





CASE STUDY

First Amazonas Fiscal and Environmental Sustainability Programmatic Development Policy Financing

BRAZIL

1. PROJECT HIGHLIGHTS

Key Cross-Country Benefit	Key National Benefit
 <p><i>Promoting the preservation one of the world's largest forest carbon sinks.</i></p>	 <p><i>Combining short-term liquidity support with long-term fiscal consolidation as well as social and economic sustainability.</i></p>

2. QUICK FACTS

Categories	Project Details
Project Name	First Amazonas Fiscal and Environmental Programmatic Development Policy Financing
Project Description	The objective of the project is to support the state of Amazonas in strengthening fiscal sustainability and integrating forest conservation and development. It integrates preserving biodiversity with the country's need to build back after the Covid-19 pandemic supporting fiscal adjustment and sustainable low-carbon and climate-resilient development.
Global Public Good (GPG) Theme	Climate & environment
Sub-Theme	Preservation of biodiversity
Sector	Forestry, sub-national government, insurance and pension, social protection

Disclaimer: We based the case study on the information cited and publicly available as of May 2023. The findings – especially concerning the GPG perspective – have been concluded to our best knowledge. The views expressed are the authors' assessments and do not necessarily reflect the project stakeholders' views. Any errors that remain are our responsibility.

Country of Implementation	Brazil
Region	Latin America & Caribbean
Income Category	Upper middle income
Implementation period	2020-2022
Project Volume	US\$ 200 million
Financial source	International Bank for Reconstruction and Development (IBRD)
Instruments	Development Policy Financing
MDB Involved	World Bank
Implementing Partner	State Secretary of Finance, State of Amazonas ¹
Link to detailed project information²	https://documents1.worldbank.org/curated/en/099540012232284728/pdf/P172455076965b0410b23a0b27f291c4bed.pdf , https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazonas-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf

3. WHY THIS IS A BEST PRACTICE

- **Ambition:** The project is transformative as it addresses environmental issues in a globally unique habitat, representing the largest sub-national forest carbon stock in the world and a key area for biodiversity.
- **Sustainability:** The project is environmentally, socially, and economically sustainable in theory. Pillar A helps to achieve economic sustainability in the short and long term while Pillar B also supports

¹ Further partners engaged were the German Federal Ministry of Economic Cooperation and Development (BMZ), German Development Bank (KfW), German Agency for International Cooperation (GIZ), Norway Royal Norwegian Ministry of Climate and Environment, French Development Agency (AFD), United Kingdom DFID, Japan JICA, USA USAID, European Commission, The Netherlands, United Nations Development Program (UNDP), Governors' Climate and Forests Task Force (GCF), Under2 Coalition—The Climate Group, Wildlife Conservation Society (WCS), Conservation International (CI), Conservation International (CI), Gordon and Betty Moore Foundation, and Andes Amazon Fund (AAF). For more information see <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazonas-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>, Table 8/

² If not stated otherwise, the two documents provide the main source for the case study.

economic sustainability in the long-term. Moreover, PA 6—the extension of the Bolsa Floresta programme—presents a form of just transition mechanism providing an alternative source of income protecting the forests in targeted areas. Moreover, Pillar B enhances environmental sustainability. Yet, the implementation of this pillar leaves room for improvement.

- **Scalability:** The project could be scaled up in the State of Amazonas. This could mean reducing the deforested area even further, increased forest concessions granted or the number of fully validated CAR. Moreover, the Bolsa Floresta programme could be scaled up as it was one of the most successful components of the project.
- **Transformability:** The project is transformative as it uses policy financing re-shaping incentive structures as well as monitoring systems to promote environmental sustainability.

4. PROJECT INFORMATION

4.1 CHALLENGES OF GPG PROVISION IN THE COUNTRY CONTEXT

The state of Amazonas is Brazil’s largest state hosting a quarter of the Amazon basin. With an area of 1.5 million km² and over 96% of the original forest cover preserved, the **state of Amazonas has the largest subnational forest carbon stock in the world**.³ Reversing the recent uptick in deforestation in the state in the next five years, for example, would save emissions equivalent to the total annual emissions from Belgium. Moreover, the state of Amazonas is a key player to anchor the conservation of the wider Amazon basin. Thus, the state is a central cooperation partner to enhance the preservation of global biodiversity and mitigate climate change. On a regional level, the preservation of the Amazonas is crucial as a provider of freshwater resources and ecosystem services that support rainfall vital for agriculture, hydropower, and urban populations across South America including Brazil’s engine of economic growth—the central and south-eastern states.

Yet, the **State of Amazonas has high levels of poverty and unemployment**. This paradox—higher than average poverty in a state with more natural capital than its neighbours—incentivises illegal deforestation and degradation in the absence of regulated ways to make natural capital work for local communities. State-level institutional and regulatory reforms are critical for the implementation and enforcement of robust federal environmental laws—including the Forest Code and for providing incentives to integrate conservation and development. Moreover, the **State of Amazonas has been particularly affected by**

FIGURE 1: STATE OF AMAZONAS IN BRAZIL



³ The World Bank (2020, 1): <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazons-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>

the Covid-19 pandemic, which has caused unprecedented health, economic, and social impacts. With more than 4,500 deaths, Amazonas has the fourth highest death rate among all Brazilian states (1,100 per million people).⁴ The economy is projected to fall into its deepest recession on record, with a drop of 5.4 percent and 5.6 percent in national and state gross domestic product (GDP), respectively, in 2020, and widespread implications for income, employment, poverty, and inequality. Aiming to mitigate the crisis, the federal government has put forward a large fiscal package equivalent to 11.2 percent of GDP. Increased social assistance has been at the forefront of the government's response and has been projected to increase by 7 percent of GDP in 2020.⁵ As of August 2020, 61.9 percent of households in Amazonas had received emergency support from the federal government. Overall, these policies have led to a looming liquidity crisis.⁶

In summary, the **State of Amazonas is facing several parallel challenges, including deteriorating fiscal accounts, the economic, health and social impact of Covid-19, and large increase in deforestation and forest fires across the Legal Amazon region that erodes its natural capital**. Thus, the State of Amazonas and the World Bank have agreed on implementing a Development Policy Financing (DPF) loan covering US\$ 200 million overall.⁷ The development objectives were to support the state of Amazonas in strengthening fiscal sustainability and integrating environmental conservation and development.

4.2 INTERVENTION

4.2.1 Project Design and Agents of Change

The DPF described is the first of two DPFs aimed to strengthen environmental and fiscal sustainability in the State of Amazonas.⁸ The operation promotes reforms that modify the state's pension system, improve transparency, and ensure fiscal sustainability; support the state to build back better, strengthening public investment management and diversifying the economy; and build the regulatory framework and institutional capacity to reverse the deforestation trend in Amazonas State. Together, these reforms are expected to **shift the growth trajectory of the state away from illegal deforestation and degradation, towards greener and more inclusive growth**.

⁴ The World Bank (2020, 1): <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazons-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>

⁵ As these numbers refer to the state level where data availability is limited they can not be confirmed as of today.

⁶ The World Bank (2020, 1 ff.): <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazons-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>

⁷ The World Bank (2020, ii): <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazons-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>

⁸ The second DPF is currently in the pipeline and planned to be implemented in 2024, see: Development Projects : Second Amazona Fiscal and Environmental Sustainability Programmatic DPF - P173090 (worldbank.org).

FIGURE 2: PROJECT COMPONENTS



Source: Oxford Economics based on [World Bank \(2020\)](#), Table 7

The project consists of two pillars as displayed in Figure 2. Pillar A aims to **strengthen fiscal sustainability** by focussing on reforms concerning the pension system and improving public investment management. Concerning the pension system Prior Action 1 (PA1)⁹ it includes the enactment of legislation increasing civil servants’ pension contribution rates from 11% to 14% and the adoption of a unified pension management system including all branches of power.¹⁰ Next, referring to the strengthening of public investment management, the borrower has enacted a regulation to establish prioritisation criteria for public investment projects under its 2020-23 multiannual plan seeking to improve climate change adoption and resilience (PA2). Overall, the first pillar of the DPF thus improves fiscal transparency and medium-term sustainability of state pension liabilities. Moreover, a more efficient public investment programme that also contributes to climate-informed public policy decision and investment planning is ensured.

Moving on to pillar B, the borrower supports the prevention of deforestation by enacting the adoption of a State Plan for the Prevention and Control of Deforestation and Forest Fires setting out roles and responsibilities, procedures and instruments for coordinated enforcement by federal, state, and community agencies, as well as the establishment of an integrated early-warning system for preventing, suppressing, and responding to illegal deforestation and forest fires (PA3). Moreover, the state of Amazonas has enacted regulation to enhance the effectiveness of environmental regularisation instruments, namely the Environmental Regularization Program and the Rural Environmental Cadastre (CAR) for rural landholdings that do not comply with the conservation requirements under the Forest Code. Next, legislation to facilitate forest concessions in formally designated state forests has been enacted. This enables third parties meeting international environmental and social standards to practice low-level selective logging. Lastly, the borrower proposed legislation to expand the Bolsa Floresta programme, providing payments for environmental services to families that actively protect the forest in targeted areas. Notably, women receive the payments on behalf of their family in most cases.

⁹ Prior Actions are policy and institutional actions deemed critical to achieving the objectives of a programme supported by the development policy operation. Normally, complying with them is a necessary condition for the disbursement of the bank loan (<https://ppfdocuments.azureedge.net/b98d432b-7471-441b-9f39-36b7c380bd05.pdf>). However, in this case the full amount was disbursed.

¹⁰ The World Bank (2020, 104): <https://documents1.worldbank.org/curated/en/691751608001800037/pdf/Brazil-First-Amazonas-Fiscal-and-Environmental-Sustainability-Programmatic-Development-Policy-Financing.pdf>

Overall, Pillar B supports legal, institutional, and regulatory reforms at state level to strengthen the implementation and enforcement of federal environmental legislation to **conserve and sustainably develop state forest resources**. It focusses on improving its command-and-control system to reduce deforestation and forest fires, closing conservation deficits on private lands by improving operational rules, and enhancing incentive systems to combine income support, conservation outcomes in poor communities and promoting gender equity.

4.2.2 Results

The results and evaluation of the DPF's components are displayed in Table 1. Overall, as of December 2022 the progress of the achievement of the Policy Development Objective of the project has been rated by the Bank as **moderately satisfactory**. The results for pillar A have been evaluated as satisfactory. Yet, pillar B is more problematic highlighting the **challenges** of the project as well. A major aspect is the large increase in deforestation especially on federal lands despite the target of decreasing the deforested area and the proceeding of the implementation of the state plan to prevent deforestation and forest fires. Thus, an Integrated Centre for Forest Monitoring and Control has been created using finance from partners to invest in environmental sanctions. Moreover, the State of Amazonas has made significant progress already on the indicative triggers of the environmental pillar raising hopes for the second phase of the programme. Moreover, most of the other Results indicators from Pillar have not reached the target either. Yet, PA 6 has gained the best rating, representing a form of just transition. These findings demonstrate the **importance of the project incentive structure for those aspects that support GPG provision** (i.e., the preservation of biodiversity and climate change mitigation) and have comparatively low direct national benefits.

TABLE 1: DPF RESULTS AND OUTCOME

Prior Action	Results indicator	Baseline (2019)	Target (2022)	Actual outcome	Evaluation
1 (Pillar A)	% reduction of pension system deficit financed with public budget.	0	11	21.9 (10/2021)	Satisfactorily
2 (Pillar A)	% of new infrastructure projects screened for climate and disaster risks.	0	20	0 (11/2021)	Satisfactorily
3 (Pillar B)	Deforested area (km ²) GPG	1,434	1,200	2,607 (07/2022)	Unsatisfactory
4 (Pillar B)	Number of fully validated CAR GPG	11	>2000	300 (10/2022)	Moderately satisfactorily
5 (Pillar B)	Forest concessions granted (hectares) GPG	0	60,000	0 (11/2022)	Moderately satisfactorily
6 (Pillar B)	Number of families enrolled in the Bolsa Floresta programme (of which, women receive the payment on behalf of the family) GPG	9,602	12,000	14,500 (12/ 2022)	Highly Satisfactorily

Note: **GPG** highlights indicators that are particularly relevant from the GPG perspective.

Source: Oxford Economics based on [The World Bank \(2022\)](#)

5. PROJECT IMPACT

5.1 NATIONAL BENEFITS

The DPF supports the client country in several regards partly reinforcing each other positively. In the short term, it helps the state to financially recover from the Covid-19 pandemic alleviating a looming liquidity crisis by providing a US\$200 million loan. Moreover, the DPF promotes long-term fiscal sustainability, for example, by reforming the pension system, which in turn contributes to macroeconomic stability. Thus, it **supports fiscal room for the government with various desirable externalities to other development objectives.**

Furthermore, the biodiversity and climate aspects of the programme provide a significant value for the State of Amazonas in the long run, for instance, by protecting the Amazonas as a central source of income. Additionally, protecting the Amazonas from exploitation ensures that it will continue to provide freshwater resources and ecosystem services support rainfall in the future. Lastly, the families additionally enrolled in the Bolsa Floresta programme benefit directly by receiving a secured income paid for their provision of environmental services. Since these payments are mostly paid out to the women, the programme also promotes gender equality.

5.2 CROSS-COUNTRY BENEFITS


Pillar B of the programme especially aims to deliver a significant increase of GPG provision. **Protecting the Amazonas ensures the long-term functioning of one of the most important carbon sinks on earth.** The emissions that could be saved here are a meaningful contribution to mitigate climate change, benefitting all people globally. The same holds true for the programme's contribution to the preservation of biodiversity. Besides these GPGs, the DPF also contributes to the stabilization of the international financial system by taking preventive measures to avoid a liquidity crisis in the State of Amazonas and promoting long-term financial sustainability. Moreover, global public health may be positively affected as well via two main channels: Decreased deforestation and increased environmental regularisation to preserve biodiversity may reduce the risk of releasing new viruses and sustain biodiversity as an important source for medical resources.

Yet, the programme's effect on peace and security is not clear and may vary in the short versus the long term. Conflicts may arise in the short-term as the DPF aims to reduce deforestation and enhance environmental regularisation potentially threatening income sources from illegal logging, for example. However, as these incomes depend on the exploitation of the Amazonas, they are not sustainable in the long run—potentially just postponing conflicts. Moreover, the DPF supports the generation of sustainable income sources such as the extension of the Bolsa Floresta programme and the sustainable use of the Amazonas as an income source. These positive effects and just transition aspects help to prevent unrest and conflict.

6. LESSONS FOR FUTURE GPG PROVISION

6.1 SUCCESS FACTORS

One of the programme's success factors may have been its **mutually reinforcing nature**. A solid and transparent fiscal framework helps preserve fiscal room, unlock support for the conservation of the state's forests through direct public investment, and improve environmental credibility for attracting private investment. Furthermore, the reforms supported under Pillar B will not only contribute to forest conservation and deliver development gains to rural communities but will also help to generate new sources of state revenue and leverage external funding for state action, helping the State of Amazonas to build back better from the public health and economic crises arising from Covid-19. Moreover, the pillars of the DPF series are closely aligned with the guiding themes of the state's 2020–23 multiannual plan (PPA): quality of life, sustainable development, and modernisation of public management. Aligning the DPF with the state's priorities may help to ensure the governments engagement and accountability.

 *"This strategy to support the states in the Legal Amazon was designed to have a foot in this fundamental issue." — Renato Nardello, Program Leader, Sustainable Development, World Bank*



Another crucial factor is the **intervention at the state level**. Combining both, support on the federal and state level is crucial (1) because the concerned areas are state and federal lands, and (2) because the state is responsible for implementing federal policies, such as the Forest Code. Additionally, providing resources and capacity to states enables them to argue more with the federal government for the implementation and definition of policies that are consistent with their objectives.¹¹ As pointed out by Renato Nardello, one of the Team leaders of the project, even if the conservation effort remained only moderately satisfactory, it was important to get "a foot in this fundamental issue".

Furthermore, the design of the proposed DPF programmatic series incorporates **lessons learned** from previous subnational DPFs in Brazil. These are, for instance, focussing fiscal measures on key outcomes and designing them front-loaded to limit moral hazard and pursuing to implement reforms at the beginning of the political cycle to maximize ownership and leadership at the highest levels in the state. Other lessons learned named concerning mainly pillar B include promoting interrelated agendas, operationalising regulation, and strengthening institutions to act as credible partners. Thus, the overall idea is to support GPG provision by combining protection, conservation, and development. International good practice on integrating environmental conservation and development as well as experience of other operations in Brazil focused on agriculture, climate change, and environmental issues benefitted the second pillar of the DPF.

6.2 HOW TO REPLICATE THE BEST PRACTICE

The general idea of combining GPG goals such as the protection and conservation of the rainforests with countries' development objectives is replicable. Connecting these goals can increase a government's accountability and engagement. Moreover, GPG and national goals may reinforce each other positively in the ideal

¹¹ Morning Express (2021): World Bank lends money to Brazilian states in exchange for Amazon conservation (morningexpress.in)

case. However, as the rainforest is a rather special habitat, a direct replication of the project may be limited to other states containing part of the Amazon or other rainforests, for example in Africa and Asia. A somewhat similar project has already been established before the First Amazonas Fiscal and Environmental Sustainability Programmatic Development Policy Financing in Brazil—the Mato Grosso Fiscal Adjustment and Environmental Sustainability Development Policy Loan.

The lessons learned include:

- Combining national development goals and GPG provision may increase stakeholders' engagement and accountability. Yet, the project also demonstrates that PA providing mainly national benefits, such as Pillar A and the expansion of the Bolsa Floresta programme, were much more successful than the GPG focussed aspects of the DPF.
- Programmes and projects are necessary at all levels of government to ensure effective and sustainable implementation and success.
- While innovative approaches can be beneficial, learning from and incorporating best practices of previous projects and programmes may be just as important.
- DPFs tend to be comparatively transformational by design as they address policy aspects, changing economies and societies structurally. Taking GPG aspects into account here as well can be a good starting point to bring these topics to the attention of crucial national stakeholders.
- Both national and cross-country benefits are substantially promoted by the project
- More generally, funding is just one aspect to increase GPG provision. The willingness and capacity of its recipients need to be given as well to ensure a successful increase in provision levels.