannual Plan (or PPA), which covers investments and continuous expenditures (92) over four years (106). For not being part of the national budget, the Fund's annual and medium-term budget is not discussed and approved by the Legislative.

¹³ Acronym for the "Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis", in Portuguese.

and other illegal activities in the Legal Amazon (50). Considering the limited budget of the Ministry of the Environment and the Ibama¹⁴, choosing not to use the Amazon Fund to counter deforestation is even more unreasonable. The significant volume of resources made available by the Amazon Fund has been one of its historical successes domestically, allowing for significant financial support to environmental policies, and globally, as a REDD+ (21). These figures reinforce the potential damage that the dismantlement of the Amazon Fund can have on deforestation prevention efforts (50).

Legal action was taken in an attempt to restrain some of the changes on the Fund's management. Making use of its legislative oversight function, in 2019 the Legislature summoned multiple times the then Minister of the Environment Ricardo Salles to discuss the management of Fund (59; 60; 61; 62; 20) and in trying to establish a Parliamentary Commission of Inquiry – which never came to fruition (63). Moreover, draft bill number 415/2020, initiated by the Legislative power, was proposed as a way to strengthen the judicial status of the Fund by establishing it in law (64). As of June 2022, the draft law is pending to be voted in the Senate (65). Civil society has also remained active and joined political parties in questioning why the Fund has remained largely unspent (10). This case is currently under review by the Supreme Court (66). Finally, COFA's extinction was deemed unconstitutional and annulled by the Supreme Court in 2022 (67).

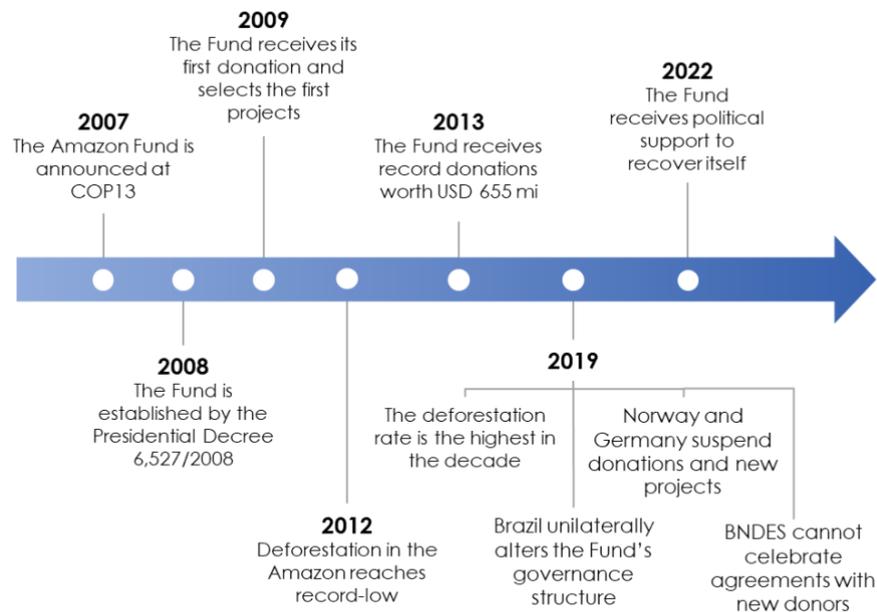
Even if these actions come to fruition and the Fund is legally put back in place, without political support compatible to reduce deforestation applied to the domestic policy ecosystem, deforestation cannot be reduced (21). That is to say that while the Amazon Fund is important, it is not able to single-handedly define deforestation outcomes in the Amazon. In fact, the opposing domestic political landscape is part of the reason why negotiations between Brazil and donor countries to re-establish the partnership has been unsuccessful so far (50). Nonetheless, international donors had anticipated the political appetite to resume the partnership if a new president were elected in 2022, made the political to reduce deforestation, and a governance structure is agreed on by the parties (68; 50). The political appetite proved to be factual as soon as Lula da Silva was elected in 30/10/2022. In his first speech after being elected, Lula explicitly expressed the intention of reaching zero deforestation in the Amazon and resuming a protagonist role in the fight against climate change, in cooperation with the international community (69). This clear signalling changed the prospect of the Fund, from at risk of being shut down to a most-relevant policy for Brazil. In the week following the election, Norway and Germany have

¹⁴ Respectively equivalent to 0.06% (R\$ 3,010,481,539.00) and 0.04% (R\$ 1.804.771.911,00) of the planned national budget (R\$ 4,790,034,009,527.00) in 2022 (58).

expressed their intention of resuming their collaboration with the Fund as quickly as possible (70; 71).

Throughout the Fund's fourteen years of existence, it has supported the efforts of deforestation reduction in the Amazon biome. The brief history presented here is the basis for assessing the institutional integrity of the Fund and what can be achieved in the future. It is summarised in Figure 5. The announced political shift towards the integration between conservation and economic development in the Amazon by the president-elect is a window of opportunity for a new phase in the history of the Fund, which will require its rehabilitation and strengthening.

Figure 5 – Timeline of the Amazon Fund



Source: created by the author.

3.2.2. Governance structure

The Fund's governance structure was defined in the original decree (36). The decree lists the actors involved in the Fund, as well as the attribution of each actor (36). Even though the structure was considered appropriate by the donors and auditors (50; 70; 48; 71), in 2019 and 2020 the Brazilian federal government unilaterally revoked essential aspects of the governance (50; 55; 47; 56). The original structure, however, was not substituted by a new one (50). After the publication of Decree 9,759/2019, the Ministry of the Environment was responsible for suggesting a new governance structure to the Presidency, which it did

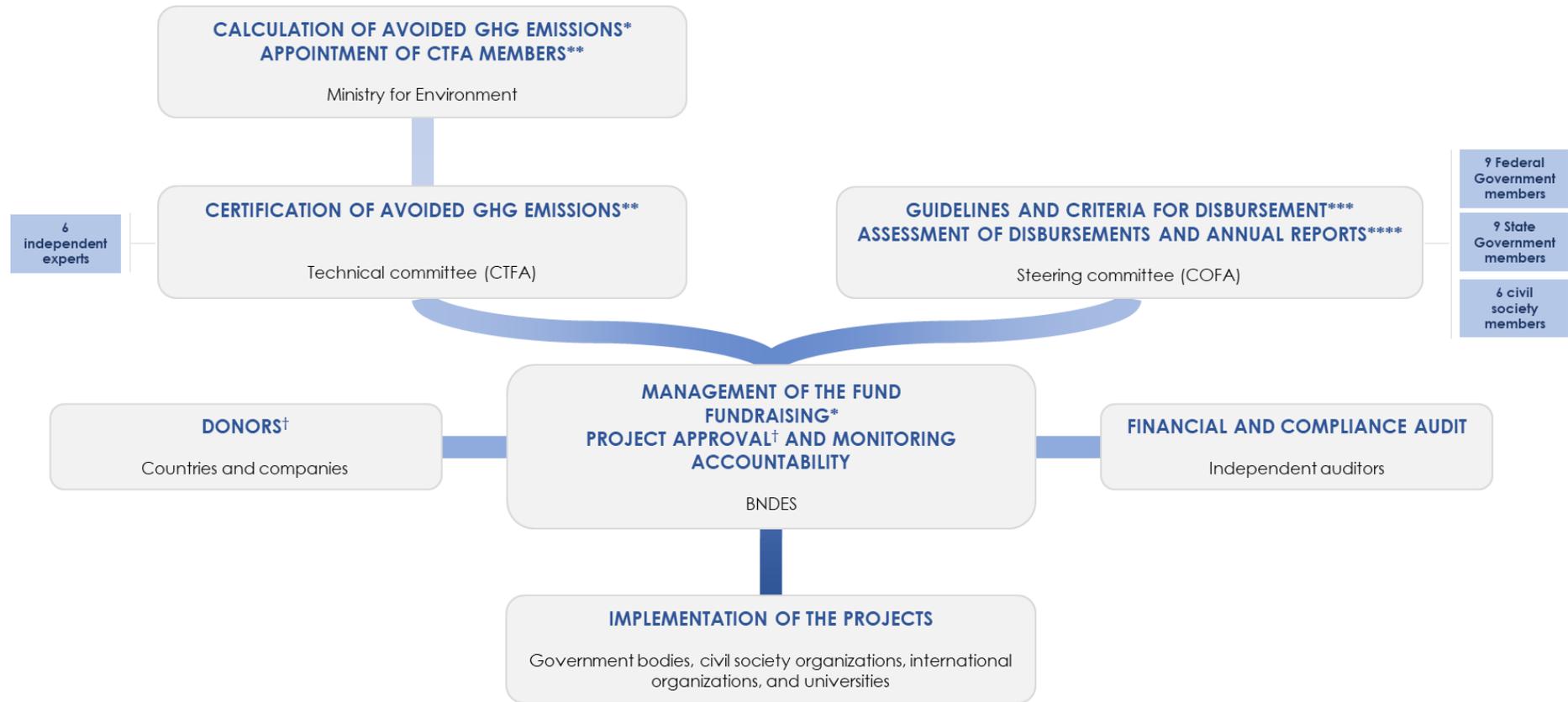
not, as well as negotiating the structure with the donors, which so far has failed (50; 47)¹⁵. Additionally, despite the extinction of COFA (one of the Fund's committees) being deemed unconstitutional by the Supreme Court in April 2022 (67), as of November 2022, the committee has not resumed its activities.

Figure 6 exhibits the actors involved in the governance of the Amazon Fund and the roles of each actor. Several roles are currently blocked due to the changes made in 2019 and 2020. However, in the absence of a new governance structure, the roles and actors laid out are those established in the original decree, in effect until 27 June 2019¹⁶.

¹⁵ In February/2020 the Presidency established a new committee for the Legal Amazon, named CNAL. CNAL is chaired by the vice-presidency. Even though the Amazon Fund is not mentioned in the Decree that created CNAL (108), the vice-presidency has negotiated with donors since then (50).

¹⁶ 28 June 2019 was when the decision to extinguish the committees, established by Decree number 9,759/2019, entered into effect (Article 5) (47).

Figure 6 – Governance structure of the Amazon Fund



* Attribution cancelled by the revocation of Article 2 of Decree 6,527/2008, ** attribution cancelled by the revocation of Article 3 of Decree 6,527/2008, *** attribution cancelled by the revocation of Article 4 of Decree 6,527/2008, **** attribution cancelled by the revocation of Article 6 of Decree 6,527/2008, †attribution blocked by donors and BNDES since the revocation of COFA and CTFA.

Source: created by the author based on (50; 36; 47; 55; 56).

Having laid out the governance structure of the Fund, I explore how it comes into function in the next paragraphs and summarise it in Figure 8.

BNDES, the Fund manager, receives monetary resources from donors and applies them to the Fund's account. The maximum resources that BNDES can raise are equivalent to the emission credits achieved¹⁷. The credits are calculated based on the emissions from deforestation that were avoided in the period (ton CO_{2eq}). The credits are calculated by the Ministry of the Environment and certified by CTFA (50). Brazilian officials and international donors have conflicting views on how to calculate the payment for deforestation reduction. Brazil sustains that the credits are cumulative and account for the reduction in emissions since 2006 (16). According to the Brazilian position, the Amazon Fund has received only 15.5% (USD 3.4 bi) of the total credits certified by CTFA (USD 21.9 bi) (50). Petrobras uses cumulative credits to calculate its donations. Norway and Germany, on the other hand, base their donations according to the results in deforestation reduction achieved in the previous year. This is one way in which donor countries try to push for a continuation of results after the 2005-2012 historical deforestation contraction (16) (recall Figure 2).

Regardless of the calculation method, BNDES recognises the contribution of the donors in tons of avoided emissions equivalent to their donation (ton CO_{2eq}/R\$) and publishes it online¹⁸ (36). It is because carbon credits precede the donations that the Fund is an RBF – Brazil must reduce emissions first (achieve results) to receive donations later (receive payment). Historical donors, however, have not committed to buying all credits available or even proportionately to yearly results. Rather, donations are related to the pace of the Fund itself in financing projects (21).

To make use of the donations received, BNDES is responsible for opening public calls to select projects to finance. The selection criteria are biannually defined by COFA (33; 36). Even though this was not defined by the original Decree, COFA has been chaired by the Ministry of the Environment since its creation – which is reasonable considering that the Ministry is responsible for environmental protection policies in the country. At a minimum, the criteria must guarantee that the projects supported by the Amazon Fund are aligned with broader policies in the Legal Amazon (recall footnote 11). Moreover, up to 20% of the resources is permissible to be directed to the development of monitoring systems and deforestation control in other biomes in Brazil and tropical countries (36). Government

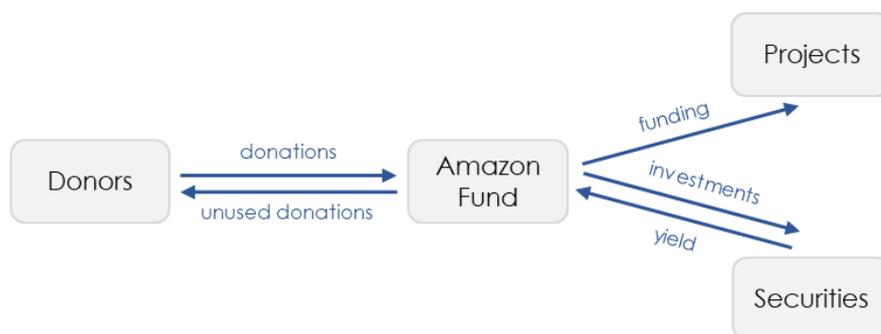
¹⁷ The credits account for the reduction in emissions since 2008. The Amazon Fund has received 15.5% (USD 3.4 bi) of the total credits certified by CTFA (USD 21.9 bi) (50). This means that the Fund could be more than sixfold in size if all other conditionalities hold.

¹⁸ The certification of donations is available at <http://www.amazonfund.gov.br/en/donations/>.

bodies, civil society organisations, international organisations, and universities can apply projects to public calls (57).

Once selected, BNDES transfers non-refundable resources to the projects, which then become part of the Fund's project portfolio¹⁹. BNDES monitors the implementation of the projects by requiring (i) a summary of activities, (ii) financial information, and (iii) evidence of contractual compliance. When the project is complete, an evaluation report is produced (57). Biannually, BNDES presents, to COFA's assessment, information on the expenditures (36). The flux of resources, illustrated in Figure 7, is from donors to the Amazon Fund; and then from the Amazon Fund to projects or, in the case of remaining financial resources, securities aimed at protecting the real value of the Fund over time. Additionally, agreements with donors can account for an inverted flux, in which case unused donations return to the donors (50; 48; 41). It is important to highlight that both donations from donor countries and disbursements to projects are grant-based. Neither Brazil nor project implementers need to pay back any grants awarded. This means that the Amazon Fund depends entirely on donations to raise resources²⁰.

Figure 7 – The flux of resources of the Amazon Fund



Source: created by the author based on (36; 50).

Finally, annually, BNDES contracts out external audits, which cover compliance and financial evaluations, and publishes a report (36). These are part of the conditions set out in agreement with the donors (48; 41; 40; 49). The compliance audit examines how adequate the supported projects' goals, products, services, and actions are in relation to the criteria defined by COFA. The financial audit examines the Fund's extract in the period

¹⁹ The portfolio is available at <http://www.amazonfund.gov.br/en/carteira-de-projetos/>.

²⁰ Another option would be to accumulate enough capital to establish the Amazon Fund as a perpetual fund. This is not the current configuration of the Fund, as an RBF. Moreover, the donations agreements with international countries have accounted so far for a donation influx that is dependent on the payment for projects – the more you finance, the more donations you receive (if all conditionalities are met) (21).

(50). The annual report is published in Portuguese and English and covers the activities financed by the Fund. It is assessed by COFA (36).

Figure 8 – Activities performed for the Fund's operation



Source: created by the author based on (36; 48; 50; 40).

One important aspect to notice in the governance structure is the independence and protagonism of Brazilian institutions in the operation of the Fund, with BNDES, the Ministry of the Environment, and the Committees as the main actors in the governance. The absence of donors in the decision-making of the Fund is uncommon for REDD+ experiences (37). Brazilian institutions were granted complete responsibility for the Fund for being perceived as trustworthy partners (37; 71; 21). BNDES, as the manager of the Fund, is involved in most operational activities. The Ministry of the Environment, on the other hand, is central in all the major decisions of the Fund – it chairs COFA, appoints CTFA members, calculates carbon emissions credits, runs associated policies, and has historically negotiated with donors. Likewise, the outcomes achieved by the Amazon Fund are relevant to the Ministry's objectives of curbing deforestation, as discussed in item 3.2.3. The Committees, which count on a wide representation of Brazilian institutions and specialists, provide technical expertise to the Fund's activities.

Reducing deforestation is why the whole governance structure is put in place. For the Fund to be sustainable and fulfil its purpose, some logical premises must hold:

- i. There are donors interested in paying for deforestation results.
- ii. The Amazon Fund has a governance structure in place that allows it to receive donations and finance projects.
- iii. The projects supported by the Amazon Fund are effective in reducing deforestation and increasing conservation.
- iv. The Amazon Fund is part of a policy ecosystem²¹ with similar goals.
- v. Deforestation is in decline in the Legal Amazon.

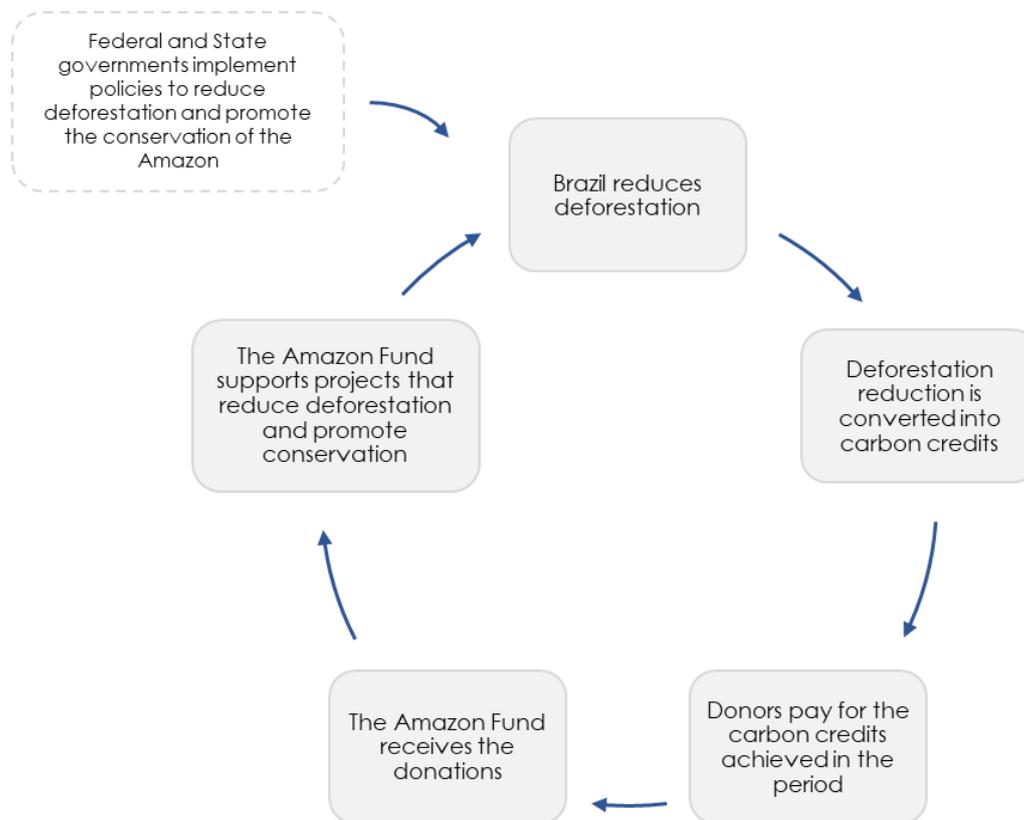
When all the premises are true, the expected cycle of events is the one exhibited in Figure 9. In a positive feedback loop, the better the Amazon Fund works, the more deforestation is reduced, and the more the Fund attracts donations.

Premise iii is a contentious item between Brazil and donor countries. While Brazil understands that if the projects supported by the Amazon Fund are in line with deforestation policies and guidelines (defined by COFA), the Amazon Fund does not need to demonstrate additional deforestation prevention results. This makes sense when considering the RBP characteristic of the Fund. Donors, however, have been pushing for a demonstration of the results of the Amazon Fund concerning deforestation results (16). Considering that without donors the Fund is unsustainable, and the Amazon Fund is part of a policy ecosystem focused on decreasing deforestation (premise iv), premise iii is essential for the Fund.

As a result of the political decisions made in the 2019-2022 period, premises ii, iv and v do not currently hold (refer to item 3.2.1 for a more in-depth historical description). As a result, the positive loop is blocked, and the Fund is at risk. Considering the logic behind the governance structure of the Amazon Fund is essential in the efforts toward sustainable functioning. Take the current situation, of an in-existent governance structure (premise ii) and suppose that a substitute structure is put in place. Eventual donations that the Fund attracts or new projects that it supports, will not be sustainable unless deforestation is in decline in the Legal Amazon (premise v). Deforestation reduction, in turn, is only achievable in a policy ecosystem with the same objectives as the Amazon Fund (premise iv). The positive feedback loop that is expected to arise from the Amazon Fund is therefore only achievable when its logical premises are true. These premisses are considered when analysing the Fund's results (item 3.2.3) and its institutional integrity (5).

²¹ Brazil is a Federation formed by national, state, and municipal level governments. The Constitution attributes all three levels with responsibilities over deforestation control and conservation (see articles 23 and 24) (92). Therefore, the "policy ecosystem" of the premise encompasses policies developed at all three federal levels for all of them are relevant to the results of deforestation control and conservation. The findings by (11) are consistent with this logic, as is the history of deforestation control during the 2000s (7).

Figure 9 – The positive feedback loop of the Amazon Fund

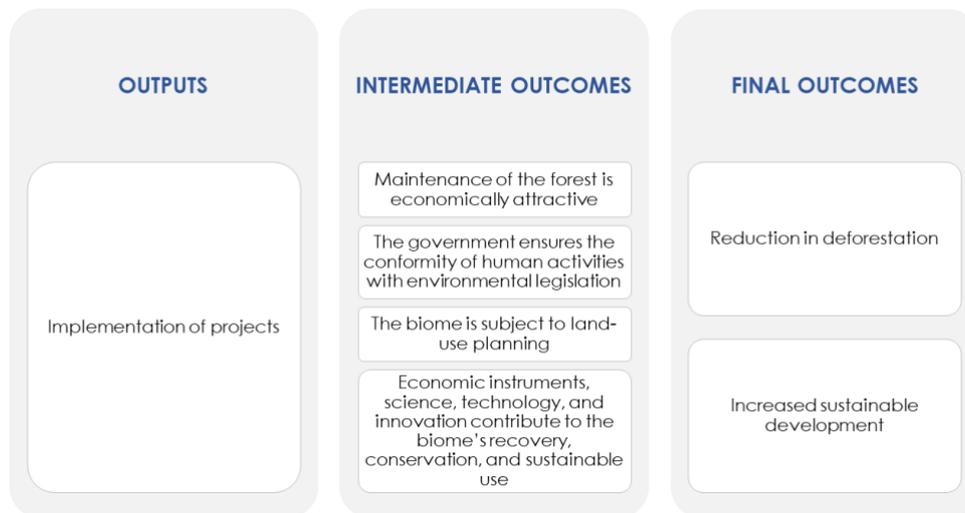


Source: created by the author based on (36; 50).

3.2.3. The Fund's disbursements and results

The major deforestation reduction that happened in Brazil (Figure 2) is a result of a group of policies that includes the expansion of indigenous lands and protected areas, command-and-control policies, as well as the work of civil society and economic shifts (7; 2; 13). As part of this policy ecosystem, the overall objective of the Amazon Fund is to reduce deforestation in the Legal Amazon and contribute to sustainable development (72). To achieve these goals, the Fund follows a logical framework with multiple indicators (72), which suggests a partial Theory of Change (TOC), summarised in Figure 10.

Figure 10 – Partial Theory of Change for the Amazon Fund



Source: created by the author based on (72).

Each of the intermediate outcomes is connected and supports a pillar of the (currently extinguished) PPCDAm (recall footnote 11), namely (i) sustainable production, (ii) monitoring control, (iii) territorial planning, and (iv) science, innovation, and economic instruments²² (72; 73). This is an essential characteristic of the Fund, which highlights the Fund's embedment in the ecosystem of environmental protection policies (recall premise iv discussed in item 3.2.2), rather than a supporter of random projects. As a result, donors evaluated the logical framework as "good" and were satisfied with the projects the Fund supports, considering them of key importance (71). The past tense is used here because of the fractures in the relationship between the Fund and international donors, as well as of the current status of the policy ecosystem in the Amazon, as discussed in item 3.2.1. Out of the R\$ 1,8 bi of disbursements realised by the Fund until 2021, 27% (R\$ 479 mi) were directed to projects in the pillar (i), 46% (R\$ 813 mi) to pillar (ii), 14% (R\$ 251 mi) to the pillar (iii), and 13% (R\$ 243 mi) to pillar (iv) (57).

The Fund's decree allows resources to be directed to the Legal Amazon, as well as to other biomes in Brazil and even other tropical countries. Disbursements outside of the Legal Amazon are capped at 20% of the Fund's resources (36). To analyse the distribution of resources, I have used the data available on the projects portfolio (42). Table 1 is one of the results of this analysis. It shows that the vast majority of the disbursements (R\$ 1,6 bi or 94% of disbursements) were directed to the Legal Amazon, demonstrating the regional focus of the Fund. Of the 102 projects supported by the Amazon Fund, 41 are multi-state projects (all of them in the Legal Amazon) and represent 47% of the Fund's disbursements.

²² As of 26 July 2022, the website of the Amazon Fund still references the Logical Framework established in 2017 and the pillars of PPCDAm (73).

The distribution of disbursements in each state is not available for this relevant proportion of the Fund. There is a large discrepancy in allocation between Amazonian states. For instance, while Amapá received only 0.08% of disbursements, Pará accessed 12.11% - over 150 times more resources.

Table 1 – Geographical distribution of resources from the Amazon Fund

	Project location	Support from the Amazon Fund	
Legal Amazon	Acre	R\$ 106,748,888.11	6.04%
	Amazonas	R\$ 146,427,123.61	8.29%
	Amapá	R\$ 1,404,360.67	0.08%
	Maranhão	R\$ 45,373,162.37	2.57%
	Mato Grosso	R\$ 188,940,135.57	10.70%
	Pará	R\$ 213,950,522.84	12.11%
	Rondônia	R\$ 89,111,081.69	5.05%
	Roraima	R\$ 3,075,205.25	0.17%
	Tocantins	R\$ 31,758,910.00	1.80%
	Multi-state projects	R\$ 834,698,256.62	47.26%
	Total Legal Amazon	R\$ 1,661,487,646.73	94.07%
	Other locations	R\$ 104,706,634.20	5.93%
Total Amazon Fund	R\$ 1,766,194,280.93	100.00%	

Source: created by the author based on (42).

Perhaps it is the case that multi-state projects reduce these discrepancies. Table 2 intends to investigate this hypothesis. The “multi-state project” columns indicate the quantity of projects and financial resources that a given state shares with other states. While it is not possible to know the exact distribution of disbursements between the participating states, access to multi-state projects is less concentrated.

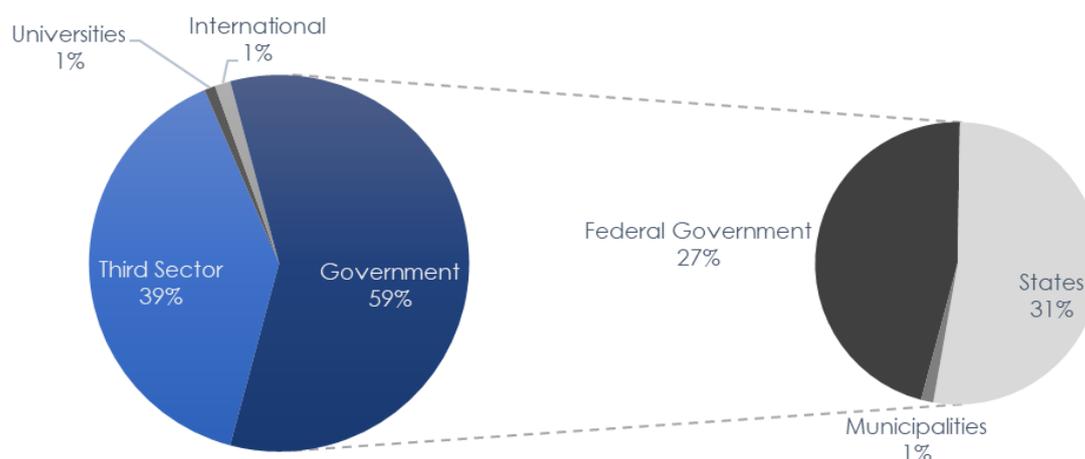
Table 2 – Distribution of resources from the Amazon Fund in the Legal Amazon

State	Single-state projects		Multi-state project		State presence (single + multi-state projects)/total	
	Number of projects	Support from the Amazon Fund	Number of projects	Support from the Amazon Fund	Proportion of projects	Proportion of support
Acre	8	R\$ 106,748,888.11	19	R\$ 636,923,404.60	26%	42%
Amazonas	9	R\$ 146,427,123.61	22	R\$ 673,701,061.60	30%	46%
Amapá	1	R\$ 1,404,360.67	18	R\$ 593,079,562.20	19%	34%
Maranhão	2	R\$ 45,373,162.37	20	R\$ 632,299,850.00	22%	38%
Mato Grosso	15	R\$ 188,940,135.57	28	R\$ 772,212,770.00	42%	54%
Pará	18	R\$ 213,950,522.84	29	R\$ 763,691,283.20	46%	55%
Rondônia	5	R\$ 89,111,081.69	22	R\$ 662,950,968.30	26%	43%
Roraima	1	R\$ 3,075,205.25	17	R\$ 587,273,879.60	18%	33%
Tocantins	2	R\$ 31,758,910.00	20	R\$ 629,425,028.60	22%	37%

Source: created by the author based on (42).

In terms of recipient organisations, governmental bodies are the recipient of most of the disbursements (R\$ 1,029,311,628.97), followed by third-sector organisations (R\$ 696,801,554.31), other countries (R\$ 23,693,641.00), and Universities (R\$ 16,387,456.65) (data analysis performed by the author from (42)). Figure 11 gives more detail on the organisational distribution of disbursements.

Figure 11 – Support from the Amazon Fund by organisation type



Source: created by the author based on (42).

Considering the high proportion of disbursements directed to governmental bodies (59%), one question that comes to mind is the financial additionality of the Fund. "Financial additionality" in this case stands for the extra resources that public policies receive from the Amazon Fund, in addition to their regular budget. If the resources from the Fund are used to compensate for a reduction in the budget, there would be no additionality (33). This logic that the Fund is a "supplement" was established in the agreements with donors (70; 48; 40). The budget of many federal agencies has been in decline since 2012, at the same time when they have received increased disbursements from the Fund. The lack of additionality of the Fund has, therefore, also been raised as a potential issue (33).

The Fund publishes the projects' outputs (Table 3), indicators of intermediate outcomes achieved (Table 4), and indicators of final outcomes (Table 5) in the annual report²³ (recall item 3.2.2). According to donors' evaluations, the Fund has demonstrated good results (71). Another important endorsement of the Fund comes from the Federal Court of Accounts²⁴. The Court has not found any serious irregularities in the Fund's disbursements or goals which is beneficial to the Fund as it increases the trust in its integrity (50).

Table 3 – Sample of indicators of projects' outputs

Indicator	2021 (cumulative)	Relation with Intermediate Outcome
Individuals trained to practice sustainable economic activities	43,870	Maintenance of the forest is economically attractive
Rural properties with sustainable production projects	4,841	
Number of supported environmental agencies	326	The government ensures the conformity of human activities with environmental legislation
Resources disbursed to projects to combat forest fires (R\$ mi)	77,3	
Public employees trained in environmental management and/or deforestation monitoring	10,893	
Protected areas supported	195	The biome is subject to land-use planning
Indigenous lands supported	101	
Individuals trained in the management of forests and protected areas	3,716	
Resources disbursed to research (R\$ mi)	149,7	Economic instruments, science, technology, and innovation contribute

²³ The annual reports are available at: <http://www.amazonfund.gov.br/en/library/amazon-fund/activity-report/>. A summary of the results is available at: <http://www.amazonfund.gov.br/en/monitoring-evaluation/fundo-amazonia-em-numeros/>.

²⁴ "Tribunal de Contas da União" (TCU), in Portuguese.

Families benefited from payment for environmental services	2,124	to the biome's recovery, conservation, and sustainable use
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Source: created by the author based on (57).

Table 4 – Indicators of intermediate outcomes

Intermediate outcome	Indicator	2009	2020	Variation
Maintenance of the forest is economically attractive	Plant extractivism in the Legal Amazon	264,141 ton	302,875 ton	+15%
	Legal logging in the Legal Amazon	829,102 ton	5,651,910 ton	+581%
The government ensures the conformity of human activities with environmental legislation	Number of state environmental agencies outposts	56	67	+20%
	Number of municipalities able to license activities with local environmental impact	32	262	+719%
	Number of environmental permits/licenses granted by state environmental agencies	19,674	32,118	+63%
The biome is subject to land-use planning	Area of indigenous lands and federally protected areas in the Amazon with a land-use management tool	236,483 km ²	1,061,301 km ²	+394%
	Area deforested in protected areas (indigenous lands, and state/federally protected areas) in the Amazon	854 km ²	2,046 km ²	+140%
Economic instruments, science, technology, and innovation contribute to the biome's recovery, conservation, and sustainable use	Number of patents filed at the National Institute of Industrial Property by residents of Amazonian States	169	282	+67%

Source: created by the author based on (57).

Table 5 – Final outcomes indicators

Final outcome	Indicator	Most up-to-date comparison	Variation
---------------	-----------	----------------------------	-----------

Reduction in deforestation	Annual deforestation	2009	2021	+75%
		7,464 km ²	13,038 km ²	
Increased sustainable development	Participation of Amazonian States in the national GDP	2009	2019	+0.88%
		8.04%	8.92%	

Source: created by the author based on (57; 6; 74).

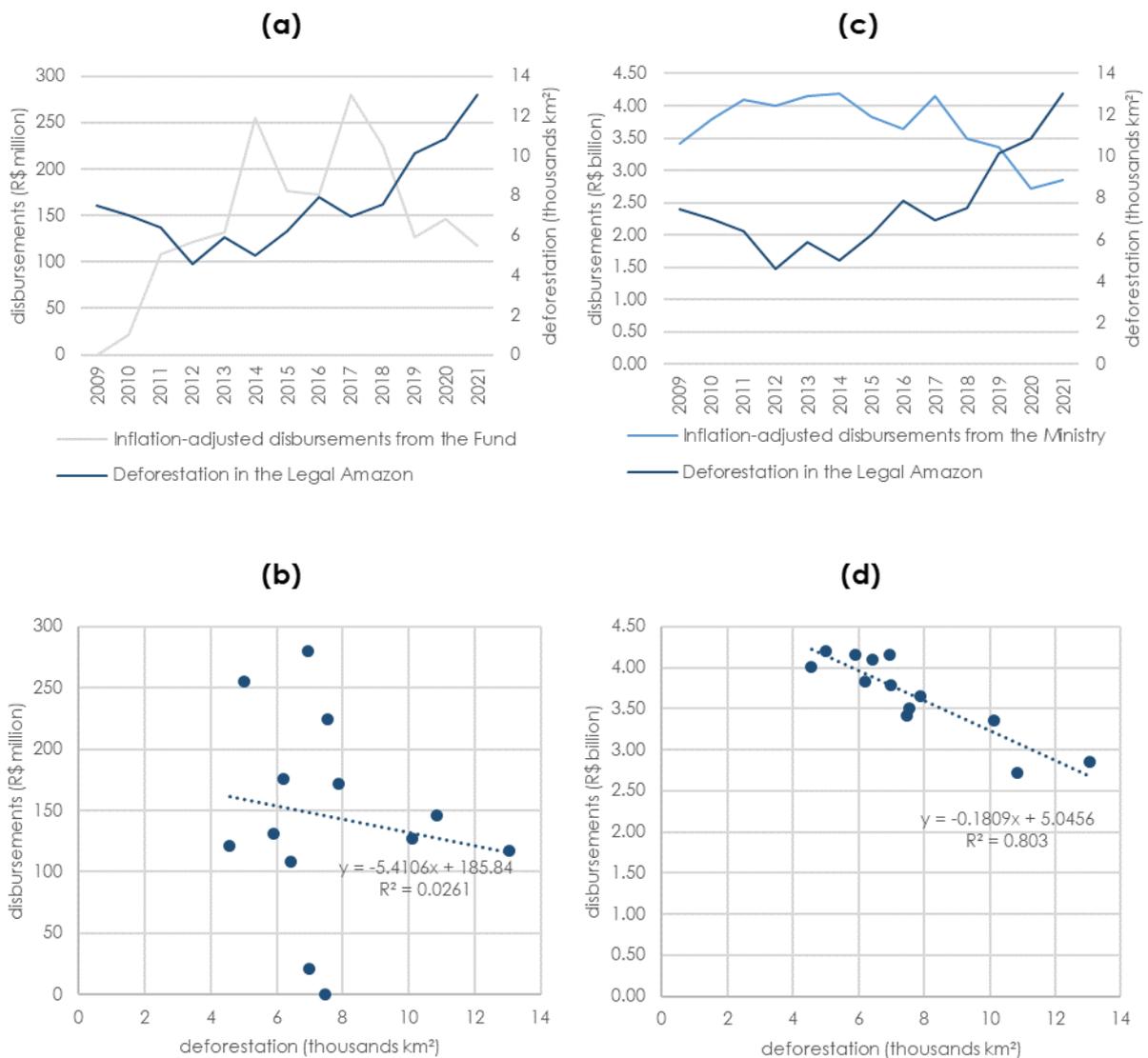
The elephant in the room, however, is the yearly deforestation rate, with an upward tendency since 2013 (6). The Fund and its financial support to projects are contemporary to rising deforestation in the Legal Amazon, as illustrated in Figure 12.a. Two indicators also highlight the increase in deforestation – “deforested area in protected areas (indigenous lands, and state/federally protected areas) in the Amazon” in Table 4 and “annual deforestation” in Table 5. The disbursements of the Amazon Fund to projects, however, are not good predictors of deforestation levels ($R^2=0.026$) (Figure 12.b). Disbursements of the Ministry of the Environment (Figure 12.c), on the other hand, are much more related to the rise in deforestation ($R^2=0.803$) (Figure 12.d). The relationship between deforestation with the Ministry of the Environment is not only statistical but, most importantly, rational. Firstly, embedded in the Ministry of the Environment are some of the most relevant executors of environmental policies, such as Ibama and the Chico Mendes Institute for Biodiversity Conservation (ICMbio)²⁵ (58). Secondly, the Ministry is the head of the national environmental policies in the country (75). Finally, a more capable Ministry is expected to yield better results and vice-versa. State capacity is the potential a public organisation has to achieve the results it pursues (purpose). Resources are one of the indicators of capacity – while the budget is not the only type of resource and not a determinant of outcomes, it is an important aspect of capacity (76). A Ministry for the Environment with a shrunk budget is expected to be less capable. The finding also supports the premise for the sustainability of the Amazon Fund discussed in item 3.2.2 – without capable institutions in the policy ecosystem, deforestation rises, and the Amazon Fund is expected to lose the ability to attract donations.

The Amazon Fund is not a contributor to the rise in deforestation. Nonetheless, there is also no evaluation of what deforestation levels might have been without the support of the projects for the deforestation control goal (77). Measuring how much deforestation prevention (final outcome) is attributable to the projects supported by the Amazon Fund has also proven challenging (16; 33; 71). While at first, this would not be a requirement for an RBF (37), and the Fund as a whole is deemed a successful project by donors (71), they

²⁵ Acronym for “Instituto Chico Mendes de Conservação da Biodiversidade”, in Portuguese

have pushed for evidence of results in deforestation reduction achieved by the Fund (recall premise iii discussed on item 3.2.2) (16). To this end, and without abandoning longer-term policies (which have been the focus of the Fund so far) (37), the Fund would benefit from proactively selecting projects in areas of high deforestation rates that can yield results in a shorter period, within the timeframe of the project (33). Moreover, including deforestation prevention in the intermediate outcomes would also be beneficial.

Figure 12 – Inflation-adjusted disbursements of the Amazon Fund and the Ministry of the Environment and deforestation in the Legal Amazon



Source: created by the author based on (6; 78; 79; 80; 58; 81)

To sum up, the Fund is evaluated as a successful policy by domestic and international stakeholders. Nonetheless, there is room for improvement, particularly in the selection of

projects and monitoring. These improvements would be beneficial for the functioning of the Fund, as well as the trust it yields to the international community, potentially attracting more donors and supporting the long-term sustainability of the Fund.

4. METHODOLOGY

This working paper was conceived from two assumptions about the Amazon Fund. The first is that the Fund is valuable for Brazil because it supports the country in the efforts to reduce emissions coming from the deforestation of the Amazon. The second is that the Fund's operation was disabled due to a political choice, which eventually might change. When this happens, how could a revisited Amazon Fund be effective and sustainable in the long term? This is the challenge that the working paper addresses. The conceptual framework selected to guide the research was Kirby's public institutional integrity (82; 83).

Public institutional integrity was developed to answer to the low levels of trust in public institutions registered around the world (83). Corruption, as a major violation of trust, has historically inspired many anti-corruption policies and organisations to answer to the issue of low trust (84; 83; 85). While it is certain that corruption is undesirable and good governance should prevent and address corruption cases, being anti-corrupt is not the only characteristic we want to find in a public institution, nor the only requirement for trust (84; 83; 82; 85). More than being anti-corrupt, a trustworthy institution is one that can be relied upon to meet the commitments it has made (86). This is where the concept of integrity, as in in "doing the right thing in the right way" (85), comes in handy. The conceptual framework of public institutional integrity applies the concept of integrity to public institutions and reads as follows:

"Public institutional integrity is the robust disposition of a public institution to pursue its purpose efficiently, within the constraints of legitimacy, consistent with its commitments" (82) (page 1627).

It follows that a public institution that possesses integrity has a commitment (legitimate purpose) and is reliable to deliver such commitment, even in adverse moments. Such an institution would be, therefore, trustworthy (87; 82).

While integrity (and the trust that follows) is valuable for any public institution, why is it especially important for the Amazon Fund? Because integrity is one of the keys to the Fund's recovery and long-term sustainability.

Firstly, the current context of the Amazon Fund is of a policy hanging by a thread – donations and new projects have been frozen since 2019. Given that without new donations the Fund is not sustainable, it will be up to the next elected Brazilian president to define the Fund's fate and either recover it or terminate it. If the former is the political choice (as it has been signalled by the president-elect Lula da Silva), re-establishing trust will be key. Historically, the Amazon Fund was regarded as a trustworthy institution by the international community, the Brazilian government, and project implementers. Being a

trustworthy institution is what allowed the Fund to receive donations from international partners, be part of the Brazilian policy ecosystem, and receive and implement projects. Donors saw the Brazilian government as a trustworthy partner and delegated the responsibility for the management of their donations entirely to Brazil, without taking part in any decision-making other than choosing how much to donate (37; 21)²⁶. At the same time, the fact that there was not any international interference in the governance of the Fund gave confidence to Brazilian institutions (the government and implementers) (21). The Fund could not have been approved if there were signs of international interference (37; 7). In the first speech after being elected, Lula explicitly said that Brazil “is open to international cooperation to preserve the Amazon (...) without ever renouncing its sovereignty” (69), remounting back to the notion that the Amazon Fund's configuration must be one that restricts international participation in decision-making in the potential recovery phase of the Fund from 2023 onwards. For such a hands-off partnership to exist, trust from international donors is a precondition.

Secondly, public institutional integrity is essential to the Amazon Fund as it supports its long-term sustainability. While the Fund's efficiency is not directly related to donations (rather, to reductions in GHG emissions coming from the biome's deforestation), the more effective the Fund is, the more donations it is likely to receive, both from historical donors and by attracting new donors. Moreover, if the opposite is true, in the long term, donations are to be discontinued. Solid results also raise the prominence of the Fund to the Brazilian government, sustaining it in the long-term and integrating it into its climate and deforestation control policies. Finally, project implementers must trust the Fund's purpose and its ability to yield results for the Fund to maximise the quality of project applications. This way, public institutional integrity supports a thriving Amazon Fund (recall Figure 9).

By supporting the Fund's ability to yield trust, public institutional integrity facilitates the Fund to progress and endure in the long term. There are many justifications for why it is important for the Amazon Fund to succeed, but perhaps the most important is found in the reason it was established – to allow for developed nations to contribute to Brazil's efforts towards emissions' reduction by means of deforestation reduction and the sustainable use of the Amazon. Funding is also one of the bottlenecks of the Brazilian NDC goal of achieving zero illegal deforestation in the Brazilian Amazon by 2028, which can be alleviated by the Fund (2; 19). Moreover, the Amazon Fund, as a pioneer and large-scale RBF and REDD+ initiative, shapes the international discussions around climate finance and UNFCCC debates (16). Consequently, the Fund's results affect international discussions around

²⁶ This configuration is uncommon for other REDD+ experiences around the world – see (37) for some examples. In fact, trust and institutional safeguards play a major part in any REDD+ development (33).

climate finance (33). For all these reasons, strengthening the public institutional integrity of the Amazon Fund is highly relevant.

To assess the Fund's public institutional integrity and give recommendations to strengthen it, I make use of the framework available in Table 6. The framework consists of the five constitutive elements of public institutional integrity (purpose, legitimacy, consistency, efficiency, and robustness) (82), which are detailed in nine dimensions. Each of the elements and dimensions is analysed in item 5.

Table 6 – Public institutional integrity framework

Element	Dimension
1. Purpose	1.1. The institution has a clear institutional purpose
2. Legitimacy	2.1. The purpose followed by the institution is permitted by law
	2.2. The institution acts within the scope of its authority
3. Consistency	3.1. Stakeholders believe the institution has met its commitments
	3.2. The institution's commitments are legitimate and consistent with its institutional purpose
4. Efficiency	4.1. The intentions of the institution demonstrate the pursuit of its purpose
	4.2. The actions of the institution demonstrate efficiency in the pursuit of its purpose
5. Robustness	5.1. The institution remains intact in adverse environmental conditions
	5.2. There is robustness in the purpose, legitimacy, consistency, and efficiency of the institution

Source: created by the author based on (82; 87).

It is important to acknowledge that the application of the concept of public institutional integrity to the Amazon Fund differs from the original framework in two ways. Firstly, Kirby does not structure the definition of public institutional integrity using a framework nor makes use of dimensions. The format suggested here aims to support a more applicable usage of the definition in public policy. Secondly, Kirby structures integrity around a narrow

definition of what a public institution is – a public organisation composed of public officers with a defined role and bound by internal rules, authority structures, and procedures (82; 88; 89). The Amazon Fund is not a public institution of this kind because it is not formed by a standalone structure. Rather, it is formed by other institutions/groups (BNDES, MMA, committees, donors, etc.) interacting with each other (recall Figure 6). Even though the governance structure of the Amazon Fund represents a novel way of applying Kirby's definition, I argue it is still valid to analyse the Fund's institutional integrity using the same theory. This is because the Fund's structure follows the basic characteristics of the institutions originally used by Kirby: (i) the Fund has formal mechanisms for making decisions, articulating its goals and interests, and designating members (89), (ii) is capable of collective action and can be understood as a collective (88), and therefore (iii) can be worthy or unworthy of trust (82).

In order to collect data for the assessment of the Fund's public institutional integrity, I conducted a qualitative document analysis. This format of data collection is appropriate to the conceptual framework, as the bulk of data needed for the analysis is available in the form of official documents that consistently cover the history of the Fund. These documents form the primary data that were thoroughly considered to inform the analysis. The documents are mainly open access and retrieved from the Amazon Fund and the BNDES libraries²⁷, as well as from government websites. Documents that were not open access were requested to BNDES. The documents used as primary data include pieces of legislation involving the Fund, its formal framework, agreements and memorandums of understanding with donors, minutes of committee meetings, representations at the Supreme Court and congress, project portfolio, data on donations, audits, and annual reports. While the documents coming from these official sources are genuine, some of them (notably reports) could be biased towards representing the Fund in a positive light. To reduce this potential, independent evaluations and research literature were also included in the analysis, as secondary sources of information. Incorporating these sources also enabled the working paper to build upon previous works. They were important sources of information when considering the different narratives pushed forward by the actors involved in the Fund, the relationship between these actors throughout the Fund's history, insights into the decision-making process of the Fund, and quantitative analysis of the Fund's results.

²⁷ The Amazon Fund library is available at <https://www.fundoamazonia.gov.br/en/library/>. The BNDES library is available at <https://web.bndes.gov.br/bib/jspui/>.

5. ASSESSMENT OF THE INSTITUTIONAL INTEGRITY OF THE AMAZON FUND

5.1. Purpose

The analysis of the “purpose” element seeks to evaluate if the institution has a clear institutional purpose. Having a clear institutional purpose is at the core of an institution's identity. It is against the institution's purpose that it is possible to evaluate if the organisation's actions and policies are legitimate, consistent, efficient, and robust. “Purpose” is, therefore, a condition for integrity (82).

5.1.1. First dimension

The Amazon Fund is a product of international negotiations around climate change, discussed during successive COPs. The logic of supporting such an initiative is that by reducing deforestation in the Legal Amazon, Brazil would reduce its GHG emissions. Thus, **from an international perspective, the Amazon Fund is a climate policy**. Like other REDD+ initiatives, the support of forest protection and management aims to generate the global co-benefit of emissions reduction (71). The protection of the Amazon is an intermediate outcome to reaching this final goal. The following excerpt taken from the inaugural donation agreement between the Norwegian government and BNDES clearly states the international interpretation of the purpose of the Amazon Fund:

*The Goal of the Fund is to support projects that contribute to a **reduction of greenhouse gas emissions** from deforestation and forest degradation [emphasis added]. (48) (Article I.3)*

The donation agreements with Germany signed in 2010 and 2017 have a similar phrasing (item I.1 and I.2 respectively) (49; 90).

Moreover, even though the Fund precedes the institution of UNFCCC's REDD+ programme, Brazil posteriorly embedded the Amazon Fund in its REDD+ strategy (44; 55). As a pioneer and evaluated as a successful RBF for the REDD+ initiative, the Amazon Fund's experience has shaped UNFCCC's REDD+ programme (33). The international interpretation of the purpose of the Fund in the bilateral agreements is compatible with the UNFCCC's purpose in the sense that they share the focus on emissions reduction.

On the other hand, from the Brazilian government's perspective, the Fund is a **forestry and land use policy**. Emissions reduction is not stated as the Fund's end goal in the decree (36; 44) nor in its TOC (72; 57). The carbon reduction achieved via deforestation reduction is a co-benefit of decreased deforestation. Domestically, the purpose of the Amazon Fund is stated in its establishing decree and reads as follows:

*realisation of non-reimbursable investments in actions to **prevent, monitor and combat deforestation** and to **promote conservation and sustainable use** of the Legal Amazon [emphasis added] (36; 44)(Article 1)*

The Fund, therefore, has two narratives of purpose. From an international perspective, the Fund's purpose is to reduce GHG emissions by means of decreasing deforestation. From a domestic perspective, the purpose is to reduce deforestation and promote sustainable use of the biome. Is having two narratives of purpose a problem? Not necessarily. It is expected for an organisation to have multiple goals. For integrity of purpose to hold, there must be a clear hierarchy of goals and these goals must be clear enough to be assessed (87).

In terms of hierarchy, the domestic purpose clearly takes precedence over the international purpose. Firstly, because it is the domestic purpose that defines how the Fund works. Secondly, not only "emissions" are not part of the purpose of the Fund's establishing decree, but also there is no reference to "emissions" anywhere in the text. Finally, emissions are not measured by any of the indicators of the Fund, nor are directly criteria for selecting projects. Given that the hierarchy is so clear, it is interesting to consider why donors have accepted the Fund to manage their donations for a goal that is not exactly their own. The answer is in the logical connection between sustainable use and deforestation reduction and results in GHG emissions, which has enabled the Fund to serve the two narratives concomitantly rather successfully. As a result, the domestic goal was able to prevail over the international, while still maintaining agreements with donors, who were generally satisfied with the Fund's logic and results (71).

The problem, however, is in the clarity of the domestic purpose. Whereas the international purpose puts forward only one goal for the Fund – to reduce GHG emissions –, the domestic purpose enunciates multiple – to prevent, monitor, and combat deforestation, as well as promote conservation and sustainable usage of the biome. The multitude of goals lead to lack of clarity in what the "identity" or "distinctive competence" (82) of the Fund is. Is it a Fund that focuses on deforestation, on conservation, or on the management of usage of the forest? How do conflicts between these different goals can be solved so that the institution remains consistent? While it is natural for an institution to hold multiple goals, and that the goals are related to deforestation reduction overall, the domestic purpose does not provide a clear north for the Fund to answer to any of these important considerations. Consequently, the Fund is unlikely to be coherent and consistent in a robust way (82), which affects the integrity of the Fund as a whole.

5.1.2. Result

The lack of clarity of the Fund's purpose is a major source of instability to the Fund's integrity. As a result, **the element of purpose of the Amazon Fund is evaluated as inadequate**. Table 7 presents a summary of the assessment of the "purpose" element of the Fund's public institutional integrity.

Table 7 – Summary of the assessment of element 1 – purpose

Element 1. Purpose	
Dimension	Evidence
1.1. The institution has a clear institutional purpose	<ul style="list-style-type: none">• Even though the Fund has two different purposes, one international and another domestic, the hierarchy of purposes is clear• Lack of clarity in the (domestic) purpose is a major threat to the Fund's integrity
Status: Inadequate	

Source: created by the author

5.2. Legitimacy

The analysis of the "legitimacy" element seeks to evaluate if the institution's purpose is permitted, and its actions are performed within the authority domain granted to it (82; 87). Legitimacy, therefore, grants permissibility to the institution's purpose and mode of pursuit. Acting outside of the permissible boundaries would be an assault on integrity. Legitimacy is, therefore, another condition for integrity (82).

Based on the definitions provided by Kirby, I use two dimensions to analyse the Amazon Fund's legitimacy status: (i) the purpose followed by the institution is permitted by law and (ii) the institution acts within the scope of its authority.

5.2.1. First dimension

In relation to the first dimension of legitimacy, associated with the Fund's purpose, as discussed in 5.1, the Amazon Fund has two definitions of purpose. The domestic definition of purpose was established by presidential decree in 2008 when the Fund officially came

into existence. Presidential decrees are one of the instruments to initiate policies available to Brazilian presidents (91), allowed by Article 84, VI, a of the Brazilian Constitution (92). Initiating the Amazon Fund using a presidential decree is, therefore, lawful. It follows that the domestic purpose of the Amazon Fund was established in a lawful and thus permissible way. Consequently, the Fund's domestic purpose is legitimate. The Fund also supports the achievement of Article 225 of the Brazilian Constitution, according to which having access to an environment in equilibrium is a right and, for this, the Amazon must be preserved (92).

The international purpose of the Fund is legally defined in the bilateral agreements signed by Brazil²⁸ and donor countries (Norway and Germany). Considering that the Fund's domain of power was defined by the 2008's presidential decree, which precedes and authorises the bilateral agreements that followed, the international purpose must fall within this domain to have legitimacy. That is, the international purpose must be compatible with the domestic purpose to be legitimate, as Brazil is not obliged to enter into any agreements without consent (93). As discussed in 5.1, the domestic purpose of the Amazon Fund focuses on deforestation reduction and sustainable use of land, whereas internationally the focus is on emissions reduction. Is there a legitimacy conflict between them? International agreements state that the Amazon Fund, as a REDD+ initiative, supports projects that contribute to a reduction in emissions from deforestation and forest degradation (48; 40; 94; 41). Arguably, reducing emissions is a co-benefit that is part of the many potential consequences of projects that support deforestation reduction and sustainable use of the Amazon (as per the domestic purpose of the Amazon Fund). Thus, I understand that the international purpose of the Fund is compatible with the national purpose. Moreover, the Brazilian government itself has agreed, from the early 2000s, for emissions coming from deforestation to be discussed in climate negotiations, including by discussing and establishing policies like the Amazon Fund (7). The agreements are therefore lawful and legitimate. Moreover, considering that the Fund is embedded in the national strategy for REDD+, the Fund also supports the achievement of the Paris Agreement, of which Brazil and donor countries are parties. The Fund is aligned with the Paris Agreement, particularly Article 5, by using RBF to reduce emissions coming from the forest sector (30). Consequently, the Fund's international purpose is legitimate.

5.2.2. Second dimension

²⁸ BNDES is the judicial representative of the Amazon Fund, as defined in Article 1, §5 of the Fund's establishing decree (26).

In relation to the second dimension of legitimacy, the goal of the dimension is to verify if, given the authority delegated to the institution, the Amazon Fund pursues its purpose legitimately. That is if the actions taken by the Fund are “within the limits of its authority” (87). Having clear internal rules is a logical first step to later being able to assess whether the institution is complying with them. I discuss each of these aspects in the following paragraphs.

Firstly, concerning having clear internal rules, the Amazon Fund is noteworthy for having them in the first place. Internal rules were established in its founding decree and subsequent decisions made by the institution that is open to the public²⁹. The governance structure and rules of procedure that were put in place in 2008 (Figure 6) were major sources of trust for the international donors, which permitted them to fully delegate the Fund's decision-making to Brazilian organisations (21). The importance of the governance structure to the functioning of the Amazon Fund is so essential that once it was revoked in 2019 (i) donors suspended new donations to the Fund (51; 52; 53) (recall Figure 4) as well as prohibited the application of previous donations to new projects (50), and (ii) BNDES suspended public calls to the selection of new projects (50).

I argue that the decisions taken by donors and BNDES supported the preservation of the Fund's legitimacy during the most challenging time of the Fund's history. On the donors' side, the governance structure was a conditionality of the bilateral agreements (48; 40; 49; 41) and acted as a safeguard against potential threats to the legitimacy of the Fund's functioning such as biased and uninformed decision-making, or application of resources in ineffective projects (16). On BNDES's side, it would be illegitimate to keep the Fund fully running without the basic instruments that authorised the Fund to be operational in the first place – the existence of a governance structure but also the connection of the Fund's project selection process with strategic related policies such as PPCDAm, which is the basis of the logical framework of the selection process, and the National Strategy for REDD+.

Secondly, concerning the compliance with the internal rules, the fact that the Amazon Fund's actions are assessed by multiple independent parties (COFA, donors, external auditors, and BNDES itself) and that the assessments are open to the public³⁰ are strong

²⁹ The textual record of COFA and CTFA meetings are respectively available at <http://www.amazonfund.gov.br/pt/fundo-amazonia/governanca/COFA/index.html> and <http://www.amazonfund.gov.br/pt/fundo-amazonia/governanca/CTFA/index.html>. A shortcoming of the recordings is that they are only available in Portuguese.

³⁰ The Amazon Fund website centralises data on projects (<http://www.amazonfund.gov.br/en/carteira-de-projetos/>), annual reports (<http://www.amazonfund.gov.br/en/library/amazon-fund/activity-report/>), donations (<http://www.amazonfund.gov.br/en/donations/>), audits (<http://www.amazonfund.gov.br/en/donations/audit/>), and meetings of the committees (<http://www.amazonfund.gov.br/en/amazon-fund/>).

indications that the Fund generally carries out its purpose in a legitimate way, within the limits of the internal rules. Moreover, a lot of information is available in both Portuguese and English, accommodating international and domestic publics (though some documents are available only in Portuguese).

For legitimacy, the most relevant assessments are the ones carried out by external auditors. They verify the compliance of the Fund to the internal rules (named “compliance audits”), as well as the Fund’s balance sheet and assets (named “financial audits”). The audits occur every year, as established in the Fund’s original decree (36) and agreements with the donors (48; 41; 40; 49). The audits are easily available³¹ and have consistently demonstrated that the Fund acts following internal rules and financial best practices, having been evaluated as “compliant” in all external evaluations from 2010 to 2020 (compliance audits) and from 2010 to 2021 (financial audits).

For all these reasons, as far as analysed in the Fund’s records, no major event of noncompliance has been recorded in the Fund, before or after the revocation of the governance structure. Therefore, the Fund has historically acted legitimately.

5.2.3. Result

The result of the legitimacy analysis is positive overall. The purposes followed by the Fund, even if not unified, are permitted by law. Moreover, the institution has demonstrated to act within the limits of the authority given by it, even in challenging times. Inevitably, a new governance structure must be put in place to replace the original structure cancelled in 2019 for the Fund to resume full operation. On this occasion, the new structure would benefit from improving the effectiveness of participation in the committees and welcoming organisations with different levels of capacity and, as a result, achieving a higher level of legitimacy. Nonetheless, **the element of legitimacy is evaluated as adequate**. Table 8 presents a summary of the assessment of the “legitimacy” element of the Fund’s public institutional integrity.

Table 8 – Summary of the assessment of element 2 – legitimacy

Element 2. Legitimacy

³¹ Financial and compliance audits are available at <http://www.fundoamazonia.gov.br/en/donations/audit/> (in English) and (in Portuguese). One easily fixable problem that was found during the assessment is that some of the links to the audit documents are broken. Nonetheless, it was possible to perform the assessment because the audits that were not available in English were available in Portuguese and vice-versa.

Dimension	Evidence
2.1. The purpose followed by the institution is permitted by law	<ul style="list-style-type: none"> • The domestic purpose of the Amazon Fund was established in a lawful way • Brazil and donor countries have consented to the international purpose of the Amazon Fund
2.2. The institution acts within the scope of its authority	<ul style="list-style-type: none"> • The Amazon Fund has clear internal rules and has remained acting in a legitimate way in the challenging period that succeeded the extinction of the governance structure in 2019 • The Amazon Fund is assessed by multiple independent actors and has historically been well-evaluated
Status: Adequate	

Source: created by the author

5.3. Consistency

An institution is consistent if its stakeholders believe it has met its commitments. The institution should guarantee that the commitments are within the limits of its authority and support the achievement of its institutional purpose. This is because conflicts between the commitments, legitimacy, and purpose, undermine an institution's consistency (82). Consistency thus evaluates both the compliance with internal rules and commitments as an end in itself, as well as their ability to be fit for purpose (87).

Based on the definitions provided by Kirby, I use two dimensions to analyse the Amazon Fund's consistency status: (i) stakeholders believe the institution has met its commitments and (ii) the institution's commitments are legitimate and consistent with its institutional purpose.

5.3.1. First dimension

In relation to the first dimension of consistency, I start the analysis by establishing which stakeholders are the essential ones. The Amazon Fund and its projects relate to several political and economic stakeholders, both domestic and international, involved in climate and land-use policies. For analysis of consistency, I will focus on the stakeholders most

important to the Fund. These are the project implementers and donors, which are also actors to whom the Fund is formally committed through legal instruments. Besides expecting the Fund to fulfil its formal commitments, stakeholders have expectations towards the Fund, or implicit commitments. Both explicit (formal) and implicit commitments are taken into consideration in the analysis of the Fund's consistency.

Starting with project implementers, the formal commitment made by the Fund to them is to disburse the amount of support agreed. Project implementers are part of the Fund's portfolio - they have applied to the Fund's public calls, were successfully selected, and were awarded a grant (as described in item 3.2.2). The grants are paid in instalments over one to six years, depending on the implementation timeframe of the project (57). I did not find any records of problems in the disbursements of the agreed support. Therefore, once the selection was concluded, the Fund seems to have fulfilled its formal commitment to project implementers. This has also been the case during the 2019-2022 period (50; 57), which supports the Fund's commitment to its partners even in challenging circumstances.

Project implementers, nonetheless, also have expectations to what they think the Fund's implicit commitments are. Governments, for instance, who are the primary recipients of resources from the Fund (recall Figure 11), expect the Amazon Fund to be a new source of revenue to support public services related to deforestation. The issue with this expectation is that in the agreements with donors, it has been established that the Fund should supplement public budgets (70; 48; 40). As a result, as early as 2010, the Fund publicly stated that additionality was one of the criteria for project selection. The Fund has also formalised how it evaluates if a project proposal has additionally or not (95). However, at the same time as disbursements from the Fund were on the rise, many federal agencies saw their budgets shrink (33). During 2015 and 2017, the Ministry of the Environment led discussions during COFA meetings questioning if the additionality criterion should hold during the period of general shrinkage that the public budget was experiencing, as the reduction in budget also the capacity of environmental institutions. The Ministry was successful in excluding additionality as one of COFA's criteria from 2015 until 2018 under the justification that keeping the criteria would be detrimental to the purpose of the Fund of reducing deforestation (95).

What this chapter of the Fund's history illustrates is how implicit commitments of the sectors that were part of COFA were managed by the Fund. Expectations of other categories of project implementers were also discussed in a similar fashion, such as third sector organisations expectation that the Fund should support small projects (95). The fact that the main implementers of projects were part the Fund's governance structure allowed their expectations to be formally discussed. Consensus was built during the COFA

meetings and eventually led to formal changes to the rules and procedures of the Fund, which were publicly accessible to all. By managing implicit commitments publicly, the Fund transformed some of them in explicit, formal commitments, while clarifying any expectations that ended up not being met by the Fund. My assessment is that this procedure is an outstanding format of managing and actively clarifying implicit commitments or expectations. The fact that organisations involved in the Fund actively opposed the Federal government's decisions that obstructed the Fund's activity from 2019 onwards (recall item 3.2.1) corroborates to the understanding that the Fund is well regarded by the organisations that are involved in its governance and projects.

As for donor countries, the commitment is to use their donations to support the international purpose of the Fund – to select and finance projects that contribute to a reduction of Brazil's GHG emissions coming from deforestation and forest degradation (48; 70; 49). There are two components related to this commitment, both formalised in contractual documents. The first component encompasses the usage of donations. The second concerns the impact of donations in GHG emissions.

The first component of the Fund's commitment to the donors is that the donations must be used to support the international purpose of the Fund. However, it is the Amazon Fund, not the donors, that has the information on whether the donations are being properly used. This is a common problem in principal-agent relationships named "hidden information" (96). The problem of hidden information occurs when agents (Amazon Fund) hold information that is costly for the principal (donors) to acquire (26). In the case of the Amazon Fund, the information is usage of donations. To contain the problem, donors use contract design to add conditionalities (deforestation levels and governance structure), and monitoring and reporting requirements (annual reports and audits) to the donation agreements. A strong body of evidence supports the claim that the Amazon Fund is using the donations received properly. Firstly, all financial audits performed by independent parties have evaluated the Fund as "compliant". Moreover, neither the Fund nor the management of BNDES has been a target of corruption accusations (37). As a result, the problem of hidden information is contained, and donors have been confident throughout the Fund's history that their resources are not being misplaced (50).

This brings us to the second component of the commitment to donor countries. Donations are given and all formal structure is put in place because donor countries expect their resources to reduce GHG emissions coming from deforestation. This is the greatest expectation of donors towards the Fund and is explicit in the international purpose of the Fund. The agreements, however, do not specify what level of results they are seeking (94; 41; 48; 40). There are logical and diplomatic justifications for this vagueness.

The logical justification is that while the Amazon Fund is an important source of financial resources for deforestation prevention policies in Brazil (recall the discussion in 3.2.1), deforestation results are not solely a consequence of the Amazon Fund. Rather, they are intrinsically dependent on the policy choices of the Brazilian government. Recall that for the positive feedback loop of the Amazon Fund to unfold (Figure 9), the Amazon Fund must be part of a policy ecosystem that shares the goal of reducing deforestation. This is why one of the conditionalities of the agreements is for Brazil to cooperate to the reduction of emissions coming from deforestation (70). Due to the recent uptake in deforestation rates (Figure 2) and the consequent rise in GHG emissions (recall item 3.1.2), donors understand that the Brazilian government is not cooperating and, therefore, is no longer a trustworthy partner. As a result, they have suspended their relationship with the Fund. One caveat is that the lack of trust was directed at the Brazilian government, not to the Amazon Fund. Therefore, if the government positions itself as a reliable partner again, the Amazon Fund is going to be in a good position to articulate how cooperation between the nations can be re-established. In fact, this is what has very recently happened. In the week following Lula's election on 30/10/2022, Norway and Germany have expressed their intention of resuming their collaboration with the Fund as quickly as possible (97; 98).

The diplomatic justification for the vagueness is simply that Brazil would not enter any agreement that required commitments to future deforestation reduction for Brazil (7; 16; 37). This is why the RBF model works so well – it rewards about past results, without binding future commitments. Although setting a clear goal is not possible, monitoring results strengthens trust in the Fund's strategy. However, even though monitoring of results in emissions reduction is required by the agreements with Norway³² (Article VIII.1) (48; 40), neither emissions nor deforestation were ever monitored by the Fund (57). After almost a decade of support to the Fund nonetheless, donors started pushing for demonstrable GHG emissions reduction coming from the Fund, as well as a more focused strategy in the selection and monitoring of projects (16). This information comes from interviews held in previous researches as differently from the case of project implementers, who discussed their expectations publicly in COFA meetings, the relationship with donors happens behind closed doors.

As a result of the pressure coming from donors, the Fund contracted out independent evaluations. So far, however, they point out mixed results in terms of reduction in deforestation and forest degradation (35). While at first demonstrating results is not a requirement for an RBF (37), it is politically impossible to not demonstrate the results and

³² The agreements with Germany do not mention monitoring of GHG emissions results.

expect donations to be sustained in the long term. Considering that the Fund is grant-based and therefore depends entirely on donations to keep running (recall item 3.2.2 and Figure 7), failing to demonstrate that the Fund supports the achievement of the international goal is a threat to the Fund's trustworthiness and, therefore, to its sustainability.

5.3.2. Second dimension

In relation to the second dimension of consistency, the goal is to evaluate if there are conflicts between the commitments, legitimacy, and purpose of the Amazon Fund. Are the commitments made to project implementers and international donors legitimate and consistent with the achievement of the Fund's purposes?

I start by evaluating whether the commitments made to project implementers and international donors are legitimate. The formal commitment made to project implementers of realizing timely transfers of the grants approved is lawful as applying the Fund's resources is a basic action established in the Fund's decree (36), and project implementers and BNDES are in contractual relationships that determine the Fund's responsibility of transferring donations to project holders (57). Therefore, paying for projects is permitted by law and the actions taken by the Fund to do so are within the scope of the authority given to it in its original decree. As for implicit commitments, it is worth going back to the criterion of "additionality". Excluding the criterion between 2015 and 2018 was a breach of the agreement with Norway, but one that was accepted by the country as it did not prevent it from contributing with new donations in the period (recall Figure 4). Moreover, the decision was discussed in COFA meetings, in accordance with the Fund's internal rules. It follows that the commitment made to project holders is legitimate.

In the case of international donors, the commitment is to use their donations to select and finance projects that contribute to a reduction of Brazil's GHG emissions coming from deforestation and forest degradation (48; 70; 49). As previously discussed in 5.2, selecting and paying for projects, as well as supporting a REDD+ strategy that reduces GHG emissions is legitimate.

Whether these legitimate commitments are consistent with the achievement of the Fund's purposes is a different question altogether. As a starting point, a trustworthy payment is essential to attract good partners and for selected projects to be implemented. This is an aspect that the Fund has been successful at, having attracted public institutions from the federal government and almost all of the states in the Legal Amazon, except Amapá (42),

and leading NGOs in the Brazilian environmental ecosystem (99). These are signs that support the consistency between fulfilling the commitments made to project implementers and the achievement of the Fund's purposes.

As for the commitment made to donors, does selecting and paying for projects informed by the domestic purpose contribute to the GHG emissions-based international purpose? There is no question that selecting and financing projects is what allows the Fund to pursue its purposes. However, the consistency between the projects selected and a reduction in GHG emissions is complex. The logical connection between deforestation reduction and results in GHG emissions is fundamentally what justifies the existence of REDD+ initiatives in the UNFCCC framework, such as the Amazon Fund. It is also what has allowed Brazil to pursue both domestic and international purposes via the Fund.

Conflicts can arise, however, due to the lack of clarity of the domestic purpose. While the formal justification for why the Fund is part of the National REDD+ strategy is that it supports deforestation reduction, the domestic purpose puts forward multiple other goals, without any explicit hierarchy between them. The goals cover prevention, monitoring, and combatting deforestation, as well as promoting conservation and the sustainable usage of the biome (36). While conservation and sustainable use of the Amazon can support deforestation prevention, it is questionable if they are the most consistent ways of doing so. For instance, they are closely related to forest degradation, whereas Brazil's main source of emissions comes from deforestation itself (27).

Moreover, the domestic purpose is also not necessarily the most consistent way of pursuing the international purpose. For instance, the Fund has focused on building structural capacity to control deforestation in the long term, rather than focusing on projects in areas at high risk of deforestation, which would yield results in the short term (33). This decision was supported by donors because they too believe capacity building should produce future results in deforestation and emissions control (16). So far, however, the evaluations that the Fund has conducted point out mixed results in terms of reduction in deforestation, let alone emissions (35).

As the number of years the Fund is active increases, failing to demonstrate that the initiative is successful in supporting the international purpose is a growing threat to trust. In the current situation of rebuilding trust, lack of consistency between the Fund's actions and the international purpose can become the Fund's Achilles' heel. A clearer domestic purpose to inform project selection and evaluation, as well as monitoring systems that provide information on results in terms of deforestation reduction and GHG emissions is key

to increase the Fund's consistency. Lacking these aspects, the analysis of the second dimension of the consistency element is negative overall.

5.3.3. Result

The full picture is that the Amazon Fund is lacking in consistency. Even though the Fund has historically been a reliable partner to project implementers and international donors, it is not possible to verify to what extent the Fund has been successful in achieving its purposes. Therefore, **the Fund's consistency level is evaluated as inadequate**. Table 9 presents a summary of the assessment of the "consistency" element of the Fund's public institutional integrity.

Table 9 – Summary of the assessment of element 3 – consistency

Element 3. Consistency	
Dimension	Evidence
3.1. Stakeholders believe the institution has met its commitments	<ul style="list-style-type: none"> • Project implementers believe the Fund has fulfilled its commitments and is perceived as a reliable partner • Donors perceive the Fund as a reliable partner overall, but it is unclear whether the Fund has fulfilled its commitment in reducing GHG emissions
3.2. The institution's commitments are legitimate and consistent with its institutional purpose	<ul style="list-style-type: none"> • The Fund's commitments to project implementers and international donors are allowed and within the limits of authority • It is not possible to assess to what extent fulfilling the commitment to project holders supports the achievement of the Fund's purposes
Status: Inadequate	

Source: created by the author

5.4. Efficiency

The efficiency element of public institutional integrity aims to evaluate how well an institution pursues its purpose, given the resources it has (87). There is a subtle but important difference between the "efficiency" and the "consistency" elements. While the latter aims to evaluate if the institution is meeting the expectations of its stakeholders, the former looks at what the institution is set to do and how it aims to fulfil its purpose. That is to say that simply achieving the purpose is not the sole goal of the evaluation of efficiency. Rather, it considers the intentions set by the institution, and how efficient its actions are (82).

Based on the definitions provided by Kirby, I use two dimensions to analyse the Amazon Fund's efficiency status: (i) the intentions of the institution demonstrate the pursuit of its purpose, and (ii) the actions of the institution demonstrate efficiency in the pursuit of its purpose.

5.4.1. First dimension

In relation to the first dimension of efficiency, the Amazon Fund stands out for having a public logical framework, which formally establishes the Fund's intention. The intention (or general objective, as it is called in the document) reads as:

Reduction of deforestation with sustainable development in the Brazilian Amazon.
(72) (page 17)

The intention makes it clear that the Fund focuses on the domestic purpose of reducing deforestation in the Amazon rather than the international purpose of reducing emissions. The logical connection between the pursuit of the domestic purpose and the expected positive co-benefit created for the international purpose makes this clear intention acceptable to international donors. As a result, the first dimension of efficiency is evaluated as positive.

5.4.2. Second dimension

In relation to the second dimension of efficiency, the goal is to analyse if the policies and actions of the Fund support the pursuit of its purposes. To do that, I take a closer look at the Fund's internal rules, the decisions of its leaders, and the distribution of resources.

Starting with the internal rules of the Amazon Fund, which are stated in the Fund's founding decree and posterior alternations, they establish the functioning of the organisation, and the responsibilities of each actor involved. The Fund was purposefully designed to be a

recipient of RBF, and so accounted for specific procedures and activities, such as calculation of carbon credits, fundraising, and monitoring and reporting (36). The complete set of activities is available in Figure 8. Moreover, once the REDD+ framework was established in Brazil in 2015 (45), the Fund's decree was altered to mention that the Fund is eligible to receive RBF for REDD+ (44). Additionally, the Amazon Fund was formally incorporated into the Brazilian National Strategy for REDD+. As a result, the Fund enjoyed a clear and transparent set of rules that allowed it to perform its essential activities – to receive donations from RBF and support projects for REDD+.

In 2019 and 2020 a series of alterations to the Fund's structure was carried out by the Brazilian government (check item 3.2.1 for more detailed information). The governance structure was not replaced by a new one. Rather, alterations to the Fund's decree extinguished the following essential procedures and activities (55; 56), which are also available in Figure 6:

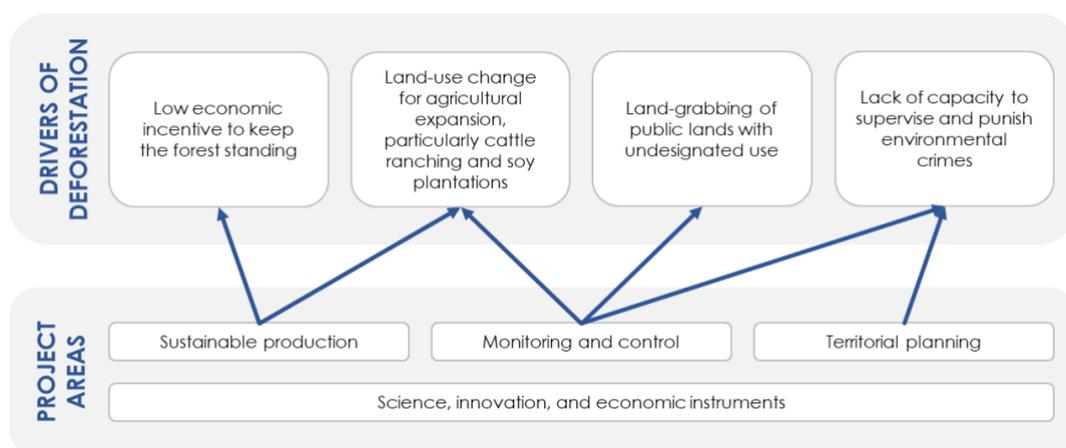
- Fundraising, previously performed by BNDES
- Project selection, previously performed by COFA
- Calculation of avoided GHG emissions, previously performed by the Ministry of the Environment
- Certification of carbon credits, previously performed by CTFA
- Assessment of disbursements and annual reports, previously performed by COFA

The result of the reforms is that the Amazon Fund is unable to seek new donors and select new projects (50). The reforms were also one of the reasons for the termination of the donation agreements (50; 39). The only activity maintained by the Fund since 2019 is the payment of previously approved projects (20; 54; 50). The alterations were decided by the Presidency and backed up by the Ministry of the Environment, even after multiple warnings from BNDES (50). The recent decisions taken by the Fund's leaders are therefore deliberate actions to restrict the Fund's efficiency. The practical result is that the Fund is obstructed to articulate its goals (89).

If the exact previous set of internal rules was put back in place, would it support the fulfilment of the Fund's purpose? It is hard to say. Evaluations of projects supported by the Amazon Fund have shown mixed results in terms of deforestation prevention (16; 33; 71). On the other hand, deforestation control is a complex problem to solve (2). The Amazon Fund could nonetheless be efficient if it pursued its purpose to the best of its abilities, considering the resources available to it, even if it did not achieve deforestation prevention results (87). This hypothesis is explored in the next few paragraphs.

My starting point for this exploration is in evaluating the Fund's TOC (Figure 10). The TOC supports the fulfilment of the domestic purpose (reduce deforestation) by establishing that supported projects must be related to one of four intermediate outcomes, which are connected to some important causes of deforestation (recall item 3.1.2) (72). Figure 13 describes the relationship between project areas and important causes of deforestation in the Amazon. The exception are "science, innovation, and economic instruments" projects, which support the other three intermediate outcomes (72). As is the case for other initiatives of RBF for REDD+ around the world, the Amazon Fund fails to tackle the drivers of deforestation associated with commodity agriculture and other sectors such as energy and mining (27) (recall item 3.1.2 for more on the drivers of deforestation).

Figure 13 – Connection between the project areas of the Amazon Fund and drivers of deforestation



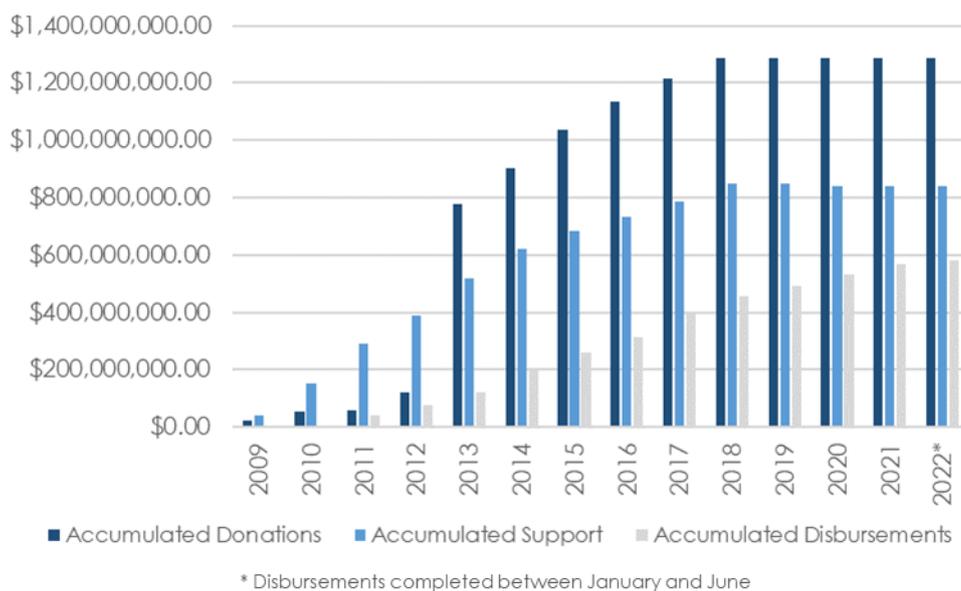
Source: created by the author based on (12; 7; 10; 2; 57; 72)

An essential characteristic of the intermediate outcomes is that they are a copy of the (currently extinct) Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm) (36). This relationship was very positive, as it embedded the Fund in the ecosystem of environmental protection policies, rather than being an insulated

supporter of random projects. Evaluators praised both this connection and the intermediate outcomes used in the TOC (71).

Another demonstration of focus on achieving the purpose is the distribution of resources. Even though the Fund's decree allows for up to 20% of resources to be directed to other biomes in Brazil and even other tropical countries (36), the vast majority of the disbursements (R\$ 1,6 bi or 94% of disbursements) were directed to the Legal Amazon (42). Even though disbursements are focused on the Amazon, historically the Fund has operated at around 65% of the potential capacity. This is because out of the accumulated donations received by the Fund, around 65% of it has been approved to support projects. This means that the Fund is not making maximum use of the resources it has. Figure 14 illustrates the Fund's accumulated donations received, support approved, and disbursements effectuated. Though it is wise to have some donations preserved in case of emergencies, the estimated R\$ 3.583 bi worth of idle resources (57) would be better used supporting projects.

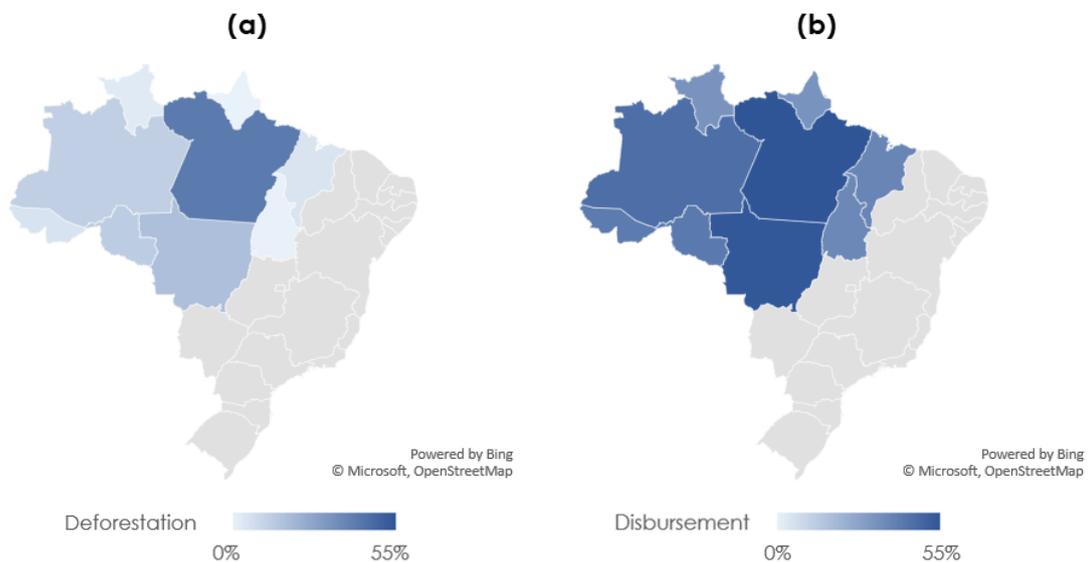
Figure 14 – Amazon Fund's accumulated donations, supports, and disbursements



Source: created by the author based on (100; 101; 102).

Moreover, the actual achievement of purposes also depends on the efficacy of the projects in supporting the Fund's purposes. In this matter, the Fund has been evaluated as passive – it used to open general public calls to projects rather than focusing on activities that could yield the most efficient results and/or areas under the highest threat of deforestation (33). As a result, while deforestation is highly concentrated in some states of the Legal Amazon, disbursements by the Amazon Fund are much more evenly distributed, as Figure 15³³ illustrates. As for the activities supported by the Fund, there are relevant divergences in the TOCs to combat deforestation of different projects and a general focus on long-term strategies (33). While the latter is a choice that might pay off in terms of results, the first might explain the Fund's mixed results. Finally, there is a potential lack of additionality of resource distribution directed to governmental bodies (59%) (Figure 11) as larger disbursements from the Amazon Fund coincided with a reduction in their budgets.

Figure 15 – Geographical distribution of deforestation (a) and disbursement from the Amazon Fund (b) between 2009 and 2021 in the states of the Legal Amazon



Source: created by the author based on (6; 42)

³³ Note that the sum of disbursement per state is bigger than 100% because there are projects implemented in multiple states.

All aspects of the second dimension of efficiency considered, while the Fund focuses its resources on the Legal Amazon and bases its actions on a TOC that is expected to achieve results in deforestation, the Fund has failed to demonstrate positive results. Lack of intentionality in terms of resource distribution helps to explain this outcome. Moreover, deficient monitoring and evaluation to identify projects that require extra support and the most efficient allocation of resources are actions that the Fund has not sufficiently pursued.

5.4.3. Result

The efficiency analysis is negative overall. The Fund currently lacks a governance structure and the internal rules required for the operation of its activities. The greatest practical effect of this blockage is the prevention of adding new projects to the Fund's portfolio, further pressurizing the R\$ 3.583 billion worth of idle resources (57). The lack of governance structure and internal rules coupled with the rise in deforestation results in legal and political unfeasibility to welcome new donors resulting in the Fund finding itself unable to pursue its purposes. Even if the previous structure was put back in place, the Fund would continue to suffer from low efficiency, as demonstrated by the historical results of projects and the passive stance of the Fund's selection process. Thus, **the element of efficiency of the Amazon Fund is evaluated as inadequate**. Table 10 presents a summary of the reasons for this result.

Table 10 – Summary of the assessment of element 4 – efficiency

Element 4. Efficiency	
Dimension	Evidence
4.1. The intentions of the institution demonstrate the pursuit of its purpose	<ul style="list-style-type: none"> The intention of the Fund is clear to all actors involved
4.2. The actions of the institution demonstrate efficiency in the pursuit of its purpose	<ul style="list-style-type: none"> TOC is expected to generate a reduction in deforestation and emissions, but deficient monitoring and evaluation impedes inference of causality between the Fund and the achievement of purposes Without a new governance structure and internal rules, the Fund is not able

	<p>to attract new donors and select projects</p> <ul style="list-style-type: none"> • The Fund does not fully employ the donations received into supporting projects • Mixed historical results in terms of deforestation due to lack of focus on activities, areas, and recipients that concentrate results
Status: Inadequate	

Source: created by the author

5.5. Robustness

The analysis of the “robustness” element seeks to evaluate if the institution’s integrity is strong enough to resist obstacles across time and circumstances (87). This means that the current integrity level is not by itself sufficient for an institution to be trustworthy. If integrity is not robust, it is not a trait that can be reliable (82).

Based on the definitions provided by Kirby, I use two dimensions to analyse the Amazon Fund’s robustness status: (i) the institution remains intact in adverse environmental conditions and (ii) there is robustness in the purpose, legitimacy, consistency, and efficiency of the institution.

5.5.1. First dimension

In relation to the first dimension of robustness, the Fund’s history provides ample evidence of how the Fund responds to adverse periods. The Amazon Fund is a consequence of the period of successful deforestation control that occurred between 2005 and 2012 (recall Figure 2) (16). From its foundation until 2018 the Fund raised in importance – founded as a pioneer RBF for the REDD+ initiative (35; 7), it received USD 1.3 bi in donations (38), supported the formation of the Brazilian REDD+ strategy (45; 44), was included as one of the most innovative tools in deforestation control in Brazil (7), and guaranteed its position as the largest (in terms of financial resources) and most durable RBF initiative applied to REDD+ in the world (33). The Fund was able to work around conflicts with international donors that pressured for evidence of the results of the projects (16), as well as in diverging opinions among members of COFA (37).

This favourable outlook drastically changed in 2019, when the newly elected government started undermining environmental institutions (20). By 2020 deforestation in the Amazon was out of control, the Fund was unable to perform the basic operations of project selection and donation acquisition and lost the support of all historical donors (50). The consequences of the deliberate political decision of blocking the Fund's capacity to act (20) are so severe that the very understanding of the Fund as an institution is currently questionable – the practical result of the reforms carried out by the Brazilian government is that the Fund is obstructed to articulate its goals (89), a capacity at the foundation of institutions (88). The Fund's history demonstrates therefore that the Fund is highly susceptible to its environment. In periods of adversity, it has collapsed.

5.5.2. Second dimension

In relation to the second dimension of robustness, the goal is to verify whether the institutional elements of purpose, legitimacy, consistency, and efficiency cohere across time and circumstance (87).

Starting with the **purpose** of the Fund, the existence of two competing narratives of purpose is a major source of instability. Firstly, the lack of clarity on what the goal of the Fund is has created conflicts between the Fund and international donors. While the Brazilian government supports the idea that as RBF, the Fund theoretically does not need to demonstrate results (16), international donors expect that the donations should directly contribute to a reduction in emissions (48; 49). Even though international donors did not withdraw from agreements with the Fund because of a domestic purpose that is different from the international one, they are likely to clash in the most pressing moments for the institution. For instance, the substantial resources provided by the Amazon Fund to structural instruments such as the registration of rural properties in the Legal Amazon (Rural and Environmental Register – CAR³⁴) was supported by donors because they too believe it can yield future results in deforestation, and thus emissions, control. Eventually, this supposition needs to be demonstrated – so far, the results are null (16; 33). If the results are not aligned with the international purpose of the Fund, its reputation would be on the line and keeping as well as building partnerships would be politically challenging. Therefore, for the long-term sustainability of the Fund, it must demonstrate that the Fund aligns with the international purpose. Secondly, as the purpose of an institution is the foundation by

³⁴ Acronym for “Cadastro Ambiental Rural”, in Portuguese.

which an institution carries out its actions and policies, having an unclear domestic purpose affects the other elements of institutional integrity (82).

The history of the Fund supports the assessment that the original governance structure was appropriate to support a legitimate pursuit of the Fund's purpose. Nonetheless, there is room to improve the robustness of the Fund's **legitimacy**, particularly in the decision-making process. The decision-making process was led by BNDES (as the manager of the Fund) and COFA (who elaborated and deliberated around the disbursement criteria), a multi-stakeholder operation that is well regarded domestically and internationally (35; 71; 50). Nonetheless, there are reservations about the level of influence of the members of COFA (Figure 6) in the decision-making process due to the low frequency of meetings (usually twice a year (103)), unequal distribution of seats reserved for government officials and civil society (nine representatives from the federal government, nine from state governments, and only six from civil society (36)), limited diversity of representatives compared to the diversity of influential actors the region (particularly concerning the low representation of traditional communities and the agricultural sector), absence of meetings in the Amazonian region, and the reduced independence of representatives to the Fund (since they are also recipients of disbursements) (35; 37). If the members of COFA are not able to participate effectively, the power of decision-making is concentrated in the chair of the committee, which has traditionally been the Ministry of the Environment. Civil society members expressed that this concentration is, in fact, the case (37). Not only this is not an intended and agreed design but is a threat to donors and societal trust in the Fund, which relies on the independence of COFA to shield the disbursements from politicisation (21). In a highly polarised and contested topic such as deforestation in Brazil (9), protecting the Fund from politicisation is essential for the robustness of the Fund's legitimacy during conflicting periods.

In terms of robustness of the **consistency** of the Fund, as pointed out in 5.3, the Fund is exposed to the political choices of the Brazilian government. Thus, in favourable periods, the rules and commitments of the Fund are more likely to be consistent with its purposes than in periods of stronger opposition. There are two major sources of such exposure – the fact that the Fund was created by presidential decree instead of law, and the lack of agency that the Fund has in fulfilling the commitment made to international donors to reduce GHG emissions from deforestation in Brazil.

Presidential decrees are as lawful and thus legitimate instruments to initiate a public policy in Brazil as laws would be. However, while the creation of the Fund by decree instead of law does not alter the Fund's legitimacy, it does affect its robustness. Policies initiated by presidential decree are unilateral decisions – they do not require the legislature to discuss

or acquiesce to the policy text. As such, policies initiated by decree are highly sensitive to time and context (91). In the case of the Amazon Fund, the risk of being drastically changed was realised when a government that promotes deforestation assumed the presidency. Without any barriers to protect the Fund, subsequent decrees dissolved the Fund's rules and structure to the point that the Fund was unable to perform basic actions. As such, the Fund was not able to support a consistent pursuit of its purposes by employing legitimate rules and commitments. This is not to say that Brazil needs to keep the Fund at all or as it was originally built (many problems with the original design have been discussed in this paper so far). But if the Fund is to enjoy robust trust from society, donors, and project implementers, it must enjoy a structure that is less exposed to changing interpretations of development by the executive branch. Shielding the Amazon Fund is especially important considering that deforestation and emissions are highly polarised topics in Brazil (9).

In relation to the agency of the Fund to the commitment to reduce GHG emissions from deforestation, this is a conditionality created by international donors to safeguard them from an ineffective usage of resources. This conditionality is reasonable considering that the Amazon Fund depends on a range of policies promoted by Brazil to be successful. Currently, however, the conditionality is so broad that encompasses even emissions coming from deforestation of other biomes (recall item 3.1.2), which are not the focus of the Amazon Fund. The Brazilian government tries to challenge the contractual conditionality by advocating for a purer RBF, in which past results in deforestation inform the results that Brazil could be rewarded, independent of current deforestation rates. While this is a valid diplomatic stand, Brazil has not succeeded in securing any international donation agreement unconditional to current deforestation rates (50) – only Petrobras' agreement has this characteristic (16), but as shown in Figure 4, the donations coming from this source have very limited resource capacity (0.6% of total donations (38)). A potentially more prolific diplomatic stand is to negotiate a clearer commitment, focused on emissions from the Amazon biome. This would increase the Fund's agency and the robustness of the Fund's consistency in periods of increased emissions coming from other biomes.

Finally, the evaluation of the robustness of the **efficiency** element points out a more balanced result. Positively, in the most challenging period of the Fund's history (from 2019 to the present), the Fund continued to pursue its purpose to the best of its ability. BNDES reached out to the Ministry of the Environment multiple times to try to keep the Fund's governance structure in place (50). Moreover, even after failing to preserve the internal rules that allowed it to fundraise and select new projects, BNDES kept the payment of

previously contracted projects, the publication of the Fund's annual report, and external audits (50). BNDES has, therefore, demonstrated maximum effort.

Negatively, the Fund's TOC lacks a connection between the final outcome of deforestation reduction and the reduction in GHG emissions (72). This means that while the TOC supports the achievement of the domestic purpose, it omits the international purpose. As a result, emissions results are not followed by the Fund at all. Because of the connection between deforestation and emissions reduction, the international purpose is only theoretically logically supported. Data to confirm this affirmation is lacking.

Moreover, evaluating the efficacy of the projects supported by the Amazon Fund is challenging. Firstly, the monitoring of ongoing projects (i) does not use standardised metrics between the projects, (ii) does not make use of the indicators set up to follow the TOC, and (iii) is not centralised in a single database (rather, one needs to access each project page separately). Secondly, even though finished projects form the information that is computed into the TOC indicators, the evaluation of finished projects (i) does not disaggregate indicators by project, (ii) does not compare the outcomes against a counterfactual of what would have happened without the projects, and (iii) only a handful of projects have their impacts on deforestation analysed. Finally, out of the many indicators (Table 3 and Table 4) monitored by the Fund, none of them measures the actual impact of the projects on deforestation or emissions reduction (57). As a result, it is very hard to assess projects individually, infer causality between the Amazon Fund and the outcomes registered, and evaluate the impacts of the Fund. Consequently, the Fund is exposed to distrust of its effectiveness, which is a threat to its robustness.

5.5.3. Result

The result of the robustness of the Fund is negative overall. The risk of the Fund's integrity to be affected by the political choices of the executive branch was realised. The Fund's structure and capacity to act collapsed during the 2019 – 2020 period and has not recovered since. Secondly, all other elements of public institutional integrity present vulnerabilities to the robustness of the Fund's integrity. As a result, **the robustness of the Amazon Fund is evaluated as inadequate**. Table 11 presents a summary of the reasons for this result.

Table 11 – Summary of the assessment of element 5 – robustness

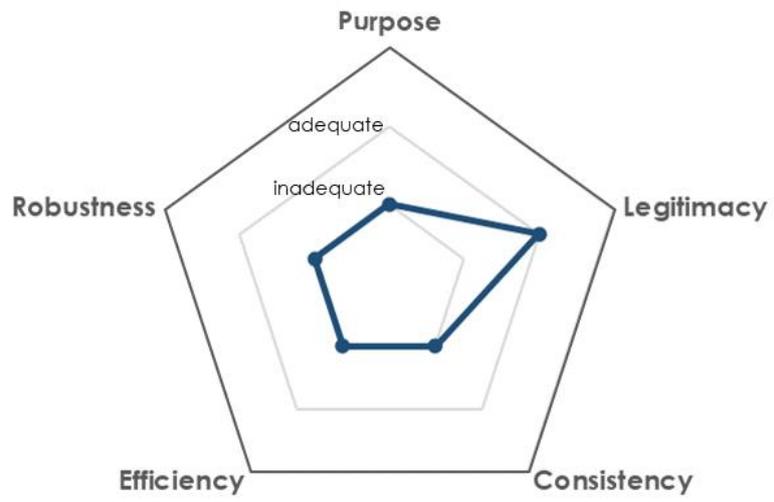
Element 5. Robustness	
Dimension	Evidence
5.1. The institution remains intact in adverse environmental conditions	<ul style="list-style-type: none"> • The Amazon Fund collapsed during the Bolsonaro presidency
5.2. There is robustness in the purpose, legitimacy, consistency, and efficiency of the institution	<ul style="list-style-type: none"> • Lack of a single purpose exposes the Fund to reputation losses with the international community • The multi-stakeholder governance is sub-effective in the decision-making and thus exposes the Fund to polarisation • Being created via decree, the Fund is highly sensitive to time and context • The Fund does not have agency over the deforestation conditionality of country donors • The TOC is expected to generate a reduction in deforestation and emissions, but results are not monitored
Status: Inadequate	

Source: created by the author

5.6. Overall result

The overall status of the Amazon Fund's public institutional integrity is graphically represented in Figure 16. The assessment calls attention to several deficiencies in the Fund's integrity. Policy recommendations to strengthen the Fund's integrity are discussed in item 6.

Figure 16 – The Amazon Fund's public institutional integrity



Source: created by the author

6. POLICY RECOMMENDATIONS

Consolidating the Fund's public institutional integrity is a path to recovering and sustaining the Amazon Fund in the long term. By increasing the Fund's trustworthiness, institutional integrity supports the Fund in (i) increasing fundraising capacity, and (ii) achieving results in deforestation and emissions prevention. Based on the Amazon Fund's current public institutional integrity, I suggest the five policy options available in Table 12. Due to their high priority, I recommend the prompt implementation of Policies 1 and 2, described in greater detail in the following items.

Table 12 – Policy options

Policy	Priority	Timeline	Dependencies
1: Reinstate internal rules	High – the policy is a requirement for the Fund to resume its activities	Short-term	Policy 2
2: Restore relationships with historical donors and seek new donors	High – the policy is a requirement for the Fund to resume its activities	Short to medium-term	Policy 1 and demonstration of efforts in reducing deforestation
3: Improve the project selection process	Medium – the policy is strategic as it improves the Fund's efficiency and robustness but is not urgent	Medium-term	Policy 1
4: Ratify the Amazon Fund in law	Medium – the policy is strategic as it improves the Fund's robustness but is not urgent	Medium to long-term	None
5: Reform the Theory of Change to consider the Fund's results in deforestation prevention and emissions	Medium – the policy is strategic as it improves the Fund's consistency, efficiency, and robustness, but is not urgent	Medium-term	Policy 1

Source: created by the author

6.1. Recommendation 1: Reinstate internal rules

Priority: High

Timeline: Short-term

Dependencies: Policy 2

Justification: Without internal rules that allow the Fund to receive donations and select projects, the Amazon Fund cannot operate (50). Therefore, establishing internal rules are one of the first steps in the efforts to resume the Fund's operation, along with the restoration of relationships with donors.

Description:

The internal rules previously in place are good starting points as they offer evidence of what worked and what could be improved. Based on that, I suggest that the new internal rules:

- Reform the Fund's domestic purpose by aligning it to the goal of emissions reduction, which provides greater clarity of purpose and robustness for the Fund
- Reinstate the relationship between the Amazon Fund and policies of deforestation control in the Legal Amazon, such as the extinct PPCDAm, which establishes the connection of the Fund to deforestation control policies and is intrinsic to its efficiency
- Reinstate a multi-stakeholder governance structure that shields the Fund from the politicisation around deforestation control in Brazil
- Increase the level of influence and independence of committees in the decision-making process
 - Restrict concomitant membership in the committees and grant-recipientcy
 - Balance distribution of seats reserved for government and civil society
 - Increase frequency of meetings
 - Increase representativeness of traditional communities and the agricultural sector
- Re-establish the BNDES' fundraising attribution

Implementation and challenges:

There are two options to re-establish the structure and rules. The first option is to put a new decree into effect. This has been how the Fund was established and altered. Such a decree would be a unilateral decision of the Brazilian President. The second option would be to articulate the Fund's rules in law. This option can be pursued with Policy 3. Whereas

establishing the rules in law would support the Fund's robustness, it requires negotiation with the Legislature. Because a governance structure and internal rules are essential for the Fund's immediate operation, I suggest that it should be published in a decree in the short term and law in the medium term.

Considering that the internal rules of the Amazon Fund must support trust-building with donors, negotiating the rules with historical donors before their promulgation in a legal text is essential for Recommendation 2: Restore relationships with historical donors and seek new donors. Donors might impose new requirements on the donation agreements, such as a clear statement of the international purpose in the Fund's legal text (considered in Recommendation 1: Reinstate internal rules) and TOC (considered in Recommendation 5). Other requirements must be negotiated by the Brazilian government in the two-level game of domestic and international pressures (104).

Effect on public institutional integrity:

The recommendation is associated with the first dimension of purpose, the first and second dimensions of consistency, the second dimension of efficiency, and the first and second dimensions of robustness.

6.2. Recommendation 2: Restore relationships with historical donors and seek new donors

Priority: High

Timeline: Short to medium-term

Dependencies: Policy 1 and demonstration of efforts by the federal government to reduce deforestation (68; 50)

Justification: As an RBF for REDD+, donations are the Amazon Fund's only source of financial resources. Ever since the unilateral decision to extinguish the Fund's internal rules, historical donors have suspended donation agreements with Brazil and blocked the usage of remaining resources for new projects. Lack of trust explains why Brazil has failed to restore the relationship with previous donors and attract new donations. Relationship building with donors is therefore a necessity for the Fund to be able to resume support for new projects.

Description:

Restoring the relationship with historical donors must be initiated with priority in the short term for the Fund to be able to access idle resources. To do that, the federal government must demonstrate efforts in restoring deforestation control institutions and commitment to the Amazon Fund by fulfilling Recommendation 1: Reinstate internal rules. Building partnerships with new donors is an important medium-term strategy to increase the Fund's capacity.

Implementation and challenges:

Historical donors promptly responded to the president-elect political signalling by publicly stating their intentions to resume the partnership with the Amazon Fund. Historical donors should be approached promptly to start the relationship restoration. Once the dependencies are met, Brazil is likely to re-establish cooperation with historical donors as well as attract new ones.

Brazil enjoys two comparative advantages in relation to other developing nations that have REDD+ programs like the Amazon Fund. The first is the Amazon itself, which occupies a central space in the politics of climate change and the global collective imaginary. The second are Brazil's advanced REDD+ policies and framework (105). Strong political signalling, as made by the president-elect, supports the goal of securing donations as it puts forward ambitious plans for the Fund and deforestation reduction (105). This ambition must, of course, be accompanied by appropriate political action in 2023 onwards for trust to hold.

To realise the potential of expanding the Fund's donations, BNDES should focus on the efforts of active search. Besides negotiating with historical donors, the Green Climate Fund, other developed nations, and private companies are potential new donors.

Effect on public institutional integrity:

The recommendation is associated with the first dimension of consistency, the second dimension of efficiency, and the second dimension of robustness.

7. CONCLUSION

After four years of reduced capacity, the Amazon Fund has just received political support to re-establish itself as a central institution in the cooperation between Brazil and the international community to halt deforestation and associated GHG emissions. In the evening of his election, the president-elect Lula da Silva remembered Brazil's success in controlling deforestation during the early 2000's (recall Figure 2), connected this achievement with the international focus on climate change, and announced his government's commitment to the ambitious goal of achieving zero deforestation in the Amazon. He also sent a clear message to the international community, stating that Brazil is open to cooperate with them to preserve the Amazon (69). The clear political signal was extremely successful in reconnecting with historical donors of the Amazon Fund. Norway and Germany promptly opened channels for the restoration of relationships with the Fund (70; 71).

From 2023 onwards, the Amazon Fund has the potential to enter a new phase in its history, attracting millions if not billions of dollars to the Brazilian effort of halting deforestation in the Amazon and, consequently, reducing its emissions associated with climate change. Considering the current state of Brazilian environmental institutions and the great challenges ahead, this influx of resources is going to be essential. Besides resources, Brazil must support efficient projects and policies in the fight against deforestation and climate change. By supporting key projects and boosting public revenue, the Amazon Fund can be a most necessary ingredient in a thriving ecosystem of environmental institutions in Brazil.

This working paper can support the Amazon Fund in this new phase. The theory of public institutional integrity used in the working paper is all about maximising trustworthiness. I argue that trustworthiness is the path to recovering the Amazon Fund in the short term and sustaining it in the long term. By increasing the Fund's trustworthiness, institutional integrity supports the Fund in receiving donations – essential as donations are the Fund's only source of financial resources as an RBF for REDD+ initiative – and employing them to projects that maximise results in deforestation and emissions reduction. The theory, therefore, is the basis for the vision for the Amazon Fund that this working paper supports – of a reliable institution that is efficient in achieving its purpose.

The results of the assessment of public institutional integrity demonstrate that the Fund is operating in suboptimal levels of integrity, particularly because of inadequacies of purpose, consistency, efficiency, and robustness. The Fund's institutional integrity status helps to elucidate why it has collapsed in periods of political opposition. It also highlights the threats to trustworthiness present in its structure and internal rules. Looking ahead, it is

in the interest of the political vision of sustainable development in the Amazon that the Fund's weaknesses are remediated. Therefore, the results of the assessment of public institutional integrity have important implications for the public officials involved in the recovery of the Amazon Fund.

The most urgent and short term actions that must be performed is to reinstate the Fund's internal rules, restore relationships with donors, and cooperate with new donors. These are the primordial steps in the efforts to resume the Fund's operation. Internal rules should be in place firstly and foremost to give back to the Fund its capacity to operate the basic operations of fundraising and selecting projects. Restating the previous connection with policies of deforestation control is also an essential step in guaranteeing the Fund's efficiency. The governance structure in which international donors are not part of the decision-making process is politically desirable, but requires a multi-stakeholder structure, based on independent committees, that shields the Fund from politicisation. There is also room for improving the clarity of the Fund's purpose. Explicitly aligning both domestic and international purposes to be based on emissions would provide this needed clarity of purpose and decrease current threats to the Fund's trustworthiness with international partners. With internal rules in place, as well as political action towards controlling deforestation, the Fund has a high potential to attract historical and new donors.

In the medium and long-term, public officials would benefit from focusing efforts in reforming the project selection process. Informed by the purpose of reducing emissions, the selection process would combine the traditional support of the Fund to long-term structuring policies with targeted policies that are able to achieve results in emissions reduction in the short and medium term. Reforming the Fund's Theory of Change based on the emissions purpose would also improve the Fund's consistency and efficiency. By monitoring deforestation and emissions results, the Fund would also be able to identify projects that require extra support and demonstrate the Fund's results. Finally, by ratifying the Fund in law, the institution would be more shielded against changes in politics, improving its ability to resist challenging circumstances.

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