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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT FOR A

PROPOSED LOAN

IN THE AMOUNT OF US$ 500 MILLION TO

THE STATE OF GOIÁS

WITH A GUARANTEE OF THE FEDERATIVE REPUBLIC OF BRAZIL

FOR THE

BR STATE OF GOIÁS SUSTAINABLE RECOVERY DPF

April 1, 2022

Macroeconomics, Trade and Investment Global Practice

Latin America and Caribbean Region

State of Goiás

GOVERNMENT FISCAL YEAR

January, 1 – December, 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of March 23, 2022)

Currency Unit

US$ 1.00: R$ 4.87

ABBREVIATIONS AND ACRONYMS

AE	*Emergency Aid ("Auxilio Emergencial")*
BCB	Brazilian Central Bank (*"Banco Central do Brasil"*)
BNDES	National Bank for Economic and Social Development (*"Banco Nacional de Desenvolvimento Econômico e Social"*)
CELG	Goiás Energy Company (*"Companhia Energética de Goiás"*)
CPF	Country Partnership Framework
DPF	Development Policy Financing
FRR	Fiscal Recovery Regime (*"Regime de Recuperação Fiscal")*
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GRID	Green, Resilient and Inclusive Development
IBRD	International Bank for Reconstruction and Development
IFI	International Financial Institutions
IMF	International Monetary Fund
IPO	Initial Public Offering
IPSAS	International Public Sector Accounting Standards
LDP	Letter of Development Policy
LRF	Fiscal Responsibility Law *("Lei de Responsabilidade Fiscal"*)
MMD-QATC	Quality and Agility Program of the Audit Courts *("Programa Qualidade e Agilidade dos Tribunais de Contas")*
NCR	Net Current Revenues (*"Receita Corrente Líquida"*)
PER	Public Expenditure Review
PES	Payment for Environmental Services
PFM	Public Financial Management
PPA	*Multiannual Plan ("Plano Plurianual")*

Saneago	Goiás Sanitation Company *("Companhia de Saneamento de Goiás"*)
SCD	Systematic Country Diagnostic
SDR	Special Drawing Rights
SE	State Secretariat of Economy (*"Secretaria de Economia"*)
SEAD	State Secretariat for Administration of Goiás (*"Secretaria de Administração"*)
SEAPA	State Secretariat of Agriculture, Livestock and Supply (*"Secretaria de Agricultura"*)
SEMAD	State Secretariat of Environment (*"Secretaria de Meio Ambiente"*)
SFN	National Financial System (*"Sistema Financeiro Nacional"*)
SoG	State of Goiás (*"Estado de Goiás"*)
STN	Federal Treasury (*"Secretaria do Tesouro Nacional"*)
TCU	Brazil Federal Audit Court *("Tribunal de Contas da União"*)
TCE-GO	Goiás State Audit Court *("Tribunal de Contas do Estado de Goiás"*)
WB	World Bank
WBG	World Bank Group

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FEDERATIVE REPUBLIC OF BRAZIL

BR STATE OF GOIÁS SUSTAINABLE RECOVERY DPF

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ACKNOWLEDGEMENTS

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SUMMARY OF PROPOSED FINANCING AND PROGRAM

BASIC INFORMATION

Project ID	Programmatic
P177632	No

Proposed Development Objective(s)

The Program Development Objective of this DPF is to support the State of Goiás in: (i) improving fiscal sustainability; and (ii) adopting climate-smart, resilient, and inclusive policies for its agricultural sector.

Organizations

Borrower:	STATE OF GOIÁS
Implementing Agency:	State Secretariat of Agriculture and Livestock (SEAPA), State Secretariat of Economy (Secretaria Estadual da Economia), State Secretariat of Environment and Sustainable Development (SEMAD)

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Financing	**500.00**

DETAILS

International Bank for Reconstruction and Development (IBRD)	500.00

INSTITUTIONAL DATA

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Overall Risk Rating

Results

Indicator Name	Baseline	Target
Pillar I - Supporting the State of Goiás in improving fiscal sustainability		
1. Current expenditures as a share of net current revenue-.	98.1 percent (2020)	93.1 percent (2024)
2. Pension deficit (excluding the military pension scheme).	R$ 5.9 billion (2024 with no reforms)	R$ 4.9 billion (2024)
3. Gender gap in retirement ages (for new civil servants).	5 years (2020)	3 years (2024)
4. Primary balance as a share of net current revenues.	10.3 percent (2020)	3.0 percent (2024)
Pillar II Supporting the State of Goiás in adopting climate-smart, resilient, and inclusive policies for its agricultural sector		
5. Number of low-carbon agricultural projects supported by the State Development Council receiving concessional financing.	91 (2021)	250 (2024)
6. Area planted with the use of bio-inputs (in ha).	300,000 ha (2021)	400,000 ha (2024)
7. Share of compensation agreements that qualify for a carbon neutrality discount.	0 (2020)	20 percent (2023)
8. Number of families on State land receiving a land title issued by the SEAPA.	214 (2019-2021)	1,000 (2022-2024)
9. Share of titles issued under the name of women as sole or joint owners.	34 percent (2021)	50 percent (2024)

IBRD PROGRAM DOCUMENT FOR A PROPOSED LOAN IN THE AMOUNT OF US$ 500 MILLION TO THE STATE OF GOIÁS FOR THE BR STATE OF GOIÁS SUSTAINABLE RECOVERY DPF

1. INTRODUCTION AND COUNTRY CONTEXT

1. **This Program Document proposes a Sustainable Recovery Development Policy Financing (DPF) operation to support the State of Goiás in: (i) improving fiscal sustainability; and (ii) adopting climate-smart, resilient, and inclusive policies for its agricultural sector.** Goiás is facing a weakened fiscal position and significant environmental sustainability challenges that are limiting its ability to pursue a sustainable post COVID-19 recovery. This proposed US$ 500 million International Bank for Reconstruction and Development (IBRD) loan, for a stand-alone DPF, will support the State in dealing with these challenges by strengthening its fiscal and environmental management frameworks for a more sustainable and climate friendly recovery. It is part of a broader package of support by the World Bank Group to help Brazil recover fiscal and environmental sustainability at the sub-national level.[1]

2. **The State fell into fiscal distress prior to the pandemic given rapidly growing personnel spending and high debt service costs, and its finances were further impacted by the COVID-19 crisis.** Prior to 2020, Goiás was confronted with fast-growing pension and personnel spending that pushed operating expenditures to grow at an annual average real rate of 5.0 percent between 2015 and 2019.[2] Its debt profile poses further challenges since it is relatively short-term and debt service is high (8.6 percent of net current revenues – NCR - in 2020, compared to an average of 5 percent for Brazilian States). As a result, Goiás has been ineligible for federal guarantees of new loans since 2017, affecting its capacity to fund environmental protection, service delivery, investment and its capacity to repay existing loans. The State also began accumulating arrears, amounting to R$ 420 million (or 6.1 percent of revenues) by end-2019. The COVID-19 pandemic[3] had a heavy impact on the State. Goiás had the 11th highest number of confirmed COVID-19 cases among all Brazilian States (13,140 per 100,000 people), and the seventh highest death toll in the country (347.8 per 100,000 people). The COVID-19 crisis also raised unemployment rates in the State of Goiás, which rose to 13.2 percent in the third quarter of 2020. The State's public finances took a

[1] The proposed operation is the third under this framework, following the Mato Grosso Fiscal Adjustment DPF (P164588) and the First Amazonas Fiscal and Environmental Sustainability Programmatic DPF (P172455). See section 4.3 for a description of the projects.

[2] Source of the fiscal data: Goiás State Secretary of Economy and World Bank calculations.

[3] Source of the COVID-19 data: Our World in Data website (*https://ourworldindata.org/*).

further hit during the COVID-19 pandemic, driven mainly by a decline in the State's revenues. Its stock of arrears increased by 25 percent in 2020, reaching 8.1 percent of revenues (R$ 420 million) by end-2020.

3. **Goiás, located in the central highlands of Brazil and entirely within the Cerrado biome (the Brazilian Savannah), is a major agricultural producer serving both domestic and export markets.** Goiás is Brazil's largest producer of sorghum and tomato, the second largest of sunflower and sugar cane, the third of soybean (70 percent exported) and corn (30 percent exported),and has the second largest cattle herd (47 percent of meat exported).[4] Its advanced agriculture-led model raised the prosperity of its citizens, lowering poverty to 12.5 percent of the population by 2019 (at the $5.5 per capita/ day poverty line). Yet, pockets of its population suffer from poverty in both urban and rural areas, with particular constraints related to formal ownership of housing and land assets.

4. **Goiás is also facing significant climate change and environmental sustainability challenges.** Goiás' agriculture-led growth model has contributed to a legacy of deforestation and land degradation in the Cerrado biome, impacting biodiversity and contributing to increase Brazil's carbon emissions. In just the last 20 years, Goiás lost more than 47,000 km^2 of primary vegetation,[5] corresponding to about 14 percent of the State's territory or 1.5 times the land area of Belgium. It is estimated that just 36.5 percent of the original vegetation of Goiás remains, compared to 50 percent for the entire Cerrado biome in Brazil.[6] Goiás' Cerrado continues to experience significant deforestation pressures linked to farming and forest fires: between 2020 and 2021, Goiás experienced a 16 percent increase in deforestation and accounted for around 10 percent of the annual deforestation in the Cerrado biome, which is comprised of 13 states.[7] Even though it receives less media coverage than the Amazon, deforestation in the Cerrado is higher than in the Amazon, both in absolute and in relative terms.[8] Agriculture, land use change and forestry combined have historically contributed more than 80 percent of Goiás' greenhouse gases (GHG) emissions. Since the late 1990s, agriculture has surpassed land-use change and forestry as the main source of GHG emissions in Goiás, becoming the dominant emitter, with more than 60 percent on average, and the main contributor to emissions increase in the last 10 years (Figure 1). Climate change is expected to impact directly the agricultural sector and people whose livelihoods depend on it through the reduction and irregularity of precipitation and increase in temperatures, and indirectly through sanctions that can

[4] Government of Goiás, *Goiás Agricultural Overview 2020*, https://www.agricultura.go.gov.br/files/agro-em-goias/ingles-radiografia-2021.pdf

[5] *http://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/cerrado/increments*

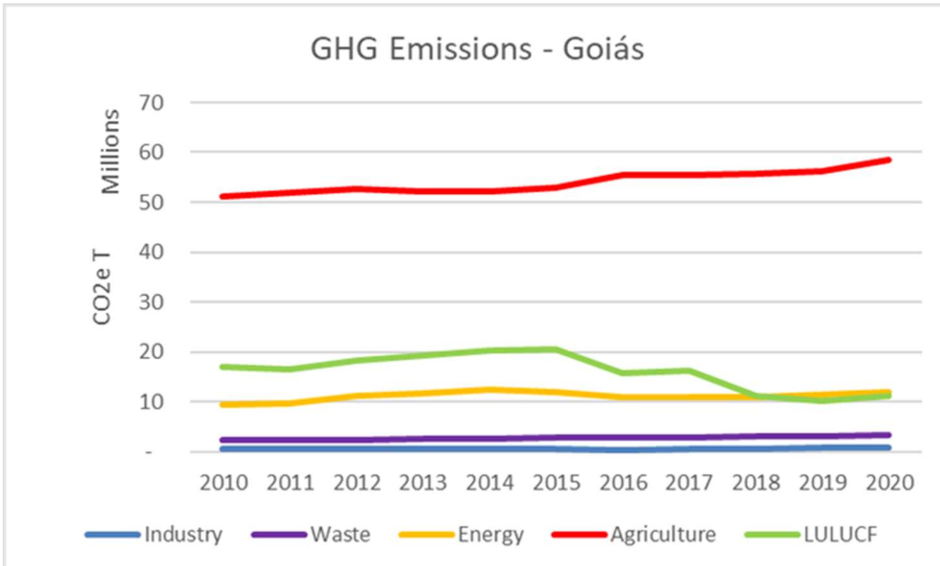
[6] *https://www.terraclass.gov.br/webgis-cerrado/#*

[7] *https://cerradodpat.ufg.br/#/plataforma*

[8] Between 2001 and 2021, the Cerrado's cumulative deforestation was 289,000 Km2 over a total area of above 2 million Km2; the cumulative deforestation for the Amazon was 250,000 km2 over a total area of more than 6.7 million km2.

affect exports originating from deforested areas (Goiás exports a large share of its agricultural and livestock production).

Figure 1: GHG Emissions in Goiás



Source: Sistema de Emissão de Gases do Efeito Estufa (SEEG); *https://plataforma.seeg.eco.br/total_emission*

5. **The proposed DPF aims to support the State of Goiás in: (i) improving fiscal sustainability; and (ii) adopting climate-smart, resilient, and inclusive policies for its agricultural sector, through two pillars**:

i. **This first pillar of this DPF would support the fiscal recovery of Goiás through the adoption of a spending cap, by consolidating spending on pensions, and the adoption of a medium-term fiscal adjustment plan.** Goiás is in the process of adopting a strong set of fiscal reforms and is committing to additional targets to ensure a fiscal recovery. An expenditure ceiling rule will help contain recurrent spending growth. A pension reform that increases the minimum retirement age and increases the contribution rate is expected to reduce the pension deficit by almost 20 percent. The implementation of a medium-term fiscal adjustment plan, whose implementation will be monitored by Brazil's Federal Treasury[9], is expected to decrease the primary balance from 10.3 percent of the NCR in 2020 to 3.0 percent by 2024, to support higher public investments, that are projected to increase from 3.5 percent in 2020 to 10.7 percent by 2024. With these reforms, the DPF will help Goiás in becoming eligible for the federal government's fiscal adjustment instrument

[9] If the state does not meet the targets of the plan, it is prohibited from: (i) increasing salaries and benefits, (ii) hiring new staff, (iii) creating new mandatory expenditures, (iv) adopting new tax expenditures, or (v) raising mandatory expenditures above inflation. Continuous non-compliance with the fiscal plan can result in the extinction of the state's fiscal recovery regime and the state cannot access federal guarantees for new loans for 5 years. For more info on the Fiscal Recovery Regime, see box 2.

for states (named “Fiscal Recovery Regime” - FRR), building further on the expected results of this DPF. The FRR will place Goiás under a medium-term fiscal consolidation plan that will improve its creditworthiness in the medium-term, increase its access to credit and federal guarantees, and improve the profile of its debt portfolio through additional fiscal consolidation measures. It thus enables this stand-alone DPF to contribute to keeping the State’s public finances on track in the medium-term.

ii. **The second pillar of this DPF would support the State of Goiás in adopting climate-smart, resilient and inclusive policies for its agricultural sector.** The DPF would help steer Goiás’ agricultural sector towards climate-smart practices, including the adoption of the State Plan to address climate mitigation and adaptation. The DPF would also support measures that reduce GHG emissions and increase carbon storage in the soil, by aiming at a 10 percent per year increase in the use of non-chemical fertilizers and phytosanitary products. It would strengthen the climate focus of the State’s environmental licensing framework by reducing compensation fees for GHG emission-neutral enterprises. Finally, the DPF would support land tenure regularization for smallholders through regulations that are environmentally sound, inclusive, and gender-balanced.

6. **This DPF contributes to strengthen Brazil’s fiscal instruments to support medium-term fiscal sustainability at the subnational level.** An important feature of this DPF is that it supports Goiás in becoming the first State to be admitted into the federal government’s FRR that became effective in December 2021, thus advancing the implementation of a strategic federal government program for the fiscal recovery of sub-national entities. The FRR is one of the Federal government’s key fiscal adjustment instruments for sub-national entities in fiscal distress. The World Bank contributed to the development of this instrument through analytical inputs and technical dialogue. Supporting the State of Goiás in adhering to the FRR will bring implementation lessons of this federal program for other Brazilian states that may follow Goiás in joining the FRR. Moreover, the FRR places Goiás under a medium-term fiscal consolidation plan with specific fiscal adjustment targets and reforms, which will be tightly monitored by the federal government and be subject to penalties in case of non-compliance, thus reducing the risk of policy reversal.

7. **The Goiás Sustainable Recovery DPF contributes to the World Bank’s Green, Resilient and Inclusive Development (GRID) approach[10].** The DPF’s environmental and climate smart agriculture reforms support a greener recovery in Goiás. They also, together with the fiscal reforms, contribute to greater environmental and economic resilience. Lastly, the proposed land tenure reform will help make agricultural growth more inclusive by securing land rights for poorer smallholder farmers and for women.

[10] *https://openknowledge.worldbank.org/bitstream/handle/10986/36322/Green-Resilient-and-Inclusive-Development.pdf?sequence=5&isAllowed=y*

2. MACROECONOMIC POLICY FRAMEWORK

2.1. RECENT ECONOMIC DEVELOPMENTS

8. **Brazil experienced one of the heaviest tolls from COVID-19 globally, but a rapid vaccine rollout since mid-2021 is supporting a gradual return to normality.** By March 15, 2022 Brazil had the third largest number of confirmed COVID-19 cases in the world (almost 30 million cases), and the second highest death toll (655,878 deaths). The country ranks 10th in the number of cases per million people (137,579), and 1st in the number of deaths per million people (3,064). Virus containment measures, across the world and domestically, constituted simultaneous global supply and demand shocks, leading to a contraction of the Brazilian economy by 3.9 percent in 2020. However, the roll-out and subsequent acceleration of the vaccination campaign are contributing to the normalization of daily life and economic activity. By March 15, 2022, Brazil had applied the first dose of the vaccine to 84.1 percent of the population, and 73.8 percent of the population is fully immunized (second dose or single dose). Brazil is already applying the first dose of the vaccine to its youth population (5+ years old) and a booster dose after 4 months of the second dose.

9. **After a deep contraction in 2020, the economy grew 4.6 percent in 2021 and recovered the losses from the COVID-19 crisis.** After a steep slump in economic activity at the onset of the pandemic, a gradual recovery began to take place in the third quarter of 2020 as global demand for commodities and manufactured products boosted output and as the roll-out of the vaccine campaign encouraged economic activity. GDP growth was propelled by a strong recovery of 4.7 percent y/y in the services sector in 2021. Despite shortages in inputs and higher production costs, industry showed a strong recovery of 4.5 percent. After two consecutively quarters of contraction, placing Brazil in a technical recession, the favorable performance of the GDP in the fourth quarter (0.5 percent q/q) results in a carryover effect of 0.3 percent for 2022.

10. **The labor market deteriorated significantly in 2020 and is yet to recover to pre-pandemic levels, though it is showing signs of recovery.** As a result of the pandemic, the unemployment rate jumped from 12.1 percent in 2019 to 13.5 percent in 2020 on average, while labor force participation declined from 63.6 percent in 2019 to 59.6 percent in 2020. The crisis had a relatively large impact on informal workers with a 12.1 percent drop in their employment in 2020, compared to a 6.3 percent fall for formal workers, and on women, whose unemployment rate peaked at 18.5 percent in the first quarter of 2021 (6.3 percentage points above men's unemployment rate). The labor market began slowly recovering in early 2021 and has been showing signs of improvement to date, although some indicators have still not achieved pre-pandemic levels. Unemployment declined to 11.1 percent by December 2021 and labor force participation increased to 62.5 percent. But the return to work was accompanied by an increase in

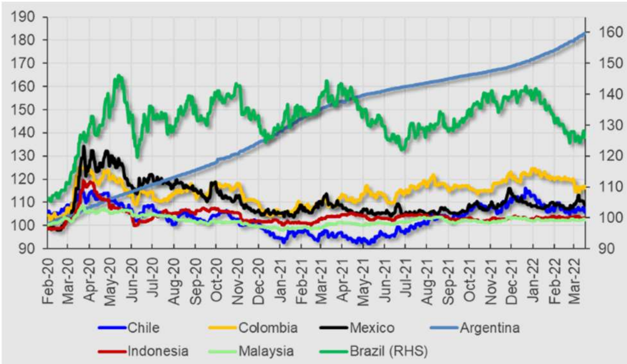
the share of informal workers, pushing the informality rate to 40.7 percent. Moreover, recent World Bank business pulse and COVID-19 phone surveys indicate cuts in pay or hours works affecting a significant share of workers. These trends, coupled with higher inflation, have contributed to a 10.7 percent decrease in average real income of workers by December 2021 (YoY).

11. **High commodity prices and the large depreciation of the Real in 2020 reduced the current account deficit for the year.** The current account (CA) deficit dropped to 1.8 percent of GDP in 2020 (down from 3.5 percent in 2019) and remained relatively stable at 1.71 percent of GDP (US$ 27.7 bn) in the 12-month to January 2022, supported by high commodity prices and the 9.1 percent depreciation of the Real over this period. Net FDI flows, the primary source of CA financing, stood at 1.8 percent of GDP (US$ 47.7 bn) in the period, comfortably financing the external deficit. Moreover, portfolio inflows recorded a large surplus of US$ 25.0 bn in the 12-month to January 2022. International reserves amounted to US$ 358.4 bn by January 2022 (a US$ 3.8 bn decrease compared to December 2021 and a US$ 2.8 bn increase compared to 2020), equivalent to 22.1 percent of GDP and more than 15 months of imports. Central Bank FX position is partially reduced by FX Swap operations in an amount of US$ 97.0 billion, resulting in a net FX long position of US$ 243.9 billion (15 percent of GDP). The external position has been further supported by the limited public exposure to currency depreciation, due to the relatively modest levels of foreign-currency denominated debt (6.7 percent of GDP).[11] The Central Bank maintained a flexible exchange rate policy, intervening in the market only to reduce excessive exchange rate volatility and to provide liquidity to the financial market when the Real is under pressure. Lastly, metal and energy commodities prices soar could benefit Brazil’s exports value, improving trade balance and current account dynamics due to the recent conflict in Ukraine.

12. **Sovereign risk premiums have been increasing in recent months due to deterioration of the country's risk profile.** Persistent inflationary pressures, a devalued currency (Figure 2) and concerns around fiscal policy in the lead-up to the 2022 elections have resulted in higher risk premiums. These factors have contributed to a significant deterioration of Brazil’s Emerging Markets Bond Index (EMBI) (Figure 3), which increased from 261 at the end of May 2021 to 331 by March 15, 2022. When compared to other emerging economies (excluding Argentina), Brazil’s country premium is high among its peers, pushing up financing costs for the government and the private sector.

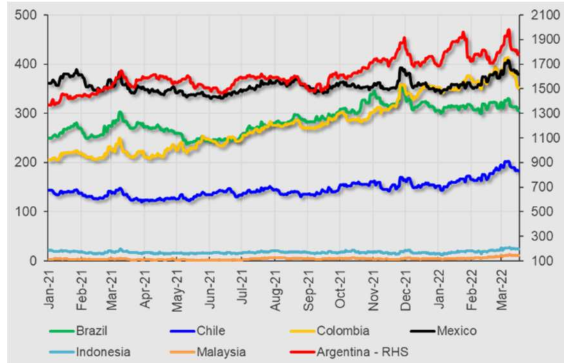
[11] Including public and private sector, Brazil’s exposure amounted 35.1 percent of GDP as of September 2021.

Figure 2. Nominal Exchange Rate Indexes
(01/01/2020 = 100)



Source: Bloomberg.

Figure 3. Bond Spreads (EMBI), Selected Emerging Economies



Source: JP Morgan.

13. **Supply side factors, coupled with a pick-up in demand, have pushed inflation above the Brazil Central Bank's (BCB) inflation target upper band in 2021 (10.1 percent), leaving a high base for 2022 due to persistence.** Consumer price index inflation reached 10.5 percent in February 2022, far above the BCB's inflation target upper band for the year (5.0 percent). Not only did headline inflation increase, but core inflation also exceeded the upper band at 8.4 percent, indicating persistence in inflation caused by a widespread higher demand for goods and services across all sectors. Food inflation (9.1 percent) accelerated and remains at a significant level, affecting mainly poor households. Inflation has been exacerbated by a severe drought that is provoking water scarcity in hydroelectric plants that, along with a tariff increase, is affecting household energy prices (28.1 percent in February 2022). Higher oil prices and currency depreciation are also contributing to inflation as gasoline inflation stands at 32.2 percent. The conflict in Ukraine has exacerbated inflationary pressures in Brazil given the impact on oil, fertilizers and food prices.[12]

14. **Monetary policy, which had taken an accommodative stance during the pandemic, swung to a tightening cycle in efforts to contain inflationary pressures.** With inflation on the rise, the BCB accelerated the pace of monetary tightening beyond neutral levels to anchor inflation expectations for 2022 and 2023. As of March 16, 2022, the interest rate had increased one percentage point (p.p.), after three consecutive rounds of 1.50 p.p. increase, and stands at 11.75 percent, up from a historically low two

[12] Ukraine and Russia account for nearly a third of global wheat exports (28 percent) and a fifth of corn exports (18 percent), exporting a large share of the corn and wheat they produce (54 percent). In the case of wheat, 85 percent of what is imported by Brazil comes from Argentina. Even though Russia and Ukraine account for a small share of imports (2 percent), Brazil could face higher prices. The war has increased the prices of many commodities, including oil and natural gas. The rise in international energy prices tend to increase fuel prices, which are the most important components of the CPI (about 4 percent). A 10 percent increase in the price of oil has an impact of 0.4 percentage point on the CPI. Finally, Russia is also a major supplier of agricultural inputs and is among the largest exporters of nitrogen fertilizers (such as ammonia and urea) in the world. Russia was responsible for 22 percent of the 41.1 million tons of fertilizers imported by Brazil in 2021.

percent in early 2021, to dampen inflationary pressures. Furthermore, BCB signaled the willingness to continue the monetary tightening to anchor inflation expectations for 2022 and 2023. However, the trajectory of current inflation and the significant downside risks keep the next steps of the BCB open.

15. **Credit growth has moderated for firms in 2021 due to the increase in interest rates and the winding-down of COVID-19 credit support interventions.** After reaching a historically high 10.8 percent real growth in January 2021[13], total outstanding loans growth decelerated throughout the course of 2021 and finished 2021 with a 5.8 percent annual growth. The slowdown is explained by the winding of credit support to corporations, with a real growth of 0.9 in the year. On the other hand, credit to individuals increased 9.7 percent, as household lending is accelerating to compensate for the high degree of indebtedness (70.9 percent of families on average for 2021) and the erosion of purchasing power due to inflation. Overall, credit for corporations and individuals reached 22.6 and 31.2 percent of GDP, respectively.

16. **The banking sector's stability was not significantly affected by the COVID-19 crisis and Brazil's banks remain strong.** The capital-asset ratio ("Basel Index") stood at 16.5 percent in December 2021, comfortably higher than the regulatory minimum (8 percent international and 11 percent in Brazil). The National Financial System's liquidity index at 1.7 (as of January 2022) remains above the prudential requirements (1.0) for financial institutions (FIs), returning to the pre-pandemic level, as the advance of vaccination, the gradual reopening of the economy and the lower than expected credit losses allowed FIs to reduce additional liquidity and increase the allocation of credits. Capitalization, measured by the Common Equity Tier 1 Ratio (CET1 or core capital) returned to pre-pandemic levels and most institutions are meeting all prudential requirements using exclusively CET1 capital (95.8 percent). Financial institutions provisioned aggressively for potential credit losses and non-performing loans remained at low levels (2.4 percent in Q3 2021). Reforms in the financial sector have also been enacted in recent years to boost competition and market access, including, among others, the adoption of a market-based long-term rate by the National Bank for Economic and Social Development (BNDES), reform of the credit information system, and improvements to the collateral execution framework.

17. **Fiscal policy provided a decisive response to the pandemic, providing 10.6 percent of GDP in support to households and firms in 2020, which was significantly curtailed in 2021.** The pandemic quickly shifted the policy agenda towards mitigating the impacts of the pandemic, especially on poor households and the private sector. Accordingly, a 11.2 percent of GDP fiscal stimulus package (Table 1) cushioned the plunge and supported a consumption-led recovery. Around 37 percent of the package (R$ 321.8 bn) went towards cash transfers to vulnerable households through the *Auxílio Emergencial* (AE) program that reached over 66 million individuals, most of whom are in the informal sector. The program mitigated the pandemic's impact on poverty in 2020, lowering it from 19.6 percent in 2019 to 12.8 percent in 2020

[13] Credit reached 53.8 percent of GDP in December 2021, after having achieved its highest level in December 2020 (54.0 percent of GDP) due to the government's credit support programs in response to the pandemic.

(estimated based on the US$5.50, 2011 PPP line). In 2021, the government aided the recovery with a much smaller package of 1.6 percent of GDP as economic conditions started to improve.

Table 1: Overview of Government Fiscal Response in 2020 and 2021

	2020		2021	
Total Fiscal Response Package	**R$, billions**	**GDP %**	**R$, billions**	**GDP %**
Anticipation of some government's recurrent	58.8	0.8	0.0	0.0
New spending	472.3	6.3	135.9	1.6
Budget reallocations	28.3	0.4	0.0	0.0
Tax deferrals	52.2	0.7	0.0	0.0
Tax cuts	19.9	0.3	0.0	0.0
Total Federal Support	**631.5**	**8.5**	**135.9**	**1.6**
Federal support to sub-nationals	158.0	2.1	0.0	0.0
of which: new spending	97.2	1.3	0.0	0.0
Grand Total	**789.5**	**10.6**	**135.9**	**1.6**

Source: Ministry of Economy.

18. **Brazil achieved a significant fiscal consolidation in 2021, but the COVID-19 response in 2020 increased public debt levels.** The COVID-19 response package contributed to a rise in the primary deficit from 0.8 percent of GDP in 2019 to 9.5 percent in 2020. General government's gross debt[14] also increased, reaching 89.3 percent by end-2020 (up from 75.8 percent in 2019). However, by the end of 2021, the primary balance improved to a surplus of 0.7 percent of GDP, driven by the rollback of COVID-19 related expenses and recovering tax collection. Subnational governments contributed to this balance with a surplus of 1.1 percent of GDP, while the central government had a deficit of 0.4 percent. Accordingly, the general government's gross debt[15] declined to 80.3 percent of GDP, an 8.3 percentage point reduction. In January 2022, the improvements in the primary balance and gross public debt have continued. While the former reached a surplus of 1.2 percent of GDP, the latter declined to 79.6 percent of GDP. In addition, the Federal Treasury's liquidity levels stood at R$ 1,692 billion (19.3 percent of GDP) by January 2022, above the level of December 2020 (R$ 1,452.6 billion, or 19.5 percent of GDP).

2.2. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

[15] Public debt is defined as the general government gross debt, including Central Bank repo operations. This definition differs from the one used by the IMF, which includes all Treasury securities held by the Central Bank, not only those related with repo operations (IMF, 2017).

19. **GDP growth is expected to slow to 0.7 percent in 2022 and is subject to significant downside risks that could push it down further.** High inflation, monetary tightening and indebtedness diminish consumer purchasing power and limit the available credit in the economy. The expected increase in poverty and the slow recovery in the labor market will also weigh on demand. On the supply side, concerns about anemic growth, slowed policy reform momentum, fiscal risks and political uncertainty (on the back of the upcoming general elections in October 2022) might postpone private investment decisions. The external environment is also expected to turn less favorable given the ongoing monetary tightening in advanced economies due to concerns in global inflation and the uncertainty arising from the conflict between Russia and Ukraine. The war in Ukraine is causing higher commodities prices and supply shortages that can trigger additional exchange rate devaluations and inflation pressures in Brazil, inducing a more aggressive monetary policy stance, potentially reducing growth. Altogether, GDP is expected to grow moderately to 0.7 percent in 2022 and mildly accelerate until 2024 on the back of easing inflation and reduced uncertainty post-elections. These medium-term projections assume that Brazil's growth model will not change, which means that growth would be largely driven by household consumption, while government consumption and public investment would be limited by the required fiscal consolidation to return to sustainable debt levels. Private investment would grow supported by external savings (thereby increasing the current account deficit). The weak performance in total factor productivity (TFP) observed over the last decade is expected to continue in the absence of renewed momentum for structural policy reforms.

20. **Poverty rates are expected to increase in 2021 and remain at similar levels through 2023.** Poverty is expected to increase to about 18.7 percent in 2021, (up from about 13 in 2020). The increase responds to the reductions in coverage and benefit amounts of Brazil's emergency transfer program, the slow recovery in the labor market and the spike in inflation towards the end of the year. In 2022, about 18 million low-income households will be supported by the new *Auxílio Brasil* program. Nonetheless, the complete elimination of the emergency transfers and sustained inflation may lead poverty rates to stay largely stagnant in the coming years. Incomes in the bottom of the distribution are not expected to increase significantly due to stagnated growth in the industry and services sectors (home to over 90 percent of the workforce) and concerns of continued high inflation that erode household' purchasing power. Expected higher agricultural commodities prices due to the ongoing conflict in Ukraine can lead to further increases in food prices with the impacts being felt mainly already vulnerable households. Notably, the almost 25 percent increase in food prices between 2020Q1 and 2021Q3 is likely a main factor behind the doubling of the proportion of households who reported running out of food in the last 30 days (9.4 percent vs. 18.1 percent) according to the results of the most recent World Bank poverty monitoring phone survey for Brazil.

21. **The current account deficit is projected to stabilize at 1.7 percent of GDP in the medium-term as external conditions adjust and growth returns to pre-pandemic trend, but robust external inflows are expected to fully finance this deficit.** In the short term, the increase in commodity price growth due to the war in Ukraine and the stronger exports' value are expected to decrease the current account deficit

to 1.3 percent of GDP by 2022. In the medium term, the current account deficit will return to pre-pandemic trends, as commodities prices growth decreases and global demand growth normalizes. The deficit is expected to be fully financed by net FDI flows (at 2.3 percent of GDP) as in previous years. Net portfolio investments are also expected to support the financial account in the medium-term (0.4 percent of GDP until 2024), driven by the rise of inflows traded in the domestic market. Brazil's external position is buffered by the country's moderate exposure to currency depreciation since 21.5 percent of the country's external debt (public and private) is in local currency, just 31.2 percent of the external debt matures within one year, and the share of foreign currency-denominated public debt is low at 6.7 percent of GDP. The external financing needs for private and public sectors in 2021 was also moderate and ended the year at around 11.4 percent of GDP.

22. **Inflationary pressures are expected to ease from 2023 onwards in response to the monetary policy response and as supply constraints loosen.** After the sharp increase in 2021, consumer price inflation is expected to gradually start decelerating in the second semester of 2022 and converge to the BCB target by 2024 (three percent for 2024). The expected deceleration is due to the dissipation of supply shocks that affected prices in 2020 and 2021 and a more aggressive monetary policy stance, that is expected to peak in 2022 (Selic rate[16] averaging 12.2 percent for 2022 and 8.2 percent for 2023) and reduce domestic demand growth. Lower inflation in 2022 will mainly come from tradable items and regulated prices. But inflationary risks persist in 2022, especially given the impact of the conflict in Ukraine on commodity prices and global supply chains, and the markets' risk outlook during an electoral year. In the medium term, inflation is expected to ease towards the BCB target from 2023 (4.5 percent average and 3.4 percent by end of period) onwards.

23. **On the fiscal side, baseline projections are anchored in the constitutional spending cap and assume the continued roll-back of the COVID-19 fiscal package.** Brazil's spending cap is a fiscal rule that links primary spending growth to inflation for 20 years (between 2016 and 2036) and imposes a reduction of three percentage points of GDP on all primary expenditures by 2030. The spending cap rule is constitutionally mandated and any change to it requires two rounds of votes at the Lower House and at the Senate. Despite recent adjustments to the spending cap to widen the fiscal space to cover the cost of cash transfers in 2022 (see Box 1), the authorities remain committed to compliance with the fiscal rule, which continues to anchor the fiscal outlook as indicated by the large fiscal adjustment achieved over the past year (lowering the primary deficit from a record-high of 9.5 percent of GDP in 2020 to a primary surplus of 0.8 percent in 2021). Indeed, non-compliance with the spending cap, a constitutionally mandated rule, triggers automatic measures to reduce mandatory expenditures, such as limiting the minimum wage increase to inflation, freezing the salaries of civil servants or vetoing new hiring of public servants. Therefore, baseline projections reflect a gradual fiscal consolidation in the medium-term, leading the primary balance to a 0.5 percent surplus by 2024, based on compliance with the spending

[16] The SELIC is the Central Bank reference lending rate.

fiscal rule and a gradual increase in revenues. These baseline estimates reflect the recent changes to the spending cap and the postponement of part of the *Precatórios'* payments of 2022.

Box 1: Recent changes to Brazil's spending cap rule

Continued need to support poor households and the costs of settling federal government judicial debt arrears (known as *Precatórios*) raised spending pressures and placed the spending cap rule for 2022 under strain. In recognition of the need to strengthen social safety nets and provide sufficient support to the poor during the recovery phase of the pandemic, the Brazilian authorities adopted *Auxílio Brasil,* a program that updates and replaces the well-known *Bolsa Familia* program in 2021. The new program widens access to cash transfers by increasing the average benefit amount (from R$ 190 to R$ 217.18) as well as the number of beneficiaries (from 14 million to 17.6 million), thus including many households that had been on waiting list for *Bolsa Familia*.

To accommodate these needs whilst maintaining the spending cap, the federal government adopted a five-year payment schedule for the *Precatórios* and adjusted the formula for calculating the spending limit under the cap. The authorities agreed to limit the value of the first *Precatórios'* payment in 2022,[17] and to pay the balance in installments over the coming five years. The authorities also adopted the rate of inflation between January and December 2021 to estimate the annual increase in the spending limit (instead of July to June in previous years) which afforded a higher spending limit given the increase in inflation towards the end of 2021. These two measures are expected to add up to 1 percent of GDP in additional fiscal space in 2022 (R$ 91.6 billion, of which R$ 47 billion is due to the change in the fiscal rule), that will mainly finance the new *Auxílio Brasil* program (with an estimated cost of R$ 84.7 billion).

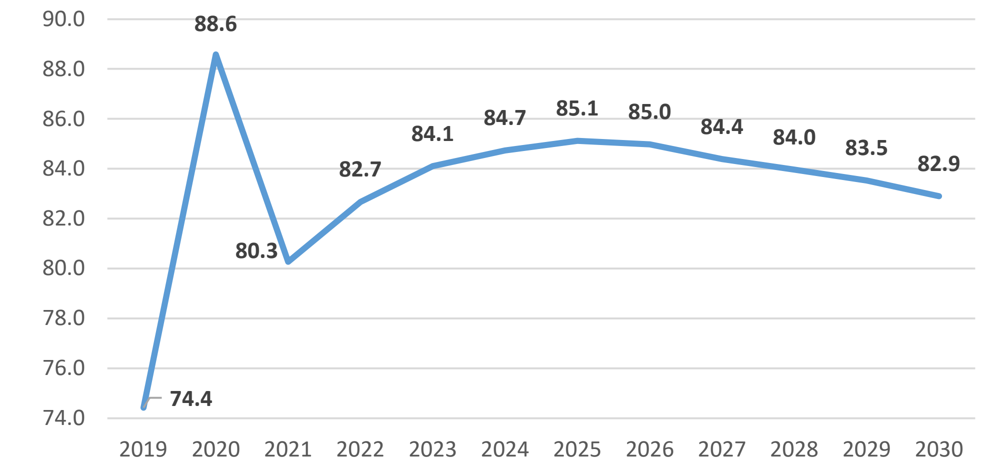
These changes have raised concerns about the credibility of the fiscal rule, especially in an electoral year, and resulted in higher risk premiums, but are mitigated by the fiscal outlook. Though the change in the spending rule has a small impact on debt sustainability analysis, it raised market concerns about the federal government's commitment to the fiscal rule, raising sovereign risk premiums (figure 2). In particular, concerns that, in the run up to the electoral cycle, new spending pressures in 2022 could further weaken fiscal discipline contribute to heightened risk perceptions. These concerns are mitigated by the comprehensive budget allocation for the *Auxílio Brasil* program in 2022, and continued consolidation in the primary balance in 2022 after the above-mentioned outlays are taken into account.

24. **Anchored by the spending cap rule, public debt is expected to peak at around 85.1 percent of GDP by 2025 before declining steadily to 82.9 percent by 2030 (Figure 4).** After a large increase in 2020 (of more than 10 p.p.), public debt decreased to 80.3 percent of GDP in 2021 on the back of the economic recovery and the improvement in the government's primary balance. Public debt is expected to increase gradually between 2021 and 2025 on the back of higher refinancing costs, while the primary balance improves. The public debt to GDP ratio would begin declining as the primary fiscal balance shifts to a higher surplus from 2024 onwards, stabilizing debt by 2025 (Figure 4). Public gross financing needs (Figure 5) increased to 35.8 percent of GDP in 2020 (7.3 p.p. of GDP above 2019) as a result of the higher fiscal deficit, but declined to 33.9 percent in 2021 reflecting the fiscal consolidation efforts to date. Public

[17] Limited to the amount paid in 2016 - R$ 30.0 billion - adjusted by inflation.

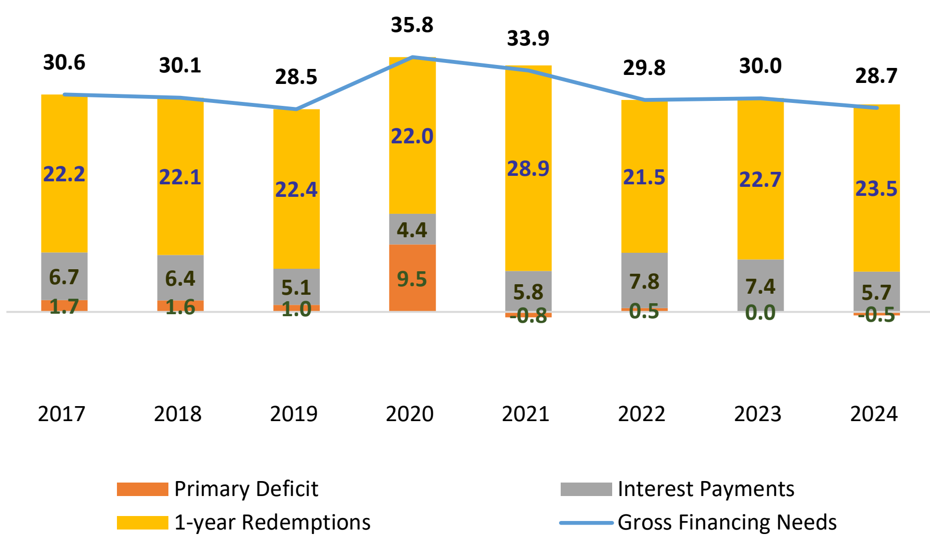
financing needs are projected to stay between 28.7 percent and 30 percent of GDP from 2022 until 2024. Rollover risks are mitigated by sizeable Federal Treasury's cash balances (19.3 percent of GDP in January 2022).

Figure 4: General Government Gross Debt (percent of GDP)



Calculation: World Bank.

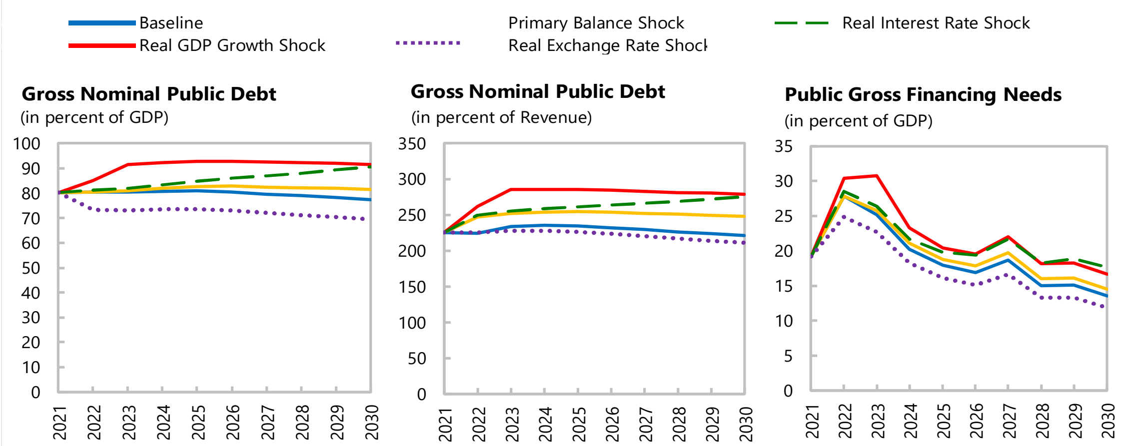
Figure 5: Gross Financing Needs of General Government Gross Debt (percent of GDP)



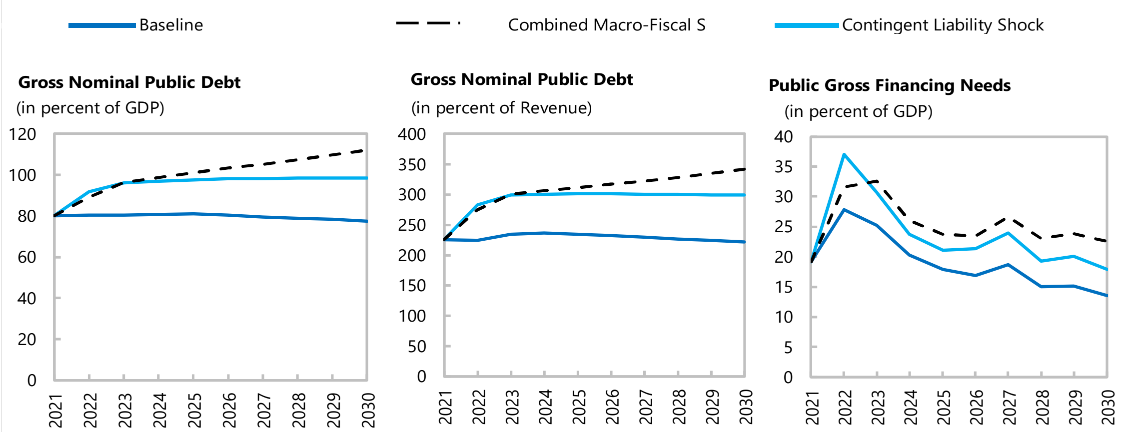
Source: Central Bank of Brazil and World Bank calculations.

Figure 6: Public Debt Sustainability Analysis, Macro-Fiscal Stress Tests

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions
(in percent)

	2021	2022	2023	2026	2030
Primary Balance Shock					
Real GDP growth	4.6	0.7	1.3	2.3	1.4
Inflation	11.1	9.7	6.3	3.0	3.0
Primary balance	0.2	-0.5	-0.5	1.1	2.4
Effective interest rate	7.3	14.9	10.8	9.5	9.5
Real Interest Rate Shock					
Real GDP growth	4.6	0.7	1.3	2.3	1.4
Inflation	11.1	9.7	6.3	3.0	3.0
Primary balance	0.2	-0.5	0.0	1.5	2.5
Effective interest rate	7.3	15.9	11.9	11.2	11.2
Combined Shock					
Real GDP growth	4.6	-2.5	-1.9	2.3	1.4
Inflation	11.1	8.9	5.5	3.0	3.0
Primary balance	0.2	-1.9	-2.7	1.1	2.4
Effective interest rate	7.3	16.3	11.6	11.0	11.1

	2021	2022	2023	2026	2030
Real GDP Growth Shock					
Real GDP growth	4.6	-2.5	-1.9	2.3	1.4
Inflation	11.1	8.9	5.5	3.0	3.0
Primary balance	0.2	-1.9	-2.7	1.5	2.5
Effective interest rate	7.3	15.1	11.0	9.6	9.4
Real Exchange Rate Shock					
Real GDP growth	4.6	0.7	1.3	2.3	1.4
Inflation	11.1	25.3	6.3	3.0	3.0
Primary balance	0.2	-0.5	0.0	1.5	2.5
Effective interest rate	7.3	15.3	10.5	9.4	9.4
Contingent Liability Shock					
Real GDP growth	4.6	-2.5	-1.9	2.3	1.4
Inflation	11.1	8.9	5.5	3.0	3.0
Primary balance	0.2	-8.0	0.0	1.5	2.5
Effective interest rate	7.3	15.8	10.9	10.1	9.4

25. **Debt sustainability is vulnerable to the pace of fiscal adjustment as well as growth and real interest rate shocks.** The main macroeconomic shocks that pose risks to debt sustainability include delays in primary balance consolidation, lower GDP growth in the short term, real interest rates increase, and real exchange depreciation. If all these shocks affect the economy simultaneously, debt indicators would deteriorate significantly with public debt potentially reaching about 118 percent of GDP by 2030 (Figure 6). Debt rollover risks are also significant as public gross financing needs are expected to range between 28.7 and 30 percent of GDP between 2022 and 2024 (Figure 5). Rollover risks are mitigated by sizeable federal cash balances (19.3 percent of GDP) and a deep domestic public bonds market.[18]

26. **Macroeconomic risks are substantial, arising mainly from the fiscal and the growth outlook in a context of heightened uncertainty.** Recent changes to the federal spending ceiling rule to accommodate higher social and electoral expenditures in the 2022 budget has undermined the credibility of the fiscal rule and increased sovereign risk premiums along the yield curve, in a context of political uncertainty on the back of the upcoming general elections in 2022. Risks of growing demand for social transfers in a complex economic context (weak growth, high inflation and sluggish labor market) could further delay the fiscal adjustment needed to ensure medium-term debt sustainability. Credible commitment to comply with the federal fiscal rule will be critical for market confidence and to motivate subnational government's fiscal consolidation. Downside risks to baseline growth projections are also significant in the short term. The war in Ukraine is causing further higher commodities prices, supply shortages and increased risk aversion, that can trigger additional exchange rate devaluations and inflation pressures in Brazil, inducing a more aggressive monetary policy stance that is likely to reduce further the economic growth. A deterioration in the external context, such as an economic slowdown in Brazil's main trading partners and a tighter monetary policy worldwide to tame global inflation, could limit external demand, provoke capital outflows in a "flight-to-quality" investment decisions and weaken the Brazilian currency, putting additional pressures on domestic inflation. The medium-term growth outlook is also subject to risks if total factor productivity remains at current levels. Higher potential growth trajectory would require renewed momentum for structural reforms to support higher investment and productivity.[19] Climate risks, including the higher rates of deforestation, could also affect Brazilian exports in a context of global demand shifts towards environmentally-sound export products.

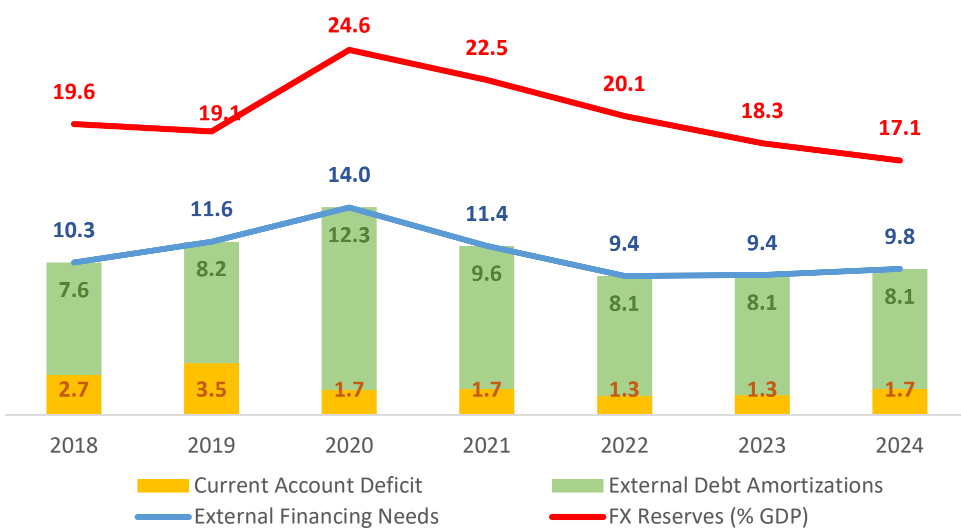
27. **At the same time, Brazil's macroeconomic framework has several policy and institutional buffers to weather shocks.** Brazil's fiscal and debt position is buffered by low government debt exposure to exchange rate risks. FX-denominated government debt represents 6.7 percent of GDP and 94.1 percent of debt was held in the domestic market in January 2022, with about 31.2 percent of the outstanding debt

[18] Domestically-issued public bonds corresponded to 90.3 percent of the gross public debt (74.9 percent of GDP) by October 2021.

[19] Key among them is the complex and burdensome tax system, which the government plans to reform by replacing the current myriad of indirect taxes with a single Value-added Tax (VAT). Also, inadequate infrastructure is a significant bottleneck for economic integration and trade facilitation.

maturing within one year (38 percent in December 2020). Also, Federal Treasury cash cushions accounted for 19.3 of GDP in January 2022, reducing roll over risks. Brazil enjoys a credible and independent Central Bank (whose Board members are granted fixed term mandates), a sound and stable financial sector, and high levels of foreign reserves. The floating exchange rate regime also provides an effective first-line of defense against external shocks. Central Bank reserves stood at a high 22.1 percent of GDP (US$ 358.4 billion) in January of 2022, enough to finance almost 15 months of imports, compared to projected external financing needs for private and public debt of about 9.4 of GDP in 2022 (Figure 7). Central Bank FX position is partially reduced by FX Swap operations in an amount of US$ 97.0 billion, resulting in a net FX long position of US$ 243.9 billion (15.0 percent of GDP).

Figure 7: Brazil's External Financing Needs and International Reserves (% of GDP)



Source: Central Bank of Brazil and World Bank calculations.

28. **Overall Brazil's macroeconomic policy framework is deemed adequate for this proposed operation.** Brazil successfully mitigated the impact of the pandemic on the poor and achieved high vaccination rates by end 2021. These efforts increased fiscal pressures and raised debt, including a further risk of additional demand for social transfers in 2022 as growth slows and the electoral cycle advances. Public debt and rollover pressures are expected to remain high in the next few years, with debt payments within one year is projected to stay above 22 percent of GDP. As the economy recovered from the 2020 recession, fiscal adjustment efforts resumed in 2021 and 2022 despite the high costs of the pandemic response (the 2022 approved included an increase in social transfers in 2022). The authorities have reiterated their commitment to observing the federal spending cap (anchor for the fiscal framework). Compliance with the spending cap will be supported by the constitutional pension reform adopted in 2019, a civil service pay freeze, and tight control of discretionary spending, including at the sub-national level. Also, the Central Bank independence law, was approved in February 2021. The recently approved financial sector reforms helped to boost competition in the financial markets, financial inclusion and

market access. The labor market reform enacted in 2017 and recent reforms approved in 2020 and 2021 have supported market entry and private sector participation in key infrastructure sectors (water and sanitation, telecom, energy). In the medium-term, additional fiscal and structural reforms would be needed to boost potential GDP growth.

Table 2: Key Macroeconomic Indicators

	2018	2019	2020	2021	2022e	2023f	2024f
Real economy	**Annual percentage change, unless otherwise indicated**						
GDP (nominal - R$ billion)	7,004	7,389	7,468	8,679	9,585	10,325	10,916
Real GDP	1.8	1.2	-3.9	4.6	0.7	1.3	2.0
Per Capita GDP (In real US$)	5,679	5,706	5,445	5,659	5,662	5,702	5,783
Contributions:							
Consumption	1.7	1.7	-4.6	2.8	0.7	1.0	1.3
Investment	0.9	0.7	-0.1	3.2	-0.1	0.4	0.8
Net exports	-0.5	-0.5	1.1	-0.8	0.1	-0.1	-0.1
Statistical discrepancy and change in	-0.4	-0.6	-0.4	-0.5	0.0	0.0	0.0
Imports, GNFS	7.7	1.3	-9.8	12.4	-0.5	2.0	3.0
Exports, GNFS	4.1	-2.6	-1.8	5.8	0.5	1.5	2.0
Unemployment rate (ILO definition)	12.4	12.1	13.5	13.2	13.1	12.9	12.1
CPI (end of period)	3.7	4.3	4.5	10.1	5.1	3.4	3.0
Fiscal Accounts	**Percent of GDP, unless otherwise indicated**						
Expenditures	40.8	41.2	46.0	39.3	40.9	39.9	37.9
Revenues	33.3	34.6	31.8	34.3	32.6	32.5	32.6
Overall Balance	-7.4	-6.6	-14.2	-5.0	-8.3	-7.4	-5.2
Primary Balance	-1.6	-1.0	-9.5	0.8	-0.5	0.0	0.5
General Government Gross Debt	75.3	74.4	88.6	80.1	82.7	84.1	84.7
Selected Monetary Accounts	**Annual percentage change, unless otherwise indicated**						
Base Money	1.8	4.8	36.3	-5.2	-	-	-
Credit to non-government	5.7	7.6	15.6	17.8	-	-	-
Interest rate - Selic (period average)	6.6	6.0	2.8	4.9	-	-	-
Balance of Payments	**Percent of GDP, unless otherwise indicated**						
Current Account Deficit	2.7	3.5	1.7	1.7	1.3	1.3	1.7
Imports, GNFS	14.0	14.4	15.7	18.5	18.4	18.8	18.5
Exports, GNFS	14.3	13.9	16.5	19.7	20.1	20.4	19.7
Net Foreign Direct Investment	4.0	2.5	2.8	1.7	2.3	2.3	2.3
Gross Reserves (in US$, eop)	374.7	356.9	355.6	362.2	365.0	367.8	368.2
In months of next year's imports	19.3	16.0	15.9	19.1	14.7	13.2	11.7
As % of short-term external debt [2/, 3/]	213.1	179.8	204.6	208.4	200.8	182.4	171.0
External Debt (in US$, eop) [3/]	665.8	675.8	639.3	639.3	668.7	741.5	791.9
External Debt [3/]	34.7	36.1	44.2	39.7	36.8	36.8	36.8

Terms of Trade (% change)	0.3	-3.2	0.2	7.2	1.8	0.0	-1.0
Exchange Rate (average)	3.7	3.9	5.2	5.4	-	-	-

1/ Brazilian Central Bank definition (2008 methodology), that excludes the Federal securities in the BCB portfolio and includes the stock of BCB repo operations.

2/ It includes the long-term debt repayments due in the next 12 months as short-term debt.

3/ It includes securities issued in Brazil held by foreign residents and intercompany loans.

Table 3: Balance of Payments (percent of GDP)

	2018	2019	2020	2021	2022e	2023f	2024f
Financing Requirements	**2.8**	**3.5**	**1.1**	**2.2**	**1.4**	**1.4**	**1.8**
Current Account Deficit	2.7	3.5	1.7	1.7	1.3	1.3	1.7
Trade Balance (GNFS) 1/ 2/	-0.4	0.5	-0.8	-1.2	-1.7	-1.7	-1.3
Primary and Secondary Incomes	3.1	3.0	2.5	2.9	3.0	3.0	3.0
Net Errors and Omissions	0.1	0.0	-0.5	0.5	0.1	0.1	0.1
Financing Sources	**2.8**	**3.5**	**1.1**	**2.2**	**1.4**	**1.4**	**1.8**
Capital Account Balance	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Net Foreign Direct Investment	4.0	2.5	2.8	1.7	2.3	2.3	2.3
Net Portfolio Investment	-0.4	-1.0	-0.9	0.4	0.1	0.1	0.4
Net All Other Flows	-0.7	0.6	-2.1	1.0	-0.9	-0.9	-0.9
Change in reserve assets	-0.2	1.4	1.0	-0.9	-0.2	-0.1	0.0
External Financing Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nominal GDP (US$ billion)	1,916.2	1,872.8	1,448.0	1,608.8	1,815.9	2,013.5	2,150.4

1/ GNFS: Goods and Non-factor Services.

2/ A negative sign in Financial Requirements means a reduction of Financial needs, i.e, a surplus in the account, and vice versa.

Table 4: General Government Fiscal Indicators (percent of GDP)

	2018	2019	2020	2021	2022e	2023f	2024f
General Government Overall Balance	(7.4)	(6.6)	(14.2)	(5.0)	(8.3)	(7.4)	(5.2)
General Government Primary balance	(1.6)	(1.0)	(9.5)	0.8	(0.5)	(0.0)	0.5
Total Revenues (and grants)	33.3	34.6	31.8	34.3	32.6	32.5	32.6
Total Primary Revenues (and grants)	33.3	34.6	31.8	34.3	32.6	32.5	32.6
Tax revenues	31.3	31.4	30.6	31.6	30.4	30.3	30.4
Taxes on goods and services	14.5	14.2	13.7	14.3	13.6	13.5	13.7
Direct Taxes	8.5	8.9	8.7	9.8	8.8	8.8	8.7
Social insurance contributions	7.6	7.7	7.7	6.8	7.5	7.5	7.4

Taxes on international trade	0.6	0.6	0.6	0.7	0.6	0.6	0.5
Other taxes	0.0	0.0	(0.0)	-	-	-	-
Non-tax revenues	2.1	3.2	1.3	2.6	2.2	2.2	2.2
Transfers and Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Expenditures 1/	40.8	41.2	46.0	39.3	40.9	39.9	37.9
Total Primary Expenditures 1/	35.0	35.6	41.3	33.5	33.2	32.5	32.2
Current expenditures	39.5	40.0	44.6	37.9	39.2	38.5	36.4
Wages and compensation	11.4	11.6	11.5	10.1	9.9	9.7	9.3
Goods and services	5.0	5.2	5.2	5.2	5.2	5.2	5.1
Interest payments	5.8	5.5	4.6	5.8	7.8	7.4	5.7
Current Transfers	17.3	17.7	23.1	16.8	16.3	16.3	16.3
Pensions to the private sector workers	7.6	7.8	8.2	7.7	7.8	7.8	7.9
Pensions to the public servants	4.6	5.1	5.3	4.7	4.7	4.6	4.6
Social Assistance	3.0	2.9	7.3	3.1	2.2	2.3	2.3
Other Current Transfers	2.1	1.9	2.3	1.3	1.6	1.6	1.6
Investments (net)	1.3	1.2	1.4	1.4	1.7	1.4	1.4
General Government Gross Debt	75.3	74.4	88.6	80.1	82.7	84.1	84.7

1/ Congress passed a constitutional amendment in 2016 limiting the growth of the federal primary spending to the rate of consumer price inflation of the previous year (measured in June). This spending ceiling will be in effect for 20 years and, as long as nominal GDP growth exceeds consumer price inflation, the federal primary expenditure will decline as a share of GDP in the medium term.

2/ Brazilian Central Bank definition (2008 methodology), that excludes the Federal securities in the BCB portfolio and includes the stock of BCB repo operations.

2.3. RECENT ECONOMIC DEVELOPMENTS AND FISCAL SUSTAINABILITY IN THE STATE OF GOIÁS

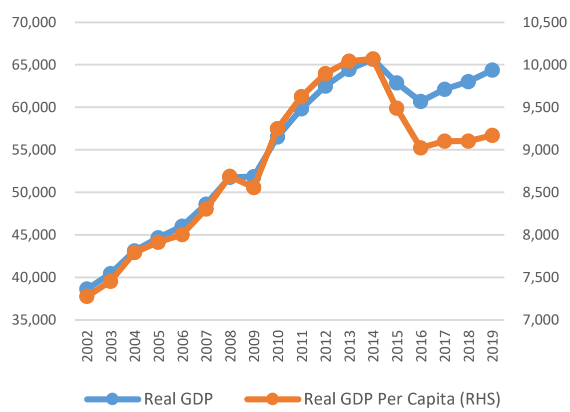
29. **Goiás is the largest Brazilian State in the Cerrado biome and has relatively low populational density, except for its capital, Goiânia**. Goiás is Brazil's seventh largest State, covering covers 340,111 km^2, or 10.3 percent of Brazil's overall area.[20] Agriculture, industry and services account for 11, 20 and 60 percent of the State's output respectively, but the State provides the 6th biggest value added in agriculture within the country. In 2019, its GDP per capita was US$5,434 - 8.7 percent below 2013 levels - as the State

[20] The State is home to 3.4 percent of the population (7.2 million people) .(Source: *Pesquisa Nacional por Amostras de Domicílios* of 2019).

struggled to recover from Brazil's 2014-16 economic downturn.[21] Real GDP per capita of the State was hit during the pandemic, dropping by an estimated 0.39 percent by end 2020 (on the back of weak economic growth[22] of 1 percent in 2020 and population growth of 1.4 percent).

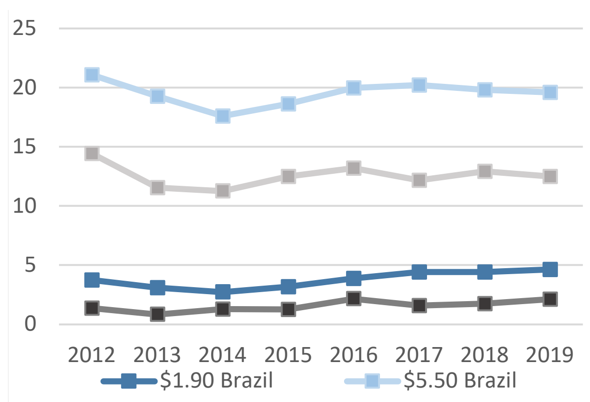
30. **The agriculture sector is the key driver of Goiás' economic activity.** The agriculture sector drives most of the industry (especially the food industry) and service sector activity in the State. Goiás' agricultural sector is of great importance to Brazil since the State is one of the main producers and exporters of meat (second largest state producer) and soy, sorghum, corn and other grains (fourth largest producer) in the country. At the same time, agriculture has traditionally been the main driver of deforestation in the Cerrado biome. Looking ahead, the slowdown of the global economy (especially China) in 2022 could result in a deceleration of the global demand for Goiás' commodities exports. In addition, lower commodity prices could also lead to lower exports revenues. Growing global market concerns around climate and environmental risks (including deforestation) expose Goiás to changing trade patterns unless it adjusts to a more climate-smart agricultural production model.

Figure 8: Goiás State Real GDP & Real GDP Per Capita (in R$ - 2002 prices)



Source: IBGE and World Bank.

Figure 9: Poverty Rates in Goiás and Brazil



Source: World Bank tabulations using SEDLAC (World Bank and CEDLAS).

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[21] Between 2010 and 2019, the real GDP of Goiás increased on average 2.3 percent per year, above the national real GDP, which increased only 1.4 percent on average. On the other hand, the real GDP per capita of the state and of Brazil increased at relatively close rates during the same period, 0.6 and 0.8 percent, respectively. This expressive result is due to the evolution of Goiás agribusiness, commerce and also to the growth and diversification of the industrial sector.

[22] Source: *Instituto Mauro Borges de Estatísticas e Estudos Socioeconômicos*, available in *https://www.imb.go.gov.br/index.php?option=com_content&view=category&id=38&Itemid=191*. The result is due to agriculture and Industry sectors, that grew, respectively, 9.4 percent and 2.5 percent in 2020. Services sector (that corresponds to 65.0 percent of the State's GDP) decreased 0.9% in the year.

31. **Federal mitigation measures (mainly the *Auxilio Emergencial* program) prevented the poverty rate in the State of Goiás from increasing during the COVID-19 pandemic in 2020, but unemployment levels increased.** In 2019, 12.5 percent of Goiás' population lived under the poverty line (US$ 5.5 per day, PPP). The poverty rate fell to 7.1 percent in 2020 in spite of the decline in economic activity (thanks to the cash transfers provided by the *Auxilio Emergencial*). In 2021, with the sluggish recovery in the labor market, inflationary pressures and the lower amount of cash transfers, the poverty rate is estimated to have increased to 9.7 percent. The COVID-19 crisis also affected unemployment rates in the State of Goiás, which rose to 13.2 percent at the peak of the pandemic in the third quarter of 2020, before declining slightly to 12.4 percent by mid-2021.

32. **Goiás has enjoyed a relatively strong revenue effort, making it less dependent on federal transfers.** In 2020, own revenues accounted for more than 78 percent of total revenues (or an equivalent to 0.4 percent of national GDP), while federal transfers corresponded to about 22 percent of the total, making Goiás one of the States with a strong revenue effort and lower dependence on federal transfers (unlike most States in the North and Northeast regions). Tax revenues were the main source of revenues for the state (around 62 percent of the revenues). In contrast, the State's performance in terms of expenditure management has not been as prudent, particularly in relation to recurrent spending growth.

33. **Rapidly growing personnel and pension spending crowded out critical spending in the State of Goiás.** Prior to 2020, Goiás was confronted with fast-growing pension and personnel spending. Between 2010 and 2019, the wage bill grew by 2.4 percent per year in real terms, mostly due to the increase of the average salary beyond inflation in the State.[23] Salary increases also raised pension expenditure. Since 2015, the number of public servants retiring in the State started to increase (more than 5 thousand people retired between 2017 and 2019, equivalent to 7.8 percent of the Goiás' civil service in 2018). Together, these developments led to an average real growth of pension spending of 6.1 percent per year between 2010 and 2019. This pushed operating expenditures to grow at an annual average real rate of 5.1 percent between 2015 and 2019 and crowded out spending on critical areas such as capital investment and environmental protection.

34. **As the State's spending profile deteriorated, public debt, debt service costs and arrears to suppliers increased.** Goiás' public debt at the end of 2020 stood at US$ 4.2 billion (about 86 percent of State net current revenue).[24] Although the State's debt is well below the limit allowed under Brazil's Fiscal Responsibility Law (200 percent of net current revenues), its debt profile poses challenges since it is relatively short-term and debt service is high (8.6 percent of net current revenues in 2020).[25] Supplier arrears in 2020 reached US$ 523 million (8.1 percent of revenues). They are projected to be reduced to

[23] The number of public servants remained largely stable between 2010 and 2019.
[24] Net current revenue is defined in the Fiscal Responsibility Law as the sum of tax revenue, social security contributions, property, industry, agriculture and services, less the amounts of constitutional transfers.
[25] However, only 0.3 percent of the overall debt is in foreign currency. The remaining amount is domestic debt owed to the federal government or domestic banks.

US$ 382 million by 2022 (5.5 percent of revenues). With this, the State's gross financing needs are projected to reach up to US$ 278 million in 2022 (equivalent to 4.0 percent of revenues).

35. **The COVID-19 crisis exacerbated fiscal challenges for the State, which were temporarily offset by the federal government's emergency fiscal support in 2020.** As in the rest of the country, Goiás faced higher spending needs as part of its response to the COVID-19 pandemic, including a R$ 450 million increase in health spending in 2020 (around 11.2 percent of the original health budget for the year) to cope with the outbreak. As part of the federal response program, R$ 1.5 billion in emergency financing was transferred from federal to State coffers in 2020, complemented with a federal debt moratorium that saved about R$ 200 million in debt repayments. This federal support helped the State to meet its financing needs and safeguard investments in 2020.

36. **Despite some fiscal relief in 2021 related to higher tax collections, structural challenges persist and require substantive reforms to tame spending growth.** In 2021, fiscal challenges reemerged once the extraordinary federal assistance ended, and debt repayments were reinstated despite an estimated increase of 20 percent in tax revenues caused by the rebound of economic activity and higher inflation. As Goiás is very dependent on its agriculture sector, the booming commodities market in 2021 also played a decisive rule to improve the State's revenues. However, these factors are conjunctural and their revenues growth impacts are not expected to last. These conditions, along with the fiscal difficulties experienced on the spending side prior to the pandemic, motivated the State to pursue a fiscal adjustment path by adhering to the FRR, (see Box 2 in section 4.2).

37. **The expected sources of Goiás' fiscal adjustment includes both above- and below-the-line measures.** The fiscal adjustment plan allows for the refinancing of the State's debt with the federal government. Payment of the State public debt will be partially suspended in 2022 and will gradually be paid off again from 2023 onwards, for a period of 30 years. The resumption of installments will be gradual, amounting US$ 922 million in fiscal savings until 2025 (Table 5). In exchange for debt renegotiation, the state is implementing several adjustment measures that include cuts in primary expenditures (pension and wage bill reforms, institution of complementary pension fund, implementation of a spending cap rule, and centralized financial management), cuts in tax benefits, debt reprofiling, privatizations, and renegotiation of arrears. Most of these measures have medium-term fiscal effects that will help the State to improve its fiscal condition and achieve the targets of its Fiscal Recovery Plan. The reduction in recurrent spending, measures to increase revenues and privatizations are expected to result, respectively, US$ 2,814 million, US$ 199 million and US$ 508 million in fiscal savings. Altogether, these measures are projected to provide fiscal savings of US$ 4,444 million until 2025.

Table 5: Estimated savings per kind of fiscal adjustment measure (2021-2025)

Savings (US$ 2021 Million)	2021	2022	2023	2024	2025	Total
Reducing Recurrent Spending	**182**	**338**	**560**	**789**	**945**	**2,814**
Wage Bill	112	140	252	360	425	1,289
Pensions	-10	74	183	235	262	744
Other Current Expenditures	80	124	126	194	258	782
Increasing Revenues	**0**	**3**	**56**	**70**	**70**	**199**
Lowering arrears and debt service costs	**290**	**542**	**199**	**331**	**68**	**1,430**
Debt Service	290	263	199	102	68	922
Privatizations	0	279	0	229	0	508
Total	**472**	**884**	**815**	**1,189**	**1,084**	**4,444**

Source: Goiás State Secretary of Economy and World Bank calculations.

Table 6: State of Goiás Projected Fiscal Balances (2018–25, US$ millions of 2021)

Estimates Includes Expected Impacts of Prior Actions and Others Measures Required by the Fiscal Recover Regime (accrual accounting)

2021 US$ Million	2018	2019	2020	2021e	2022f	2023f	2024f
I. Revenues	**5,727**	**6,635**	**6,450**	**7,008**	**6,901**	**7,062**	**7,168**
Own Revenues	4,700	5,512	5,061	5,743	5,640	5,775	5,859
of which: interests	41	32	29	26	26	26	26
Transfers	1,027	1,123	1,389	1,265	1,261	1,287	1,309
of which: COVID-19 related transfers			278				
II. Total Expenditures	**5,911**	**6,367**	**6,127**	**6,447**	**6,427**	**6,521**	**6,570**
% of revenues	*103.2%*	*96.0%*	*95.0%*	*92.0%*	*93.1%*	*92.3%*	*91.7%*
Current Expenditures	5,561	6,221	5,945	5,901	5,959	6,024	6,077
Active Personnel Spending	1,876	2,287	1,988	1,874	1,942	1,939	1,945
Pensions	1,091	1,212	1,230	1,234	1,233	1,235	1,235
Interests	243	261	212	23	33	46	53
Other Current Expenditures	2,351	2,461	2,515	2,769	2,751	2,804	2,844
Investment	350	145	182	546	468	497	493
III. Primary Balance (I-II- Interests, net)	**18**	**497**	**505**	**558**	**481**	**560**	**625**
% of revenues	*0.3%*	*7.5%*	*7.8%*	*8.0%*	*7.0%*	*7.9%*	*8.7%*
IV. Overall Balance (I-II)	**-184**	**268**	**322**	**561**	**474**	**540**	**598**
% of revenues	*-3.2%*	*4.0%*	*5.0%*	*8.0%*	*6.9%*	*7.7%*	*8.3%*
V. Net Financing	**-122**	**-182**	**-223**	**-35**	**-34**	**29**	**-8**
Loans	37	1	6	7	440	77	88
of which: World Bank Operation					440		
Amortizations, net	-162	-194	-228	-34	-743	-40	-316
Asset Sales	3	10	0	0	278	0	229
Pension Fund	0	0	-1	-8	-9	-9	-9
VI. Gross Financing Needs (IV +	**346**	**-75**	**-93**	**-519**	**278**	**-491**	**-273**
% of revenues	*6.0%*	*-1.1%*	*-1.4%*	*-7.4%*	*4.0%*	*-7.0%*	*-3.8%*
VII. Financing Surplus/Gap (IV+V)	**-306**	**86**	**99**	**526**	**440**	**569**	**590**
% of revenues	*-5.3%*	*1.3%*	*1.5%*	*7.5%*	*6.4%*	*8.1%*	*8.2%*
VIII. Stock of Arrears	**397**	**420**	**523**	**364**	**382**	**0**	**0**
% of revenues	*6.9%*	*6.3%*	*8.1%*	*5.2%*	*5.5%*	*0.0%*	*0.0%*
VII. Stock of Debt	**4,168**	**4,198**	**4,436**	**3,786**	**3,522**	**3,437**	**3,016**
% of revenues	*72.8%*	*63.3%*	*68.8%*	*54.0%*	*51.0%*	*48.7%*	*42.1%*
World Bank Operation as share of Gross Financing Needs					*66.6%*		

Source: Goiás State Secretary of Economy and World Bank calculations.

Notes: (i) Revenues are net of the FUNDEB deductions; (ii) Primary balance and overall balance in 2020 without the federal fiscal support to combat the COVID-19 pandemic would be US$ 227 and US$ 44 million, respectively; (iii) The State estimates revenues of privatization of the CELG enterprise of around US$ 295 million in 2022, and revenues of the IPO of the Saneago enterprise of around US$ 259 million in 2024.

2.4. IMF RELATIONS

38. **Federal authorities maintain an ongoing dialogue with the International Monetary Fund (IMF) on Brazil's macroeconomic policy**. On September 10, 2021, the Executive Board of the IMF concluded the Article IV consultation with Brazil. During the preparation of this DPF, the World Bank and the IMF discussed fiscal and structural issues related to this operation. The Bank and the Fund have also collaborated closely with the federal government, including on public financial management, public investment management, and a Financial Sector Assessment Program. The IMF has provided technical assistance to Brazilian authorities in other areas, such as fiscal transparency and fiscal frameworks for subnational governments (see Annex 2 on IMF Relations); while the Bank prepared a Public Expenditure Review in collaboration with the federal government[26] and an intergovernmental fiscal transfers report.

3. GOVERNMENT PROGRAM

39. **The State government's 2020–23 multiannual plan (PPA—*Plano Plurianual*) aims to improve quality of life, while promoting sustainable development and the fiscal responsibility.** The government of Goiás designed the PPA following broad inputs from public consultations and government agencies. A digital platform was made available to enable popular participation in the construction of the Pluriannual Plan. The eight strategic areas include economic development, maintaining fiscal responsibility, governance and transformative management, promoting public health and education, peace and hospitality (promote security and protection for the State's citizens, with the observance of the human rights), sustainable infrastructure development (focused on the families, business and environment), social inclusion and regional development. The government program also includes commitments to adherence to the UN Sustainable Development Goals. The proposed DPF is aligned with this PPA.

4. PROPOSED OPERATION

40. **The Program Development Objective of this proposed DPF is support the State of Goiás to: (i) improve fiscal sustainability; and (ii) adopt climate-smart, resilient, and inclusive policies for its agricultural sector.** The proposed DPF is articulated around two pillars:

[26] World Bank (2017), A Fair Adjustment: Efficiency and Equity of Public Spending in Brazil, Report N. 121480, pp. 121–126.

- **i.** The first pillar of the DPF supports reforms that strengthen the State's medium-term fiscal sustainability, primarily by containing recurrent spending, through the adoption of: (i) an expenditure rule that limits growth of the primary expenditures to inflation as a fiscal anchor for the States' public finances; (ii) reforms to make the pension system more sustainable, including increasing the minimum retirement age and contribution rates; and (iii) a medium-term fiscal adjustment plan.
- **ii.** The second pillar supports reforms that supports the State's in the adoption of climate-smart, resilient, and inclusive policies for its agricultural sector through: (i) the adoption of the state plan of climate change mitigation and adaption; (ii) a national program for bio-inputs to enhance climate-smart- agricultural practices; (iii) the increase of the climate focus of the state's environmental licensing systems; and (iv) the regularization of legal land tenure for vulnerable small-scale farmers, with focus on inclusiveness, environmental protection, and gender balance.

41. **The proposed DPF is a standalone operation as requested by the federal government and its size is determined by Goiás' fiscal space to borrow.** This precludes the possibility of a programmatic DPF series at this stage as the FFR allows for only one loan to restructure costly debt. The State's eligibility for the FRR requires a credible medium-term fiscal framework anchored in a fiscal consolidation plan to be closely monitored by the Federal Treasury. Supported by this DPF, the successful implementation of the State's fiscal consolidation plan will help Goiás exit the FRR and become eligible for new sovereign guaranteed lending from International Financial Institutions (IFI) in support of its development priorities.

4.1. LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

42. **The pillars of the proposed DPF are closely aligned with the guiding themes of the government's PPA: quality of life, sustainable development, and modernization of public management.** Pillar I is related to the PPA strategic area of "Fiscal Responsibility", and "Governance and Transformative Management" as it directly supports the modernization of public management by ensuring improved pension, wage bill and public spending control, which will help create more fiscal space for public investment and economic development. Pillar II supports the PPA strategic areas of "Infrastructure and Sustainability" as well as "Economic Development" by supporting an integrated approach to low-carbon, sustainable, and inclusive agricultural systems.

43. **The design of the proposed DPF incorporates lessons learned in supporting fiscal reforms from previous subnational DPFs in Brazil.** Between FY09 and FY20, the World Bank approved 22 subnational DPFs in Brazil, many of which contained fiscal pillars. Key lessons from their evaluation include: (i) fiscal measures need to focus on key fiscal outcomes and need to be front-loaded so as to limit moral hazards; (ii) ownership and leadership at the highest levels of the State are needed to successfully implement reforms; (iii) selectivity in the choice of sectors is key to keep the operation focused and deliver meaningful

results; (iv) DPFs can serve as a vehicle for deepening policy dialogue on fundamental issues, with the Bank providing technical knowledge; and (v) close collaboration with relevant federal agencies (particularly the Federal Treasury — STN) strengthens the design of a fiscal program and the monitoring of subnational governments' fiscal status. As such, this DPF is critical as part of a broader WBG engagement in Brazil.

4.2. PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

Pillar I: Supporting the State of Goiás in improving fiscal sustainability

44. **Given its fragile fiscal position, Goiás made fiscal recovery one of the pillars of its development program and has opted to participate in a federal fiscal adjustment program for subnational entities in fiscal distress.** Rising recurrent spending and accumulating arrears pushed the State to begin addressing fiscal imbalances. The State is prioritizing reforms that restrict recurrent spending growth and that would allow it to adhere to the FRR, one of the federal government's fiscal adjustment instruments, described in Box 2 below.

Box 2: Fiscal Recovery Regime Program (FRR)

The FRR was established in 2017 to support the fiscal consolidation of States in a precarious fiscal situation. The regime offers debt relief for highly indebted States in fiscal distress in return for fiscal adjustment measures.[27]

The eligibility criteria to adhere to the regime are: (i) State's net current revenues (NCR) < Debt Stock; (ii) personnel spending > 60 percent of NCR; or current spending > 95 percent of NCR; (iii) amount of non-earmarked expenses greater than non-earmarked cash balances. States that do not comply with point (i) will still be able to join the FRR but cannot access debt relief from the Federal Government.

States that are eligible for regime will need to implement a set of upfront fiscal measures to be accepted: (i) reduction of tax exemptions by at least by 20 percent; (ii) privatizations of State's owned companies (or, at least, acquire legislative authorization to privatize); (iii) adoption of an expenditure rule that links recurrent expenditure growth to inflation; (iv) harmonizing the States' civil service benefits with those of the federal government; (v) approval of a pension reform similar to the federal pension reform of 2019; (vi) establishment of a complementary pension fund; (vii) centralization of all public resources in a single account managed by the Executive Branch; and (viii) renegotiating arrears.

The FRR also requires States to adopt a fiscal recovery plan, approved by the Federal Treasury, that will pave a path

[27] Initially, only Rio de Janeiro adhered to the FRR as other States were not accepted due to the rigid eligibility criteria for the regime. In 2021, the Federal Government made changes to the regime, making it more accessible for a bigger group of States in fiscal distress.

to fiscal sustainability within the regime. Alternatively, States would be required to commit to avoid: (i) increasing salaries and benefits, (ii) hiring new staff, (iii) creating new mandatory expenditures, (iv) adopting new tax expenditures, or (v) raising mandatory expenditures above inflation.

The fiscal recovery plan sets fiscal targets for primary balance and arrears. If the state does not meet the agreed targets, they should commit to all fiscal adjustment measures listed above.

States in compliance with the regime will only be allowed to access federal guarantees for borrowing solely with the following purposes: (i) financing of a voluntary staff termination program; (ii) payroll auditing; (iii) arrears refinancing; (iv) debt restructuring; (v) accessing the Profisco and Progestão federal programs for fiscal adjustment; and (vi) privatizations.

The FRR can be finalized in three situations: (i) the state achieves the fiscal targets; (ii) expiration time of the FRR, which is up to 9 years; (iii) if requested by the state. Fiscal accounts of the state are considered balanced in (i) when the primary balance is higher than the debt service, and when the ratio between arrears and the NCR is lower than 10 percent. Note that the variable used to measure the amount of arrears (the *"Restos a Pagar"*) is a proxy for arrears and it also includes some unused budget allocations from the previous year (that are not considered arrears have financial backing to be paid later). That is the rationale for assuming a ceiling of 10 percent (not zero) for arrears as the target.

There are also two options where the FRR is extinct instead of finalized: (i) the State is considered in default for two years in a row; or (ii) the state judicializes any debt contract that was granted with debt relief in the FRR. The State is considered in default with the FRR when: (i) it does not share requested information by STN; (ii) it does not implement measures agreed in the fiscal recovery plan; or (iii) it does not meet the fiscal targets agreed upon in the fiscal recovery plan. If the state has its FRR extinct, the state will not receive federal guarantees for new operations for the next five years.

45. **Goiás is adopting a critical set of fiscal reforms necessary for joining the FRR**. To qualify for the FRR, the State is implementing a package of measures that aim to reduce recurrent spending pressures, increase revenues, lower arrears and debt service costs, as listed below. As such, the State is pursuing a fiscal adjustment with savings both above and below the line (Table 5).

- **Reducing recurrent spending**: pension reform and institution of complementary pension fund, wage bill reform, spending cap rule, and centralized financial management.
- **Increasing revenues**: reducing tax expenditures.
- **Lowering arrears and debt service costs**: debt restructuring,[28] privatization of State companies and the sale of assets, and renegotiation of arrears.

46. **This pillar of the DPF promotes the fiscal recovery of Goiás by supporting the State's adherence to the FRR.** The DPF supports fiscal reforms that are prerequisites for the State's entry into the FRR: (i)

[28] The State of Goiás intends to use the proceeds from this DPF to reprofile its loan portfolio and reducing debt service costs by retiring a US dollar indexed high-cost loan.

adopting the FRR spending cap rule as medium-term fiscal anchor (PA#1); and (ii) consolidating the cost of civil service pensions (PA#2). These reforms have been prioritized by the DPF because of their expected impact on reducing recurrent spending, which has been the main source of pressure on Goiás' fiscal accounts. In addition to these measures, Goiás is committing to a forward-looking fiscal adjustment plan that sets fiscal targets for the primary balance and the clearance of arrears over the coming years (PA#3). The fiscal plan also sets personnel spending targets, including limits to salary adjustments and new hires, that will help it to comply with the spending cap. Figures 10 to 13 below show the expected impact of these reforms on key fiscal indicators. In recovering its credit rating, the State will be able to access new credit lines and become eligible to receive federal government's guarantees.

Figure 10: Pension System Deficit (% of NCR)

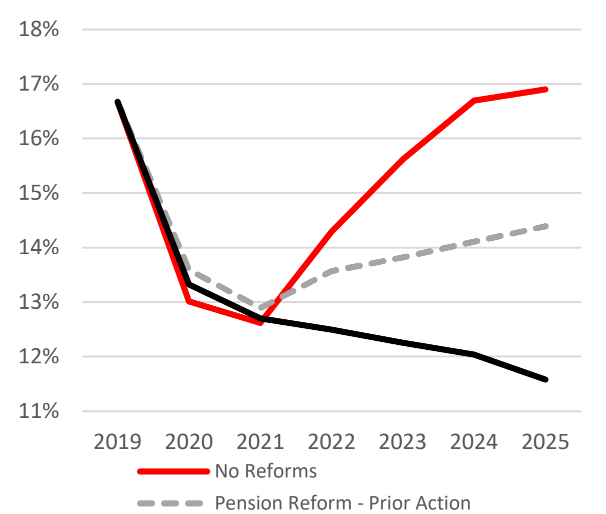


Figure 11: FRL – Personnel Spending indicator

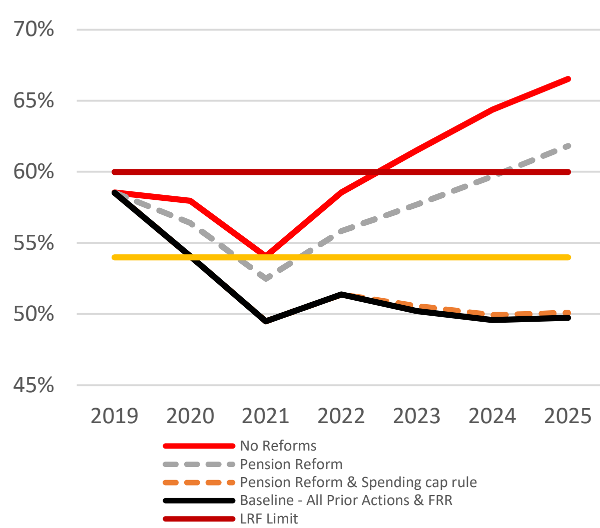


Figure 12: Primary Balance (% of NCR)

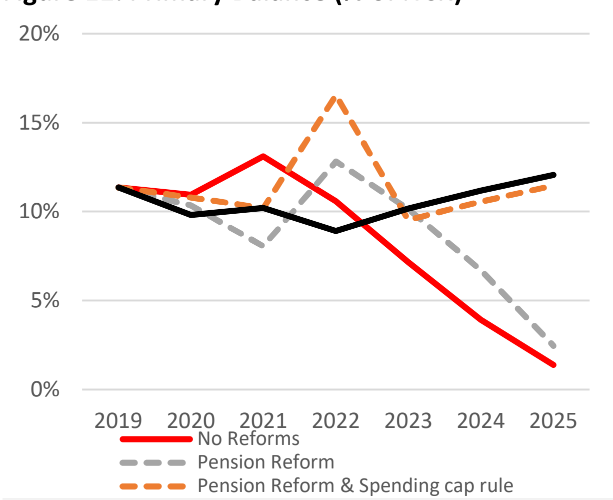
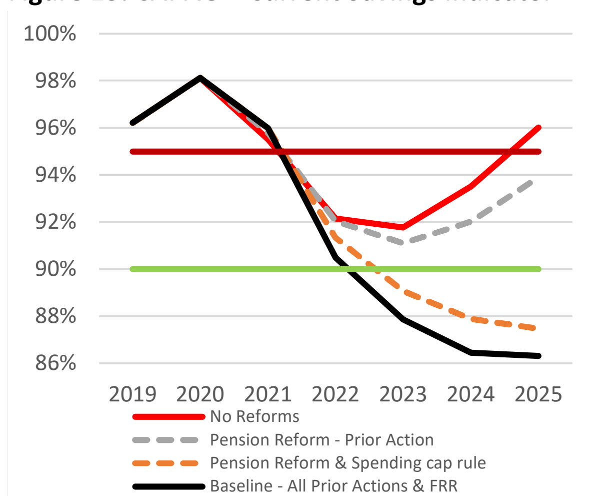


Figure 13: CAPAG – Current Savings indicator



Source: SE and World Bank calculations.

Note: CAPAG current savings indicator is a weighted average of the previous 3 years, as defined by STN methodology.

Prior Action #1: *The Borrower has amended its Constitution to adopt an expenditure rule, under the Federal Fiscal Recovery Regime (Regime de Recuperação Fiscal), that limits growth of the primary expenditures to inflation as a medium-term fiscal anchor for the Borrower's public finances, as evidenced by the Constitutional Amendment No. 70 modifying articles 40 and 41 of the transitory provisions of the Borrower's Constitution, dated December 7, 2021, published on the Borrower's official gazette on December 8, 2021.*

47. ***Rationale.*** Goiás' fiscal woes are mainly related to a rapid rise in recurrent spending, caused by its growing wage bill and pension costs, as well as increases in other recurrent outlays. As spending pressures mounted, the State was unable to contain them in the absence of a credible fiscal anchor to guide budget decisions. And although the Federal government had established instruments aimed at disciplining the budgets of sub-national entities, such as the Fiscal Responsibility Law adopted in 2000 and the credit worthiness assessments to access federal guarantees for loans, their effectiveness was eroded overtime in the absence of an anchor, resulting in bailouts of sub-national entities in distress.[29] Goiás adopted an expenditure rule to limit the growth of primary expenditures in 2017 in the context of the 2016[30] federal government bailout of States in fiscal distress. However, the fiscal rule was not implementable due to weaknesses in the design of the federal adjustment program at that time: (i) incompatibility between expenditure rule and constitutional minimum spending requirements; and (ii) lack of feasible sanctions for non-compliance. To address these issues, the FRR was adapted to address the weaknesses of the preceding program. As Goiás now attempts to restore the sustainability of its fiscal framework, it now has access to an improved federal program with instruments that lend credibility to its fiscal adjustment path and provide more predictability of expenditures for the next years.

48. ***Prior Action.*** To provide an anchor to its fiscal recovery plan, Goiás has adopted an expenditure rule under the FRR, which limits the growth of primary expenditures to the rate of inflation, from 2022 to 2031 (prior action). This expenditure rule accommodates constitutionally mandated spending. It brings predictability to the State's budget on the expenditure side by limiting pressures for additional spending. To support the compliance with this rule, the State is implementing reforms that contain recurrent spending growth, thus promoting a fiscal adjustment based on reducing recurrent spending, as opposed to investment (such as pension reform (PA#2) and reducing civil service benefits.

49. ***Expected Results.*** The expenditure rule is expected to curb recurrent expenditure growth, including spending on personnel. As a result, the weighted average of the ratio of current expenditures to

[29] The Fiscal Responsibility Law was further eroded by inconsistencies that prevented sub-national entities from adopting spending controls. For example, it mandated that education and health spending become linked to revenue increases (a pro-cyclical approach) that would make it difficult to cap spending growth on these sectors in real terms.

[30] Federal Complementary Law 156/2016

current revenues (that is the fiscal indicator adopted in the Federal Treasury credit rating methodology) is expected to decrease from 98.1 percent in 2020 to 90.5 percent in 2022, falling below the threshold set by the Federal's governments credit worthiness benchmark for sub-national entities. The resulting increase in the State's operating balance will allow it to reduce its debt service costs, reduce arrears and raise investments. In a counterfactual scenario where no fiscal reforms would be adopted, this ratio would be below the 95 percent threshold between 2022 and 2024 but would be above it again in 2025 (96.0 percent) and would continue to increase in subsequent years. This reform will also allow the State to regain access to borrowing with support from federal government guarantees[31] to promote investments in favor of its environmental, social and economic goals.

Prior Action #2: *The Borrower has enacted a law to reduce the pension deficit for civil servants by: (i) increasing the minimum retirement age, (ii) broadening the contribution base, and (iii) mandating a unified management of the Borrower's pension system under the responsibility of a single agency (Goiás Previdência – GOIASPREV), as evidenced by articles 4, 18 and 68 of Law (Lei Complementar) No. 161, dated December 30, 2020, published on the Borrower's official gazette on December 30, 2020.*

50. ***Rationale.*** Goiás operates a pay-as-you-go pension system, financed through civil servant contributions at a fixed percentage of their salaries, along with employer contributions made by the State, set at double the rate of employee contributions. As the number of retired civil servants with ample pre-2003 pension rights increased in the last decade, the deficit of the unsustainable pension scheme grew, putting an additional burden to the government's accounts. The deficit of the civil service pension system (for all branches of government) reached R$ 239 million in January 2020 (R$ 3.1 billion annualized), equivalent to 11.7 percent of the State's current revenues in January.[32] Goiás' pension system also had a five-year retirement age gap between men and women (60 years for men and 55 years for women), perpetuating social stereotypes of greater women's role in housework and leading to a potential gender gap in pension levels as well as shorter and less rewarding professional careers of women.[33] Pension eligibility conditions were also primarily oriented towards reaching relatively high length of service periods, which were especially restrictive for women who typically have longer career gaps associated with care responsibilities. Despite of length of service requirement for pension eligibility being 30 years for women compared to 35 years for men, based on national retirement statistics only 42 percent of women is able to reach that requirement compared to 57 percent of men. A further challenge arose in

[31] The credit worthiness assessment (CAPAG) is conducted by the Federal Treasury (STN) for federally-guaranteed subnational borrowing. The STN assesses three different indicators: (i) indebtedness; (ii) current savings; and (iii) liquidity. Depending on the combination of the evaluation of these indicators, each subnational government receives a score between A and D. In order to have borrowing access with federal guarantees, the SNG must have a CAPAG A or B score.

[32] The deficit of the public pension system is defined as the State's expenditures on old age and survivor pensions, minus the contributions made by State employees, the regular contribution made by the State as the employer, and the compensation received by the National Social Security Institute (through COMPREV).

[33] https://thedocs.worldbank.org/en/doc/121231541445506749-0050022018/original/WBLSavingForOldAgeFINALWEB.pdf

the area of coordination. Different branches of government in Brazil have strong autonomy and they seldom share pension information with the executive, undermining integrated management of the pension system, and creating parallel and costly pension administrations within the State. These challenges made pension reform one of the top priorities for the State in pursuit of a more sustainable fiscal outlook.

51. ***Prior Action.*** To shift the public sector pension scheme to a more sustainable trajectory, Goiás followed the federal pension reform for non-uniformed personnel (prior action) by increasing the minimum retirement age applicable for new civil servants from 55 and 60 for women and men, respectively, to 62 and 65 years. Transition rules will be applied for current civil servants to increase their retirement ages over time until they reach the new 62/65 thresholds. Along with the increases in retirement age, the minimum length of service requirement was reduced from 35 and 30 years for men and women, respectively, to 25 years for both genders. It also raised civil servants' contribution by broadening the contribution base. This was done by taxing the part of the pension benefit that surpasses the minimum wage (in 2021, the minimum wage was R$ 1,192.40). Before the reform, the contribution was collected upon the amounts that surpassed the highest pension benefit paid by the federal public pension system to the private sector workers (the RGPS), that corresponded to R$ 6,433.57 in 2021. As a result, the individual contribution basis was expanded up to R$ 5,241.17 (that corresponds to the difference between the R$ 1,192.40 and R$ 6,433.57). Moreover, it implemented a unified pension record management system for all branches of government, bringing transparency and standardization to the issuance of pension benefits, which has been a long-standing problem for adequate pension administration and expenditure planning.

52. ***Expected Results.*** The pension system deficit is expected to decline to R$ 4.9 billion in 2024 (12.0 percent of net current revenue), compared with a R$ 5.9 billion (16.7 percent of net current revenue) projected for the same year in the absence of reform.[34, 35] Therefore, the reform is expected to generate short-term savings of R$ 333 million per year, which represents a 28 percent decrease in the pension deficit projected for 2024. Following the example of federal government, the reform also narrows a distortive gender gap in retirement ages from 5 to 3 years (62 years for women and 65 years for men after the reform, compared to 55 years for women and 60 years for men before). Moreover, since periods of child- and elder-care tend to shorten female careers more than those of men, the reduction in the minimum length of service for pension eligibility is female-friendly, which is achieved without perpetuating differential gender treatment by law. Together, the increase in retirement ages and decrease in length of service requirement helped shift the emphasis from career length to retirement age

[34] The pension benefit base for public servants that joined the public sector before 2003 increases in line with salary and benefit increases of active public servants. Thus, the reform in PA#3, which reduces civil service benefits, will also contribute to lowering Goiás' pension deficit.

[35] The scenario with no reforms and the scenario with only the pension reform assumes an average real wage increase of 5.5 percent between 2022 and 2024, while the scenario with all reforms assumes an average of 1.4 percent during the same period.

as the main condition for retirement benefit eligibility, allowing for more career flexibility within a longer potential working life span, which is especially valued by women. Statistically, this shift in focus in pension eligibility conditions is relevant for higher proportion of women compared to men.

***Prior Action #3**: The Borrower has issued a decree establishing a fiscal adjustment plan ("Plano De Recuperação Fiscal Do Estado De Goiás") that sets medium-term targets to increase the primary balance and reduce arrears, as evidenced by Decree No. 10013, dated December 27, 2021, published on the Borrower's official gazette on December 27, 2021 and rectified (Errata) on the Borrower's official gazette on December 29, 2021.*

53. ***Rationale.*** Having implemented upfront fiscal adjustment reforms in its bid to join the FRR, Goiás also needs to adopt a credible medium-term fiscal consolidation plan to anchor fiscal sustainability and sustain sound fiscal outcomes in the medium-term. The requirement of such a plan under the FRR stems from a recognition of the risks of reversal of fiscal adjustment reforms in the absence of an anchored fiscal plan with targets and accompanying measures that help to achieve them.

54. ***Prior Action.*** To commit to a credible medium-term fiscal adjustment path, the State of Goiás has adopted a fiscal adjustment plan (prior action). The plan sets out two targets that will be annually assessed until 2030 by the State and the Federal Treasury.[36] The first is a target to increase the primary balance surplus from R$ 277 million (US$ 50.3 million) in 2022 to R$ 6,430 million (US$ 1,167 million) by 2030 (up from 0.9 percent of NCR to 13.8 percent of NCR). The second target reduces the ratio of arrears from 8 percent of NCR in 2022 to 5 percent of the NCR from 2023 onwards. The reforms adopted by the State prior to joining the FRR (listed in paragraph #44 above) are expected to help Goiás in meeting these targets. To further support the State in meeting its targets, the plan also includes the following measures: (i) decreasing tax expenditures by around R$ 350 million (US$ 63.5 million, or) 1.2 percent of NCR); (ii) sale of assets; (iii) privatization of the State's power generation and transmission company; (iv) IPO of the Saneago sanitation company; and (v) reprofiling the debt portfolio.

55. **This plan is anchored in a series of measures that will help ensure its implementation.** Its implementation is jointly monitored with the Federal authorities under the framework of the FRR. If the State fails to meet its targets, it will face penalties under the FRR that act as an incentive to remain on track. Failure to meet the targets of the plan can prevent the State from: (i) increasing salaries and benefits, (ii) hiring new staff, (iii) creating new mandatory expenditures, (iv) adopting new tax expenditures, or (v) raising mandatory expenditures above inflation. Continuous non-compliance with the plan can result in the extinction of the State's fiscal recovery plan with the Federal Treasury and inability

[36] As explained in box 2, the FRR can finalized before the time by the state or if the fiscal accounts of the state are considered balanced, which means that the primary balance is higher than the debt service disregarding the debt relief promoted at the FRR, and that the ratio between arrears and the NCR is lower than 10 percent.

to access federal guarantees for new loans for 5 years. Continued policy dialogue and engagement of the World Bank team with the State will provide additional support to the delivery of the plan.

56. ***Expected Results.*** The fiscal recovery plan is expected to rebalance the fiscal accounts of the State, reducing its debt levels and increasing fiscal space. Primary balance is estimated to increase from 9.8 percent of NCR in 2020 (R$ 2.6 billion) to 11.2 percent by 2024 (R$ 3,9 billion), and amount that is expected to be sufficient to pay the state's debt service. In the absence of this prior action, primary balance is estimated to decrease to 3.9 percent of NCR by 2024 (R$ 1,8 billion). Starting in 2023, the estimated trajectory to the primary balance is projected to continuously increase even with also increasing investments over the years. With these improvements, Goiás is expected to exit the FRR, become creditworthy and regain access to sovereign guaranteed-financing by 2022. This prior action is expected to allow for investments increases from 2.5 percent of NCR in 2020 to 9.0 percent by 2023. In absence of this prior action, investments would be stagnated around 0.5 percent of NCR between 2022 and 2030. These fiscal gains would also open up fiscal space, enabling the State to strengthen its post-COVID-19 social and economic recovery efforts and its climate and environmental sustainability efforts (discussed in Pillar II).

Pillar II: Supporting the State of Goiás in adopting climate-smart, resilient, and inclusive policies for its agricultural sector

57. **The State of Goiás recognizes its significant contribution to climate change, stemming mainly from deforestation and land degradation pressures linked to farming in its Cerrado biome.** Goiás is one of Brazil's major agricultural producers. The development of its agricultural sector has been associated with large scale deforestation over many years, contributing significantly to Brazil's emissions from land use change and from agriculture and livestock. The State authorities recognize the adverse effects of climate change on the continued success of the sector. Higher temperatures expected in central states of Brazil will increase loss of soil moisture and increase forest fire probability, leading to greater aridity, affecting livestock and crops, furthering economic losses, damage to agricultural lands and infrastructure. Furthermore, land degradation and soil erosion, exacerbated by recurrent flood and drought adversely impact agricultural production, and thus the livelihoods of rural communities. Goiás also recognizes the broader implications of climate change on local and global communities, and has been integrating carbon emission reduction policies in its plans and strategies.

58. **This pillar will support the State of Goiás in shifting to a climate resilient and low-carbon and inclusive agricultural development through more sustainable management of its natural resources.** This pillar is expected to help steer Goiás' agricultural sector towards practices that increase carbon storage, reduce GHG emissions and foster adaptation to climate change. To do so, the package of reforms includes: the adoption of the state plan for climate mitigation and adaptation (PA#4), measures to promote the adoption of bio-inputs in agricultural production to increase soil carbon capture (PA#5), measures to

increase the climate focus of the State's environmental licensing systems (PA#6); and land tenure regularization for smallholders through regulations that protect the environment, are socially inclusive, and recognize women's land title rights (PA#7). This pillar will benefit from fiscal savings made possible under the first pillar of the DPF, in that the State will be able to extend favorable financial conditions for select beneficiaries. For instance, the State will be able to offer discounts to the environmental compensation fees due by carbon-neutral undertakings (PA#5), and to provide public land at virtual no cost for vulnerable and finance administrative and operational costs for the land regularization of vulnerable smallholder families and rural communities (PA#7).

Prior Action #4: *The Borrower has issued a decree establishing a plan for climate change mitigation and adaptation and sustainability in agriculture (Plano Estadual de Mitigação/Adaptação às Mudanças Climáticas e Sustentabilidade na Agropecuária) to foster a low-carbon economy in the agricultural sector, as evidenced by Decree 9,891, dated June 22, 2021, published on the Borrower's official gazette on June 23, 2021.*

59. **Rationale**. Agriculture in Goiás is both the leading source of GHG emissions and, with about 90 percent of its cropped area in rainfed production, highly vulnerable to increasing climate change impacts, including through raising temperatures (which further lead to forest fires and forest degradation), changing precipitation patterns, increased frequency and intensity of climate-induced natural disaster, and loss of globally significant biodiversity. Goiás' (and Brazil's) leadership in soybean and maize production depends on predictable rain patterns in the Amazon-Cerrado agricultural frontier, where recent regional warming and drying have already pushed 28 percent of current agricultural lands out of their optimal climate space, a share that could reach 51 percent by 2030.[37] While adaptation strategies may alleviate some of the impacts, maintaining native vegetation and other mitigation strategies are a critical part of the solution to stabilize the regional climate. Goiás' Cerrado is also home to vulnerable populations, including traditional *Quilombola*[38] and indigenous peoples' communities, who largely depend on agriculture and are directly and disproportionately impacted by deforestation and climate change. Goiás needs to strengthen the legal framework for climate change adaptation and mitigation in agriculture to enable relevant policies and initiatives at State level and to leverage and coordinate with the growing number of federal legislations and programs aimed at achieving Brazil's National Determined Contribution (NDC) and increasing adaptation to climate change.

60. **Prior Action.** The State plan for climate change adaption and mitigation and agricultural sustainability (State Decree 9891 of June 22, 2021) aims to establish a low-emission, resilient agricultural sector to achieve environmental, social, and economic sustainability. The plan replaces and strengthens

[37] Rattis, L., Brando, P.M., Macedo, M.N. et al. Climatic limit for agriculture in Brazil. Nat. Clim. Chang. 11, 1098–1104 (2021). https://doi.org/10.1038/s41558-021-01214-3

[38] The Quilombolas are the remnants of an ethnic-racial group formed by descendants of runaway slaves during the period of slavery in Brazil, that lived in the so-called quilombos.

the first-generation climate change adaptation and mitigation plan adopted in 2012. The objectives of the plan include, among others: (i) reducing GHG emissions and increasing carbon sequestration in the State's agricultural and livestock sectors; (ii) promoting and incentivizing sustainable technologies and innovations to contribute to native environmental protection, such as payment for environmental services (PES), as well as improved soil and water management; and (iii) promoting and implementing the coordination and harmonization of State and federal entities involved in the sustainable development of the agricultural sector in Goiás. To implement the reform, the State government is developing programmatic goals and executive programs, under the leadership of its Secretariat for Agriculture and Livestock (SEAPA), and is actively promoting climate-smart investments in the agricultural sector. A key provision of the plan is the mandate to contribute to the elaboration and follow-up of sectoral budget proposals (PPA - and Annual Budget Laws) to transform the policy thrust into concrete climate change and adaptation initiatives

61. **Expected Results.** By strengthening the climate change mitigation and adaptation approach in its agricultural sector, the State will make important and tangible strides to secure the integrity of the Cerrado biome and the myriad environmental services critical for climate mitigation.[39] The plan strengthens the legal framework needed for Goiás to support a series of policies and programs at State level and to coordinate with federal programs like the Low-Carbon Agriculture Program for the Cerrado or the National Program of Payment for Environmental Services, which will leverage access to concessional financing for firms and farms that adopt innovative climate-smart practices, for both mitigation and adaptation, such as, for example, photovoltaic energy, irrigation, landscape management, or restoration of pastures. It is expected that implementation of the climate change mitigation and adaptation plan would be as successful as the first-generation plan of 2012, which was instrumental in supporting the adoption of climate-smart agricultural innovations that are now mainstreamed practices, such as no-till and direct seeding.[40] The State will support the implementation of the plan through information and promotional campaigns, technical assistance and financing aimed at increasing the adoption of climate change adaptation and mitigation technologies and practices. At the policy level, the implementation of the plan will be coordinated by the state committee on sustainable low-carbon agriculture, comprising the agriculture and environment secretariats and technical, academic, and private sector representatives. To accompany and monitor the implementation of the climate change adaptation and adaptation plan, Goiás has strengthened its environmental monitoring system with the creation of

[39] The Cerrado is considered the "cradle of water" in Brazil, a savannah with the largest biodiversity in the world and an important ecological niche for mitigating the effects of global climate change. See for example: Damasco, Gabriel & Gouveia Fontes, Clarissa & Françoso, Renata & Haidar, Ricardo. (2018). The Cerrado Biome: A Forgotten Biodiversity Hotspot. Frontiers for Young Minds. 6. 10.3389/frym.2018.00022.

[40] No-till and direct seeding, cornerstones of conservation agriculture, are now practiced on 90 percent of areas cultivated with soybean in Brazil.

the State's Environmental Geographic Information System (SIGA),[41] capable of providing real-time information on a vast array of environmental-sensitive activities. As a result of the State's increased thrust on climate change mitigation and adaptation, it is expected that the adoption of climate-smart initiatives will increase dramatically, resulting in a three-fold increase of low-carbon agricultural projects supported by the State Development Council between 2021 and 2024, passing from 91 to 250.[42]

Prior Action #5: *The Borrower has enacted a law establishing a program on bio-inputs (Programa Estadual de Bioinsumos) to enhance the adoption of climate-smart agricultural practices, as evidenced by State Law No 21,005, dated May 14, 2021, published on the Borrower's official gazette on May 17, 2021.*

62. **Rationale.** The adoption of new technologies and increased use of inputs, inorganic fertilizers and chemical pesticides in particular, has explained between 56 and 68 percent of growth in agriculture in Goiás over the last two decades.[43] However, inorganic fertilizers account for 13 percent of non-CO_2 emissions in the agricultural sector and GHG emissions linked to synthetic fertilizers have increased by 58 percent between 2010 and 2019 (see Figure 14).[44] Furthermore, inorganic fertilizers and chemical pesticides are major pollutants of soils and water, can have a negative impact on human health and biodiversity[45] and are for most of them imported, making the sector highly dependent on global value-chains shortages and increases in price. Seeking to adapt to climate change, reduce environmental footprint and increase carbon storage in the soil production, Goiás has been shifting its support towards climate resilient and low-carbon agriculture with reduced emissions and higher CO_2 sequestration. With the State fostering the adoption of climate-smart technologies and innovations that contribute to the preservation of the environment with the adoption of the Plan for Mitigation/Adaptation to climate changes and sustainability in the Agricultural Sector (as per PA#4), there is a growing demand in Goiás for more sustainable alternatives to chemical inputs in agriculture such as bio-based agricultural inputs, or

[41] https://siga.meioambiente.go.gov.br/

[42] The State Development Council (*Conselho de Desenvolvimento do Estado)* is regulated by State Decree 9.620 of February 20, 2020 and is a multi-stakeholder consultative body of the state's Executive Branch, as defined by State Law 20.491, of June 25, 2019, Among other activities, the State Development Council revises and endorses proposals to be submitted for financing by the federal *Fundo Constitucional de Financiamento do Centro-Oeste.*

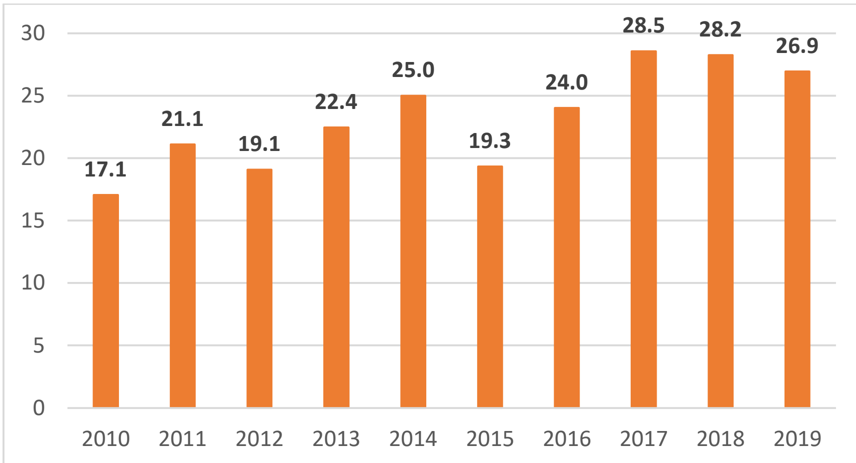
[43] World Bank Group (2017). *Agriculture productivity growth in Brazil. Recent trends and future prospects*. In line with the rest of the agricultural sector in Brazil, which is the world's largest consumer of pesticides and the fourth largest consumers of inorganic fertilizers (2017) with the Cerrado region concentrating the highest use of pesticides. In 2015, soybean, sugarcane (two of the major crops in Goiás) and corn used 82 percent of Brazil's chemical inputs consumption (Pignati WA et al, 2017, *Spatial distribution of pesticides use in Brazil: a strategy for health surveillance*).

[44] FAOSTATDATA, https://www.fao.org/faostat/en/#data/GT

[45] In Brazil, drinking water contamination by pesticides has increased from 75 percent to 92 percent between 2014 and 2017.

bio-inputs.[46] So far, it is estimated that bio-inputs use covers around seven percent of Goiás' agricultural land, principally in cotton and soy production, and represent less than two percent of the current inputs market.

Figure 14: Emissions from chemical fertilizers in Brazil (Mton CO_2eq)



Source: FAO STAT

63. **Prior action.** By enacting Law No. 21005 of May 14, 2021, the State of Goiás aims at enhancing the adoption of climate-friendly agricultural practices through the implementation of the state program on bio-inputs. The state law builds on the national program on bio-inputs, enacted by federal Decree N. 10.375 of May 26, 2020, which aims to, among others, (i) promote the elaboration of policies, programs and plans at State level to foster the use of bio-inputs; and (ii) set forth credit instruments and research to promote the development and use of bio-inputs. Building on the federal program, the state law creates an enabling environment in the State of Goiás for the transition to more climate-smart agriculture by: (i) providing a framework for the registration of bio-inputs; (ii) supporting local production of bio-inputs through partnerships with universities and research centers;[47] (iii) promoting the adoption of bio-inputs by family farmers through capacity building and training of stakeholders, communication campaigns; and (iv) promoting the integration of existing credit instruments with the program.[48]

64. **Expected results.** The prior action is fostering a paradigm shift in Goiás' agricultural practices, with stakeholders moving away from chemical inputs towards bio-inputs. This is expected to result in increased

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[46] Bio-inputs are considered to be any product, process or technology of plant, animal or microbial origin, intended for use in the production, storage and processing of agricultural products, as defined in the federal Decree N.10.375 of May 26,2020

[47] As the Incentive Program for Technological Innovation in Agriculture (INOVAGRO in Portuguese), or the Investment part of the National Program for Family Farming (PRONAF Investimento).

[48] Including the specific lines of credit that are part of the new program for Low-Carbon Agriculture ("*Agricultura de Baixo Carbono"* – ABC+).

adoption of climate-smart agriculture practices through higher use of bio-inputs by farmers, supported by local production of bio-inputs, increased capacities and financial incentives through lines of credit, resulting in a reduction of the environmental and carbon footprints of the sector. More specifically, over the first three years of implementation of the legislation, the planted area farmed with the use of bio-inputs is expected to increase by 10 percent per year on average. Several of the products, technologies and processes supported by the program will result in: (i) a reduced use of chemical fertilizer and pesticides, thereby reducing emissions linked to these products; (ii) reduced CO_2 and other GHG emissions (NO_2 mostly)[49]; and (iii) higher organic matter content in the soil, enhancing CO_2 sequestration potential[50] (see Box 3). Furthermore, the program is expected to foster the adoption by farmers and agricultural value-chain stakeholders of agricultural management practices that would allow them to strengthen their resilience to foreseen climate change.[51] For example, it is estimated that bio-inputs can help reduce 30 percent of losses due to La Niña climate event.[52] These technologies and practices can also result in higher yields (between 4.6 and 6.4 percent increase in soy yields with the use of *Bradyrhizobium inoculant*) and reduced production costs (25 to 30 percent decrease in soy production with the use of phosphorite).

Box 3: Examples of bio-inputs effects on GHG emissions

Microbial Nitrogen inoculant in soy production. *Bradyrhizobium* is a bacterium that helps plants assimilate nitrogen from the atmosphere as a nutrient for their growth. Studies have shown that with the application of *Bradyrhizobium* inoculant in soy production, inorganic nitrogen fertilizer is not needed, and yield can even increase up to 6.4 percent. The inoculant application also results in reduced Soil Organic Carbon CO_2 emissions (-18.3kg/ha/year) and reduced emissions of Nitrous Oxide (N_2O), leading to an estimated reduction of 45.6 kg CO_2eq/ton of soy[53].

Microbial phosphate inoculant in corn production. *Penicillium bilaiae* is a bacterium that enhances the assimilation by the plants of phosphate present in the soil, reducing the need for inorganic phosphorus

[49] In the first years of implementation of the Program, Goiás is targeting soy producers to foster the adoption of bio-inputs. As an example, assuming that *Bradyrhizobium* would be used on the area of about 100,000 ha expected to be reached by 2024, this would lead to a total reduction of GHG emissions of approximately 16,000 CO_2e tons per year by 2024.

[50] http://www.fao.org/global-soil-partnership/en/

[51] Some bio-inputs supported by the Program can help foster the development of the plant and its roots, increasing its resistance to adversary climate effects such as droughts. Improved agricultural practices supported by the Program such as planting under cover crops or agro-forestry, help reducing the risk of land erosion due to heavy rainfall or floods. In the face of increased pests and diseases outbreaks linked to climate change, the Bio-inputs Program will also facilitate access to biological control agents for farmers, strengthening their resilience.

[52] *https://www.canalrural.com.br/programas/informacao/rural-noticias/bioinsumos-podem-reduzir-em-30-perdas-com-o-la-nina-nas-lavouras/*

[53] Source: Mendoza Beltran, A., Scheel, C.N., Fitton, N. et al. Assessing life cycle environmental impacts of inoculating soybeans in Argentina with *Bradyrhizobium japonicum*. Int J Life Cycle Assess 26, 1570–1585 (2021). https://doi.org/10.1007/s11367-021-01929-7

fertilizer and that can lead to yield increase of up to 4 percent. It has been estimated that the use of this inoculant leads to a reduction of CO_2 emissions in corn production of -36kgCO_2/tons of corn[54].

Biochar, carbonized vegetable waste obtained through pyrolysis, is seen as a promising approach of lowering the levels of CO_2 in the atmosphere. Applications of biochar in different regions (and soils) across Brazil have shown an increased level of organic carbon in soils and increased water availability for plants[55].

Prior Action #6: *The Borrower has issued a decree to reduce compensation fees for environmental licenses to carbon-neutral farms and firms, as evidenced by Decree No. 9,821, dated March 1, 2021, published on the Borrower's official gazette on March 2, 2021.*

65. **Rationale.** Environmental licensing is a core instrument to ensure sustainability when reconciling economic development with the use of natural resources. It is an important tool for supporting businesses in measuring their environmental impacts and adopting approaches consistent with sustainability and climate mitigation goals. A sound environmental licensing system is critical for mitigating climate risks. This is particularly true for the State of Goiás given the importance of its agricultural sector and the contribution of the sectors unsustainable practices, such as deforestation and land degradation, for Brazil's Carbon footprint. The State of Goiás has recognized that its environmental licensing framework had significant weaknesses and began to update it as a part of its sustainability agenda. The first steps were to modernize the inefficient and cumbersome paper-based licensing processes which, coupled with weak institutional capacity, caused significant bottlenecks.[56] In 2019, Goiás adopted the new "IPÊ" Environmental Licensing System.[57] This new framework streamlined the processing of license applications, including by digitizing procedures and requiring that licenses be issued within 180 days. With the expedited processing, firms and farms are less likely to maintain illegal behaviors for years, which decreases the adverse environmental impacts, including GHG emissions due to reduction of deforestation

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[54] Source: Kløverpris, J.H., Scheel, C.N., Schmidt, J. et al. Assessing life cycle impacts from changes in agricultural practices of crop production. Int J Life Cycle Assess 25, 1991–2007 (2020). https://doi.org/10.1007/s11367-020-01767-z

[55] Source: Brazil Ministry of Agriculture, Livestock and Food Supply (2021), Adapting to climate change: Strategies for Brazilian agricultural and livestock systems

[56] Under the previous licensing system, processing times ranged upwards of 474 days and, in some instances, extended out to seven years, resulting in numerous enterprises proceeding without formal oversight of their environmental impact and Carbon footprint. By 2021, Goiás had over 6,000 unlicensed activities pending approval through the original system.

[57] In 2019, Goiás adopted Law 20.694/2019 that replaced previous environmental licensing laws to establish the new IPÊ System. This system includes an integrated environmental portal linking all computerized systems, transparency tools, access to services and data related to the State's environmental management procedures to provide for greater participation and easier access for businesses to environmental control agencies. In 2020, Goiás established the Extraordinary Environmental Licensing Regime (REL) as a measure to cope with the extreme economic downturn in the State caused by COVID-19 (Law 20.773/2020). The REL allowed for expedited processing of environmental licenses under the IPÊ system and was extended to December 31, 2022.

and environmental degradation on those plots of land that were not previously licensed. In the next steps of the process, the State will sharpen the climate focus of its environmental licensing framework by creating incentives for enterprises to become carbon-neutral.

66. **Prior Action.** To provide incentives for economic actors to reduce their carbon footprint, the State of Goiás adopted regulations (Decree 9,821/2021) that afford enterprises with carbon-neutral activities (including those that neutralize emissions)[58] a 15 percent reduction in environmental compensation fees. While the discount granted under this PA was introduced as part of the simplified environmental licensing regime adopted in response to the COVID-19 pandemic and due to expire by 2023, the Borrower has committed to continue the effects of this measure through equivalent legislative measures to regulate its ordinary environmental licensing regime instituted by the aforementioned State Law 20.694/2019. The regulations also establish the methodology for measuring the extent of environmental impact of an activity for which environmental compensation is required, either through direct compensation payments and/or remedial actions such as the rehabilitation or remediation of environmental damages. Together, these measures leverage the new IPÊ Environmental Licensing System, which improves the processing of licensing applications and supports the sustainability goals of the State.

67. **Expected Results.** This reform, as part of Goiás' broader overhaul of environmental licensing systems, will offer a clear incentive for carbon neutral activity by the State's economic actors, thus reducing GHG emissions and the State's overall carbon footprint. The environmental licensing reforms are also expected to improve the business environment of the State. The sectors benefiting most from this incentive through the new and streamlined licensing process are expected to be agriculture, including livestock, forestry and irrigation, small and medium businesses that generate minor to moderate adverse environmental impacts, transmission lines, sanitary landfills, manufacturing (textiles, paints, food products), and small, medium and large-scale industry (tires, pharmaceuticals, farm equipment). As a result of the incentive, it is expected that firms and farms will increase the use of carbon-neutral activities resulting in the increase of compensation agreements that qualify for such a discount, up to 20 percent of all agreement by 2023. The State will continue to provide economic and/or administrative incentives to carbon-neutral activities by extending similar provisions through its regular environmental licensing system.[59]

Prior Action #7. *The Borrower has approved regulation establishing criteria to facilitate the access to regularized land tenure for small-scale farmers, which strengthen the inclusiveness, environmental protection, and gender balance of its land regularization program, as evidenced by Portaria SEAPA No. 153/2022, dated March 21, 2022, as published on the Borrower's official gazette on March 22, 2022*

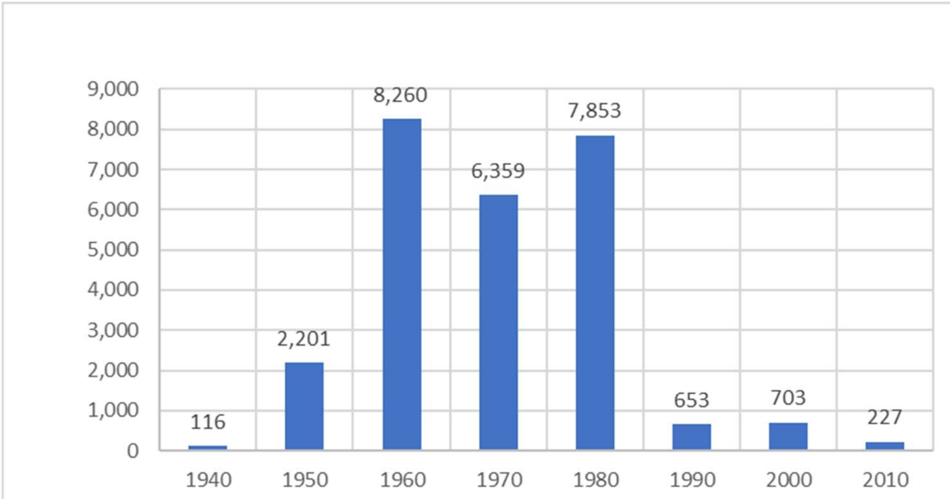
[58] Activities will be classified as carbon neutral based on the technology used such as replacement of high-carbon inputs/equipment/material with low-carbon ones, increased carbon sequestration, etc.

59 For instance, the procedure to obtain an environmental license already reflects an increased priority scoring for establishments that reduce pollution and minimize environmental impact (as defined in the *Instrução Normativa* 19/2021 of July 1, 2021 of the State Secretariat of Environment and Sustainable Development).

68. **Rationale.** In Goiás, as in most States in Brazil, thousands of farmers have historically accessed State land through informal channels, given inadequate access to formal land rights essential for social inclusion and economic development. Undesignated public lands have recently[60] become the main areas of deforestation in Brazil. In this context, the State has a leading role in the formalization of the land rights of these families, and land tenure regularization programs have historically been an essential element of the State's social and economic development strategy and have proven an effective instrument in preventing deforestation, therefore contributing to climate change mitigation. From the 1940s through the 1990s, the State of Goiás issued over 25,000 titles to occupants of state land. However, state land tenure regularization efforts have stalled in recent years, with just about 1,000 land titles issued over the last two decades. Land tenure regularization has recently resurfaced as a development priority for the State. With the adoption of State Law 18.826 in 2015, the state has regulated access to formal land rights and defined the process through which the State identifies, demarcates, and registers State land and transfers these areas to their occupants. Since the adoption of that law, Goiás demarcated over 500,000 hectares of State land. However, the formalization of rights claimed over these demarcated areas has continued to stall, mainly because small-scale farmers cannot afford the cost of regularization. The law provides for a discount of up to 70 percent of the land cost for eligible small-scale farmers who nonetheless must pay for all the procedural and material costs of the regularization. These include the preparation of the georeferenced map of the lots and the cost of recording their rights in the land registry. Smallholder farmers in the Northern region of the State – the State's poorest region – are particularly affected by the high costs of this process. SEAPA identified thousands of small-scale farmers and several *Quilombola* Communities informally occupying State land and eligible for land regularization. Land tenure informality has significant socioeconomic implications for small-scale farmers, as it exposes them to unfair dispossession, makes their access to credit more difficult, and discourages them from investing in more sustainable and productive agricultural practices, or in climate-mitigation activities like protecting natural forest and planting new trees, or securing their landholding from climate-induced events such as floods and droughts. Women are particularly vulnerable since lack of documentation means that they are not fully protected in the event of conflict, separation, or death. Stronger women's rights to land and productive assets are linked to enhanced status, improved living conditions, better nutrition and food sovereignty, improved health and education outcomes, higher earning and individual savings, and better access to credit, as well as better protection from gender violence.[61] Secure land tenure is a central element in the fight against climate change, both in terms of adaptation and mitigation. Secure tenure increases the landholder willingness to invest and protect their land, including by protecting native vegetation and planting new trees, therefore reducing deforestation and increasing carbon sequestration. This in turn reduces the impact of climate-induced events by reducing water run-off and increasing water retention in the soil.

[60] In the Amazon, deforestation on undesignated land grew by 50 percent between 2019 and 2020, representing the largest category of deforested land, or about one third of all areas.
[61] OHCHR (2017) https://www.ohchr.org/Documents/Issues/Women/WG/Womenslandright.pdf

Figure 15: Number of Land Titles issued by the State of Goiás since the 1940s, by decade



69. **Prior Action.** To make land tenure regularization more inclusive, reduce deforestation, and encourage the adoption of sustainable and climate-smart land use practices, the State of Goiás has established a Land Tenure Regularization Program for small-scale farmers (as evidenced by Portaria SEAPA 153/2022). Under this program, the State of Goiás will formalize land tenure at virtually no cost[62] for small-scale farmers who peacefully possess and effectively use up to 100 hectares of State land. The Land Tenure Regularization Program will also foster environmental protection and climate change mitigation by ensuring that the areas transferred are (brought) in compliance with the Brazilian Forest Code[63] by covering the beneficiaries' cost and administrative steps needed to register the area in the rural environmental cadaster (*Cadastro Ambiental Rural* - CAR), demarcating protected areas and legal reserves and other environmental sensitive areas prior to the issuance of each land title, and making the participation in the program contingent on committing to comply with the Forest Code. The Prior Action will require that land titles be issued preferably under the name of women, independently from their civil status, therefore contributing to the 2020-2023 State Pluriannual Plan's objective to prioritize the regularization of properties in the name of women.

70. **Expected results.** The land tenure regularization program is initially expected to benefit 1,000 families,[64] in the Northern and Eastern Mesoregions of Goiás, for a total area of about 24,000 hectares.

[62] Beneficiaries will be eligible for a discount of up to 99 percent of the costs of registration.

[63] Brazil's Native Vegetation Protection Law (12651/2012), known as the Brazilian Forest Code, is an internationally recognized good practice in terms of regulating conservation, including through mandating minimum conservation standards for private rural landholdings. The Forest Code sets guidelines for the Rural Environmental Cadaster (CAR—*Cadastro Ambiental* Rural)[38] requiring each landholder in the Cerrado biome to maintain at least 20 percent of their landholding under native vegetation.

[64] This figure includes families on land regularized either with an individual or a collective land title.

By strengthening the implementation of the Brazilian forest code and related environmental and climate change requirements, the PA will also ensure that almost 5,000 ha of land would gain formal protection under the Brazilian Forest Code, with preservation or restoration of native vegetation, therefore contributing to reducing deforestation in the Cerrado, reduce GHG emissions and increase carbon sequestration.[65] The expansion of the program to the rest of the State would progressively bring land tenure security to an area twenty times larger, with corresponding increase in the area under environmental protection, which would further contribute to climate change mitigation. Secure land tenure will also foster investments by the beneficiaries into sustainable, climate-smart and more productive agricultural practices (including protection of native vegetation and planting of trees) as they will have easier access to credit, training and agricultural extension, which could further reduce the pressure on native vegetation. The prior action is also expected to reduce the gender gap in land titling, passing from 34 percent to at least 50 percent of land titles issued in the name of women as sole or joint owners. SEAPA will start tracking the number of land titles issued under the name of women, which will allow the State to better monitor the program's impact in terms of gender equality.

Table 7: DPF Prior Actions and Analytical Underpinnings

Prior Actions	**Analytical Underpinnings**
Pillar 1: Supporting the State of Goiás in improving fiscal sustainability	
PA#1: Fiscal Rule	• Brazil SCD (report no. 101431) and Brazil Public Expenditure Review (P154992). *This PA has benefited greatly from the Brazil Public Expenditure Review, in particular the sections on fiscal sustainability, public sector wage bill, and pensions.* • Technical assistance by Bank team on in-depth fiscal modeling as part of Brazil Subnational Fiscal Modeling ASA (P172861). *Fiscal modeling that simulated the impact of the proposed reform in the State.*
PA# 2: Pensions	• Brazil Public Expenditure Review (P154992). *This PA has benefited greatly from the Brazil Public Expenditure Review, in particular the sections on pensions.* • Wage Bill & Public Workforce Reform in Brazil (P166281). *The PA has benefited greatly from the detailed analysis of the wage bill at the federal and subnational level in Brazil, and the impact of different administrative reforms because administrative reforms which impacts the wage bill policy have a great impact at pensions spending as well.* • Technical assistance by Bank team on in-depth fiscal modeling as part of Brazil Subnational Fiscal Modeling ASA (P172861). *Fiscal modeling that simulated the impact of the proposed reform in the*

[65] The area initially brought under protection under the PA represents 7 percent of the area of Cerrado currently deforested each year in Goiás, and a corresponding share of GHG emissions from land use change and forestry or about one million CO2e tons per year.

	State.
PA#3: Medium-term fiscal adjustment plan	• Brazil Public Expenditure Review (P154992). *This PA has benefited greatly from the Brazil Public Expenditure Review, in particular the sections on public sector wage bill.* • Wage Bill & Public Workforce Reform in Brazil (P166281). *This PA has benefited greatly from the detailed analysis of the wage bill at the federal and subnational level in Brazil, and the impact of different administrative reforms.* • Technical assistance by Bank team on in-depth fiscal modeling as part of Brazil Subnational Fiscal Modeling ASA (P172861). *Fiscal modeling that simulated the impact of the proposed reform in the State.*
Pillar 2: *Supporting the State of Goiás in adopting climate-smart, resilient and inclusive policies for its agricultural sector*	
PA#4: Climate Change Mitigation and Adaptation State Plan	• Rattis, L., Brando, P.M., Macedo, M.N. *et al.* Climatic limit for agriculture in Brazil. *Nat. Clim. Chang.* 11**,** 1098–1104 (2021). *https://doi.org/10.1038/s41558-021-01214-3* *Brazil's soybean and maize production depends on predictable rainfall in the Amazon-Cerrado agricultural frontier. Recent regional warming and drying already have pushed 28% of current agricultural lands out of their optimum climate space. We project that 51% of the region's agriculture will move out of that climate space by 2030 and 74% by 2060. Although agronomic adaptation strategies may relieve some of these impacts, maintaining native vegetation is a critical part of the solution for stabilizing the regional climate.*
PA#5: Climate-smart agriculture	• World Bank Group (2017). Agriculture productivity growth in Brazil. Recent trends and future prospects. About 68 *percent of agricultural growth in Brazil in the past two decades is explained by the adoption of technologies. TFP of small farmers in the Center West of the country has lagged because of several constraints (e.g., lack of access to credit, limited knowledge, reduced incentives) which have prevented them from adopting improved production technologies at the same rate as bigger farms.* • Brazil, Ministry of Agriculture, Livestock and Food Supply (2021), Adapting to climate change: Strategies for Brazilian agricultural and livestock systems, Eleneide Doff Sotta, Fernanda Garcia Sampaio, Kátia Marzall, William Goulart da Silva (publishers) • FAO (2021). FAOSTAT Analytical brief 18. Emissions due to agriculture 2000-2018 *Synthetic fertilizers account for 13% of non_CO_2 emissions in the agricultural sector in 2018* FAO (2021), Recarbonizing global soils. A technical manual of recommended management practices Mendoza Beltran, A., Scheel, C.N., Fitton, N. *et al.* (2021) Assessing life cycle environmental impacts of inoculating soybeans in Argentina with *Bradyrhizobium japonicum*. *Int J Life Cycle Assess* 26**,** 1570–1585. *The application of Bradyrhizobium inoculant in soy production can lead to a yield increase of up to 6.4 percent and a reduction of CO_2eq of 45.6 kg CO_2eq/ton of soy.*
PA#6: Environmental	• AL Assessoria em Gestão, Política e Legislação Socioambiental and Flexus Consultoria em Biodiversidade e Sustentabilidade (2020). Floresta e Agricultura Identificação da demanda por

Licensing System	restauração nativa proveniente de mecanismos legais para além da Lei de Proteção da Vegetação Nativa, 2020, Partnership for Forests (P4F) e Coalizão Brasil, Clima, Produto C – Relatório nº http://www.coalizaobr.com.br/boletins/pdf/Demanda_Firme_Estudo_integra_VF.pdf • Chiavari, Joana; Cristina L. Lopes; Julia N. de Araujo. Onde Estamos na Implementação do Código Florestal? Radiografia do CAR e do PRA nos Estados Brasileiros. Rio de Janeiro: Climate Policy Initiative, 2020. • Damasco, Gabriel & Gouveia Fontes, Clarissa & Françoso, Renata & Haidar, Ricardo. (2018). The Cerrado Biome: A Forgotten Biodiversity Hotspot. Frontiers for Young Minds. 6. 10.3389/frym.2018.00022. • Pivello, V.R. The Use of Fire in the Cerrado and Amazonian Rainforests of Brazil: Past and Present. fire ecol 7, 24 39 (2011). https://doi.org/10.4996/fireecology.0701024. • Sampaio, A. B., Vieira, D. L. M., Cordeiro, A. O. O., Aquino, F. G., Sousa, A. P., de Albuquerque, L. B., de Sousa, F. S. (2015). Guia de restauração do Cerrado: volume 1: semeadura direta. Embrapa Cerrados-Livros técnicos. • Strassburg, B., Brooks, T., Feltran-Barbieri, R. et al. Moment of truth for the Cerrado hotspot. Nat Ecol Evol 1, 0099 (2017). https://doi.org/10.1038/s41559-017-0099. • Vieira RRS, Ribeiro BR, Resende FM, et al. Compliance to Brazil's Forest Code will not protect biodiversity and ecosystem services. Divers Distrib. 2018; 24:434–438. https://doi.org/10.1111/ddi.12700.
PA#7: Smallholder land tenure	• World Bank. 2011. Brazil Low Carbon Case Study : Land Use, Land-Use Change, and Forestry. Washington, DC. World Bank. https://openknowledge.worldbank.org/handle/10986/12968 License: CC BY 3.0 IGO. • World Bank (2014). Avaliação da Governança Fundiária no Brasil; report 88751- BR.

4.3. LINK TO CPF, OTHER BANK OPERATIONS AND THE WBG STRATEGY

71. **The proposed DPF is fully aligned with the World Bank Group's Country Partnership Framework (CPF) for the period FY2018–23.**[66] The World Bank Group FY18-23 CPF for Brazil (Report no. 113259-BR, discussed by the Board of Executive Directors on July 13, 2017) was prepared against the backdrop of the deep 2014–16 economic recession that led to a fiscal crisis and increased unemployment and poverty levels. The main premise of the CPF was the need to revisit the country's growth model to improve its sustainability and inclusiveness. The CPF is built on three pillars: (i) fiscal consolidation and government effectiveness; (ii) private sector investment and productivity; and (iii) equitable and sustainable development. The operation is fully aligned with CPF objectives 1.1 (Strengthening Fiscal Management) and 1.2 (Increasing Fiscal Sustainability) under CPF Pillar 1, which supports an incentive mechanism for subnational borrowers to address their structural fiscal challenges early on, thus reducing the risk of their finances becoming unsustainable. The operation is also aligned to CPF objectives 3.1 (Supporting the

[66] The CPF was endorsed by the World Bank's Board of Executive Directors on July 13, 2017 (Report no. 113259-BR).

Achievement of Brazil's NDC with a Particular Focus on Land Use) and 3.3 (Promoting Socioeconomic Development of Small Rural Producers and Protecting Vulnerable Groups) under CPF Pillar 3, by focusing particularly on land-use planning, deforestation, environmental compliance, and payment for environmental services in a State that is critical to Brazil's climate mitigation commitments. This pillar is also consistent with the WBG Climate Change Action Plan 2021-2025[67] and 2050 targets to step up climate action so as to support countries in delivering and exceeding their Paris commitments.

72. **In line with the CPF, this proposed operation is part of a series of subnational DPFs to support fiscal adjustment and sustainable low-carbon and climate-resilient development in subnational entities**. The proposed operation is the third under this framework, following the Mato Grosso Fiscal Adjustment DPF (P164588) and the First Amazonas Fiscal and Environmental Sustainability Programmatic DPF (P172455). The Mato Grosso DPF aimed to support the State to implement of institutional reforms for fiscal sustainability; and consolidate efforts to protect forest assets while promoting agricultural productivity in line with the State's development strategy. The Amazonas DPF supported fiscal discipline, climate-informed decision making, and an integrated approach to forest conservation and development to help the State improve its recovery after COVID-19 and protect the Amazon forest.

4.4. CONSULTATIONS AND COLLABORATION WITH DEVELOPMENT PARTNERS

73. **Public consultations on proposed reforms in Goiás took place both during the development of the policies, and while they were being reviewed by the State Legislative Assembly.** In the case of State laws, these consultations follow the procedures laid out in the State Constitution and other rules governing legislative procedures. The consultation process increases the legitimacy of policies, while allowing authorities to benefit from advice and technical knowledge. The State government of Goiás confirmed that the program supported by this DPF operation is based on a broad consultation process with a variety of stakeholders.

74. **The World Bank collaborated with the Federal Treasury in the design of the Pillar I.** On the fiscal adjustment component of the operation, the World Bank team worked in close partnership with the Federal Treasury (*Secretaria do Tesouro Nacional*, STN), which is the federal government's agency responsible for supervising the fiscal affairs of subnational governments. Representatives of the STN and the World Bank team discussed the development of the program under Pillar I, the modeling of its fiscal impact and the relevance of the State's adherence to the FRR in the promotion of Goiás fiscal consolidation. For Pillar II, the World Bank team consulted with the IFC on the program of measures for the agricultural sector.

[67] https://openknowledge.worldbank.org/handle/10986/35799

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1. POVERTY AND SOCIAL IMPACT

75. **The policy measures supported under the first pillar are not expected to have direct poverty or social impacts, and positive indirect effects on equity**. The pillar comprises three prior actions aimed at containing public spending by implementing a spending cap rule (PA#1), consolidating spending on civil service pensions (PA#2) and adopting a medium-term fiscal adjustment plan (PA#3). The reforms supported by this DPF are estimated to yield US$ 4.4 billion in savings by 2025. As shown in Table 5, around 82 percent of this fiscal adjustment comes from savings in: (i) public sector wages and pensions; (ii) revenue increases; and (iii) financial costs savings as opposed to cuts to key services and infrastructure. This adjustment is not expected to significantly impact social spending since Brazil's budget includes constitutionally mandated spending envelopes for key services such as health and education that largely protect service delivery from a strong fiscal adjustment. These reforms are expected to support a potential increase in public investment from 2.5 percent of net current revenues in 2020 to 9.0 percent by 2023. In addition, the fiscal recovery of the State is expected to ensure more fiscal space to provide basic public services (mainly, health and education) on which most disadvantaged and vulnerable social groups rely on. In Goiás, about 94 percent of children in poor households attend public schools, compared to 64 percent among the non-poor.[65] Meanwhile, nine out of ten rural households in the bottom 40 percent of the distribution use the public health system when get sick, as do over 84 percent of their urban counterparts. In turn, less than 10 percent of the bottom 40 percent has access to health insurance.[68] The State spent 25.1 percent of the state budget in 2020 on education and 12.7 percent on health. These levels are above the constitutional minimum requirements and cannot be reduced to meet the state fiscal recovery targets, such that any expenditure adjustment should focus on other recurrent expenditures. However, there is a risk that less generous renumeration and retirement provisions may hamper the capacity of the State to attract and retain well qualified and talented professionals, reducing its capacity to deliver high quality public services to the poor.[66] These impacts are expected to be small and to be counteracted by the positive impacts from creating fiscal space for more social and economic investments.

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[68] It is worth mentioning that there are 956,916 families registered in CadÚnico (the official register for accessing social protection programs in Brazil) and 314,759 families enrolled and benefiting from the flagship cash transfer Bolsa Família Program (PBF) in the state of Goiás. PBF benefits people below poverty and extreme poverty lines that are lower than the World Bank's lines (US$ 1.90 and US$ 5.50 per capita income per day, which corresponded to monthly per capita incomes equal to R$ 155.00 and R$ 450.00, respectively). PBF beneficiaries include disadvantaged and vulnerable social groups such as quilombolas (4,370 families), Indigenous Peoples (164 families), traditional communities (299 families), land reform settlers (7,457 families), landless rural workers (2,134 families), homeless population (1,536 families) and recyclable materials pickers (3,735 families). [Source: Ministério da Cidadania, Relatório de Informações Sociais, retrieved from *https://aplicacoes.mds.gov.br/sagi/RIv3/geral/relatorio.php#Vis%C3%A3o%20Geral*].

76. **A rationalization of the public spending to meet the fiscal program requirements is also expected to incentivize the enhancement of the volume and quality of public services by using current resources more efficiently.** Brazil's public spending is out of line with international comparison, inefficient in many areas, and, in addition to this, overall fails to reduce the very high level of inequality of wealth and income.[69] Like many other states in Brazil recently, Goiás is facing a fiscal sustainability crisis due to a long-standing structural trend of increasing current expenditures. Given their large size in the state budget, the reform of the public pension system and the rationalization of the public sector wage will be critical to contain spending pressures and restore long-term fiscal sustainability. Eliminating inefficiencies will create additional space to face future spending pressures and generate resources that can be reallocated to programs which have shown positive social and poverty impacts. Notably, in priority areas such as health and education, spending inefficiencies imply that the same or even better results could be achieved with fewer resources.

77. **Fiscal consolidation reforms will have a moderate impact on the incomes of civil servants and pensioners.** Goiás' pension reform is expected to have an impact on the incomes of civil service retirees through the taxation of pension benefit amounts that surpass the minimum wage. In addition, efforts to contain recurrent spending may constrain the growth of civil service pay and benefits over time. These impacts are mitigated by the economic status of State civil servants who, in 2019, comprised 11 percent of the labor force in the Goiás, but only 1.8 percent of the working poor and among workers in the bottom decile, making these reforms progressive. More specifically in relation to the pension reform, the increased retirement age reduces the risk that retired civil servant pension will decline substantially relative to the average income of active civil servants as they get older. This is because over long time periods, wages of civil servants are expected to grow above the rate of inflation, while retired civil servant income is inflation indexed for those who entered service after 2003 and those who will choose to retire early. This risk is greater for women, who retire earlier and tend to live longer, so the greater increase in retirement age for women narrows this gender gap. Lastly, despite potential aversion to these reforms amongst those impacted, broader social impacts are expected to be minimum and the main representative union of Goiás' public servants (SINDIPUBLICO) has expressed support to the reform of the pension system reform, only questioning the deduction of social security contributions above the minimum wage for retirees and pensioners.[70]

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[69] For a discussion about the inefficiencies of the public spending in Brazil, see the Brazil Public Expenditure Review Report "A Fair Adjustment", available in *https://www.worldbank.org/pt/country/brazil/publication/brazil-expenditure-review-report*.
[70] The opinions of SINDIPUBLICO on the pension system reform have been manifested in some posts dated from 2019 to 2020, available on its website: https://sindipublico.org.br/2020/03/reuniao-para-debater-sobre-a-contribuicao-previdenciaria-e-novas-regras-de-aposentadoria/; https://sindipublico.org.br/2019/10/conselho-fiscal-da-previdencia-estadual-se-reune-na-goiasprev/; https://sindipublico.org.br/2020/10/presidente-do-sindipublico-e-da-goiasprev-dialogam-sobre-previdencia-complementar-e-o-beneficio-especial/; https://sindipublico.org.br/2020/08/sindipublico-recorre-da-decisao-que-negou-

78. **The policy changes supported under the second pillar are expected to have positive direct poverty and social impacts among certain subgroups of the rural population.** The adoption of a legal framework on climate change mitigation and adaptation in agriculture is expected to have positive effects on rural and agricultural incomes. It is also expected to have an indirect positive impact on the state's economy by contributing to increase the sustainability of the main economic sector and mitigate the impact of climate change. The adoption of the State Plan for Climate Change Mitigation and Adaptation and Sustainability in Agriculture (PA#4) could entail the implementation of payment for environmental services (PES) programs. While the evidence on the effects of PES on incomes is mixed,[71] the targeting and amounts of the PES implemented could potentially decrease poverty among recipients, as well as benefit them through a stable source of income. The use of bio-inputs in the agriculture sector (PA#5) is expected to have positive effects on rural incomes. Data from the Federation of Agriculture of Goiás (FAEG) shows that the cost of inorganic inputs is 114 percent higher than the cost of bio-inputs. It has also been estimated that the use of bio-inputs does not negatively affect yields, thus making the shift to bio-inputs a potential increase in net revenues for farmers. The increased use of bio-inputs could also promote the competitiveness and resilience of the agriculture sector, indirectly having a positive contribution socially and economically for rural households. It may also open new job opportunities in rural areas, as the use of bio-inputs is more labor intensive. Furthermore, contributing to reduce the use of chemical fertilizers and pesticides that are major pollutants of soils and water and can have a negative impact on biodiversity, the increased use of bio-inputs may contribute to reduce adverse impacts on the livelihoods of traditional communities that are largely based on the sustainable exploitation of natural resources. Notably, the proper adoption of bio-inputs requires knowledge, training, adequate infrastructure and strict quality control of the final product. Support to farmers during the implementation will be key for the positive impacts to materialize. Faster environmental licensing processes are expected to expand the number of legally operating businesses in the State with positive effects on job and income generation. The exemption from paying the environmental compensation fees is expected to have positive distributional effects benefiting the earnings and livelihoods of low-income families in both urban and rural areas of the state.

79. **Finally, the rural land regularization program (PA#7) is expected to yield direct and pro-poor distributive impacts.** Land is a particularly important asset for the rural poor as it is their primary means for generating a livelihood, for investing and accumulating wealth, and for transferring it between

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pedido-de-suspensao-do-desconto-da-contribuicao-previdenciaria-sobre-o-salario-minimo/ and https://sindipublico.org.br/2020/12/tribunal-de-justica-nega-recurso-do-sindicato-e-mantem-desconto-da-previdencia-de-aposentados-e-pensionistas/. Meanwhile the representative union of the civil servants of the education sector has been more resistant to the taxation of retirees and pensioners, as can be observed on the following posts: http://sintego.org.br/noticia/5857-mesmo-com-pedido-dos; http://sintego.org.br/noticia/5932-acao-do-sintego-contra-a-goiasprev-deve-ser-julgada-no-dia-08; http://sintego.org.br/noticia/5944-esclarecimento-sobre-a-acao-do-sintego-contra-a-goiasprev.

[71] See GIZ BNDES (2018) and INESC (2018) *http://amazonia.inesc.org.br/destaque/fim-do-bolsa-verde-deixa-mais-de-50-mil-pessoas-em-situacao-de-extrema-pobreza-desamparadas/* [accessed 2/2/2022]

generations. The economic literature has identified that securing land rights has a positive impact on economic activity and can improve the welfare of the poor through a number of channels, including: improved land market condition and property values, better access to credit, reduced land conflict and degradation, and women's empowerment. With secure land tenure rights, farmers and traditional communities will get access to public policies implemented by the State of Goiás and other entities of the Federation for access to rural credit, infrastructure and services (including electricity, digital communication technologies, rural extension and technical assistance). The expected positive impacts of this reform are amplified by its focus on the poorest areas of Goiás. The reform focuses on five municipalities in the Northern and Northeastern portion of the State, which are characterized by poor sociodemographic indicators and low economic dynamism.[72] However, to reach its full potential, the rural land regularization program must be coupled with investments for more profitable and sustainable value chains and improved access to public services.

80. **The rural land regularization program is also expected to foster gender equity**. As land registration will preferably favor women, it may contribute to overcoming barriers historically faced by women with regards to land ownership and farm management. Land ownership is largely imbalanced by gender. Only 14.2 percent of the farms in the State of Goiás are owned and managed by women.[73] In the five municipalities prioritized by the program, women owners or co-owners are found in just 19 percent of all farms and 22 percent of the family farms, even though they account for 33 percent of the work force among all farmers and 38 percent in the family farmers.

5.2. CLIMATE, ENVIRONMENT, FORESTS, AND OTHER NATURAL RESOURCE ASPECTS

81. **The prior actions included in the DPF are likely to result in positive effects on climate change mitigation/adaptation and the environment, including natural habitats, biodiversity and quality of natural resources.** The prior actions under the first pillar have low potential for negative effects on the environment but a certain degree of risk cannot be totally discarded, because of the already weakened capacity of the State to manage natural resources, enforce the environmental regulatory framework,

[72] According to the 2010 population census, these areas have high rates of social vulnerability; the lowest rates of employment among the economically active population and job formalization; the highest percentage of those employed in the agricultural sector; precarious conditions of housing, sanitation and access to infrastructure; the State's highest rates of illiteracy, NEET youth, early pregnancy and child mortality and the lowest life expectancy at birth. Source: Macedo, M. and Lima, A.F.R.: 2018. A Vulnerabilidade Social nos Municípios Goianos. Instituto Mauro Borges de Estatísticas e Estudos Socioeconômicos/Secretaria de Estado de Gestão e Planejamento, accessed on November 1st, 2021.

[73] Women own 15.9 percent of family farms and 11.6 percent of the commercial farms.

investment in protected areas[74] and fire brigades[75] which already suffer from staff reductions and investment limitations. It is strongly recommended that the fiscal adjustment does not affect investments in enforcement, conservation units, and firefighting.

82. **Under the second pillar, significant positive environmental impacts are expected**. The adoption of a state plan on climate change adaptation and mitigation in the agricultural sector (PA#4) will stimulate a sustainable agriculture. The implementation of the plan is expected to reduce carbon emissions from the agriculture sector (the main contributor for GHG emissions in the state) and contribute to the recuperation of degraded soils and water security, averting the increasing pressure of climate change. Low carbon/climate-smart agriculture may also allow for increased agricultural productivity and efficiency in food production.[76] The implementation of the plan will stimulate the recovery of degraded pastures, direct planting systems, integration systems, planted forests, irrigated systems, the use of bio-inputs, the management of production waste and the fostering of intensive cattle raising reducing pressures on areas still covered by native vegetation. The costs associated with these low carbon/climate smart technologies and practices are lower than initially foreseen and fully compensated by productivity gains and increased access to markets with growing requirements with regards to sustainable production. However, to achieve the objectives, the state government's technical teams need to be adequately trained and able to raise awareness among rural producers.

83. **The bio-inputs Law (PA#5) is expected to have a positive climate and environmental impact.** A major expected benefit of this prior action is the reduction of emissions associated with the use of inorganic inputs in agricultural production. The emissions of the agricultural sector include methane emissions (CH_4), nitrous oxide (N_2O) and indirect GHG generation. Agricultural practices that favor carbon sequestration so that the soil becomes a GHG drain, such as the mechanized harvest of sugarcane, without burning plant residues, accumulate carbon in the soil and mitigate the generation of associated GHGs.[77] The use of nitrogen-fixing species can increase the uptake of nitrogen fertilizer in the soil, providing cost savings and lower GHG emissions. Emissions are due to the process of nitrification and denitrification by increasing the amount of Nitrogen (N) in the soil, which results in direct and indirect

[74] Goiás has 23 conservation units, 13 of which belong to the full protection group (12 parks and 1 ecological station) and 10 to the sustainable use group (08 environmental protection areas, 1 State forest and 1 area of relevant ecological interest). https://www.meioambiente.go.gov.br/meio-ambiente-e-recursos-h%C3%ADdricos/parques-e-unidades-de-conserva%C3%A7%C3%A3o.html

[75] The State Secretariat for Environment and Sustainable Development of Goiás (SEMAD), released weekly bulletins on fires. The latest Bulletin available is from June 2020 *https://www.meioambiente.go.gov.br/meio-ambiente-e-recursos-h%C3%ADdricos/boletim-sobre-queimadas.html*. Goiás had 4,954 fires detected by satellite from January to August 2021. Compared to the same time interval in the last 23 years, the State recorded the seventh worst year for fires. The record of fires in Goiás, in this period, was above the national average (4,863). https://www.jornalopcao.com.br/ultimas-noticias/Goiás-tem-quase-5-mil-focos-de-incendio-detectados-em-2021-353933/

[76] World Bank, 2021: Climate-Smart Agriculture. Cf. https://www.worldbank.org/en/topic/climate-smart-agriculture

[77] Portela, M. G. T., Leite, L. F. C. 2016. GHG emissions from agriculture: the case of sugarcane crops. Revista Brasileira de Climatologia. Ano 12 - Vol. 18.

emissions of N_2O[78]. The use of nitrogen fertilizers depending on the dose applied can also increase the emissions of NO_2 exponentially.[79] In Brazil about 70 percent of nitrogen fertilizer used is imported, implying an associated carbon footprint. Therefore, the correct use and the fixation of Nitrogen in the soil by biological process[80] are key points in the mitigation of emissions.

84. **PA#6 (environmental licensing) is not expected to have negative environmental impacts**. However, it is necessary to pay attention to the technical capacity and the monitoring of the activities that gain the incentive of the discount on the environmental compensation fees for the classification of neutral GHG emissions. The decree supported by PA#6 holds provisions that reduce the risk of softening the environmental licensing process. Thus, after the extraordinary license is granted, the entrepreneur has up to six months to make a term of commitment for environmental compensation. The discount is granted for activities classified as CO2 neutral emission. Projects with significant environmental impact or subject to municipal licensing are not eligible for the simplified licensing process and therefore for the discount. Activities that require vegetation suppression or water use permits must request specific licenses.[81] The projects are independently audited at intervals defined by the environmental agency and all projects must be inspected by the environmental agency. The discount encourages sustainable practices with reduced environmental risks and impacts. The resources collected with the environmental compensation fees must be applied to finance activities for: (i) the recovery of degraded areas; (ii) study, protection, management and recovery of species of native flora and wild fauna; (iii) monitoring of the quality of the environment and development of environmental indicators; (iv) mitigation or adaptation to climate change; (v) maintenance of sites intended for conservation, protection and recovery of species of native flora or wild fauna; (vi) protection of water resources; (vii) environmental education; (viii) programs and projects for strengthening, restructuring, management and improvement of processes of state environmental agencies; and (ix) projects developed by private entities for environmental protection and conservation. The caveat may be that the state environmental authorities will continue to need adequate human resources, technologies and equipment to carry out appropriate oversight of environmental compliance of the firms that hire independent auditors for their licensing requests.

85. **The effort of the State of Goiás in land tenure regularization (PA#7) is expected to represent environmental gains in regularized properties.** This is because, with the regularized land, the producer will be obliged to comply with the Brazilian Forest Code, protecting natural resources and permanent preservation areas, and improving ecosystem services. Law No. 18.826/2015[82], which provides for vacant lands belonging to the State of Goiás, States in its Article 27 "the allocation of vacant lands to occupants

[78] Direct N_2O emissions result from the application of synthetic fertilizers and organic manures. Indirect N_2O emissions also occur from the same N sources as direct emissions (excluding organic land management).
[79] MAP. 2020. Collection of GEE emission and removal factors from Brazilian agriculture.
[80] Biological Nitrogen Fixation (BNF) is performed by groups of microorganisms that release N to the plant.
[81] See the Article 4 of the Law 20,773, of May 8th, 2020: *https://legisla.casacivil.go.gov.br/pesquisa_legislacao/103159/lei-20773*
[82] *https://legisla.casacivil.go.gov.br/pesquisa_legislacao/92082/lei-18826*

or squatters will focus only on the areas properly and effectively exploited, plus the legal reserve areas, permanent preservation areas and unusable areas, which are in the perimeter of the applicant's occupation", i.e., it ensures the maintenance of the areas subject to protection, under the Brazilian Forest Code.

5.3. PFM, DISBURSEMENT AND AUDITING ASPECTS

86. **The overall integrated fiduciary risk of this operation arising from the State of Goiás' (SoG) public financial management (PFM) and public procurement system[83] is moderate.** The SoG is committed to implementing important ongoing PFM reforms to improve the quality and relevance of financial information available for decision making and to enhance transparency, accountability and efficiency in PFM, including: (i) implementing the International Public Sector Accounting Standards (IPSAS)[84]; and (ii) enhancing internal audit standards[85]. Improvements are noted in many areas, and continuous emphasis to implement agreed action plans to mitigate remaining challenges. A well-developed legal framework—including the Federal Constitution, the Fiscal Responsibility Law (LRF) and other laws and regulations—underpins the SoG PFM. Institutional PFM arrangements are clearly established within the Goiás State Secretariat of Economy's departments. Budget preparation and monitoring processes are considered appropriate and there are continued improvements in the external oversight mechanisms, including participation by key stakeholders and sector agencies and follows federal rules that are consistent with international standards. The State Government's PFM environment features strong internal rules and commitments controls. The State Government's information system (SIOFI-NET) together with the Treasury Financial Administration System (AFT) and the General accounting System (SCG) are also adequate. The use of the single treasury account (STA) model of cash management and a clear allocation of responsibility for managing it, facilitates the performance of bank reconciliations on a regular and timely basis. In addition, the budget is widely available for public access, primarily through the Internet.

87. **Internal Oversight.** The State government has internal rules and commitment controls with the State Comptroller General (CGE-GO) being the entity that supports the State's direct and indirect agencies

[83] PFM aspects are supported by the following analytical work: Brazil Public Expenditure Review (PER); Country Policy and Institutional Assessments (CPIA); Brazil Public Expenditure and Financial Accountability (PEFA) Report; Last three published annual audit reports and financial statements of the State of Goiás; and Observatory of Public State Finance; 2019 MMD-QATC (Supreme Audit Institution Performance Measurement Framework); 2020 assessment of the Internal Audit Capability Model (IA-CM); IMF Fiscal Transparency Evaluations/Reviews and Code of Good Practices on Fiscal Transparency.

[84] Portaria STN nº 548/2015 - *Plano de Implantação dos Procedimentos Contábeis Patrimoniais – PIPCP*, to be fully implemented by December, 2023

[85] Implementing the Internal Audit Capability Model (IA-CM) as to strengthen the internal audit functions in all entities that execute the State budget. By the end of CY22, the State should achieve level 3 (IPPFs – professional Qualified Staff and Integrated Internal Audit level of IA-CM.

on legal and procedural compliance in public contracts, access to information, anticorruption, and transparency in public administration. The CGE-GO has sufficient independence to perform its role. During the last three years, the CGE-GO was strengthened[86] to ensure the required autonomy to perform its role and improve the State's fiscal sustainability. The CGE's internal structure was adjusted and regularized to establish the main internal control functions (internal control, internal auditing, ombudsmanship, and inspection) following a risk-based approach and the "three lines of defense", in compliance with international best practices and recommendations made by the Federal Court of Accounts (TCU) through Normative Instruction (*Instrução Normativa*) IN 63/2010.

88. **External Oversight.** The State Audit Court (*the Tribunal de Contas de Goiás*, TCE-GO) reports to the legislative branch and is responsible for performing financial, compliance and operational audits and special reviews of budget execution and the quality of government expenditures at the State level. The TCE-GO audits have a reasonable scope and are generally issued with only minor delays. As part of its strategy to strengthen its institutional framework, the TCE-GO is currently implementing the *Sistema Aprimore* aiming to monitor and track the performance of the Quality and Agility Program of the Audit Courts (*Programa Qualidade e Agilidade dos Tribunais de Contas* - MMD-QATC)[87] indicators. As a way of facilitating the application of the MMD-QATC, the TCE-GO developed an innovative work methodology that includes embedding the processing of the stages of application of the MMD-QATC in its own system (Management and Planning System - SGP).

89. **Accounting and Financial Reporting.** The SoG has been able to prepare timely financial statements of reasonable quality, with reasonable observance of the deadlines established under the schedule in implementing IPSAS. The SoG publishes the annual estimates of Revenue and Expenditure on its website; the Year-end financial statements and audit reports are also accessible, but only after they have been submitted to the legislature for approval. The latest audit of the State's accounts is for 2020 and the TCE-GO approved the Governor's submission. The TCE-GO report identified some exceptions, but they do not compromise the overall consistency and usefulness of the financial statements. To improve the quality of its financial reporting, thereby enhancing transparency and accountability of the use of public funds, the SoG has committed that it will refocus its attention on recommendations made in the last audit report, including: (i) developing a methodology to better estimate the Annual Revenue; (ii) improving the accounting and reporting of the STA; and (iii) observing the chronologic payment of invoices. In terms of fighting corruption, the SoG's ranking in the Transparency International Covid-19 Brazil Portal is 14 out of 27 Brazilian states, with an overall score of 88/100.

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[86] Law 20.986/2001 consolidates internal control in preventive action on the realization of expenses and public work processes, in line with the Goiás Public Compliance Program (PCP), operating in four axes: Ethics, Transparency, Accountability and Management of Risks.

[87] *Programa Qualidade e Agilidade dos Tribunais de Contas* (MMD-QATC), is a diagnostic tool developed by Brazilian Supreme Audit Institutions Association - ATRICON, to assess the quality and performance of the Brazilian Supreme Audit Institutions. MMD-QATC is based on the International Organization of Supreme Audit Institutions (INTOSAIs) Performance Measurement Framework (SAI-PMF).

90. **Procurement processes in Goiás are largely competitive and transparent and have been improving overtime.** The State Secretariat for Administration of Goiás (SEAD) has a section on its website that gathers information on SEAD's internal bidding processes, price registration minutes for all State Agencies, and contracts signed by the Secretariat, as well as data on the hiring of specialized consultancy made by the agency. Also, the State has an e-procurement system in place called *ComprasNet.go* that is a virtual system of procurement of goods and services using the method of reverse auction. The system allows two types of bidding: waiver of bidding procedure by the amount of the purchase and reverse auction (in person and electronic). Public entities, agencies and State foundations post their purchase or contracting needs for services on the website and wait for the suppliers to bid, in the case of a waiver; and negotiates the bids, in the case of reverse auctions, until reaching the lowest price. All public entities are accredited and can use this instrument, which facilitates the purchasing process, reduces bureaucracy and allows for easier control and inspection of the legality and transparency of the procedure. To participate in virtual purchases via *ComprasNet*, the agency must appoint a procurement manager from the agency, who will be responsible for managing the purchases made by the agency. Only registered suppliers can participate in the bids. Once registered, companies that sell the product or service being requested are notified by email and, on the day and time of the auction, they can go online on the website and send as many proposals as they like. The only condition for submitting more than one proposal is that the value must always be less than the previous bid.

91. **As a result of the adequacy of the State's PFM environment indicated above, there are no risks to the achievement of the development objectives stemming from any identified weaknesses in the PFM system and no additional fiduciary arrangements will be put in place for the operation.**

92. **The loan proceeds will be disbursed based on satisfactory implementation of the DPF supported program and will not be tied to any specific purchases.** Once the loan is effective, the World Bank will disburse the loan proceeds into a US$ denominated bank account[88] opened by the Goiás State Government at the *Banco do Brasil* branch in Goiás, Brazil. The *Banco do Brasil* is a commercial bank deemed acceptable to the World Bank, as it: (i) is financially sound, in good standing, audited regularly, receiving satisfactory audit reports, and is able to execute a large number of transactions promptly; (ii) performs a wide range of banking services satisfactorily; and (iii) provides detailed bank statements.

93. **Written Confirmation.** Within 30 days after receipt of loan proceeds, the Goiás State Government will confirm to the World Bank that: (i) the loan proceeds were received into the foreign currency denominated account, and (ii) an equivalent amount was credited to the account that finances its

[88] This account will be denominated in US$ but will not form part of Brazil's foreign exchange reserves. Nevertheless, the Central Bank still needs to be informed of the deposit. For this reason, we have also evaluated the control environment governing the Central Bank's operations by reviewing the Central Bank's audited financial statements for the years ending December 31, 2017, to 2020 (given that the last IMF Safeguards Assessment was carried out in 2004), as well as reports of independent audits carried out by an international audit firm. The auditors' opinion was unqualified for all these years.

commitments (i.e., the receipt of the proceeds recorded in the state's accounting and budgeting system/records and are available to be used for budgeted commitments). If loan proceeds are used to finance excluded expenditures as defined in the Loan Agreement, the World Bank will require the Goiás State Government to refund the amount. As a result of the conclusions about the adequacy of the state's public financial management environment, no additional fiduciary arrangements will be put in place for the operation.

5.4. MONITORING, EVALUATION AND ACCOUNTABILITY

94. **The Goiás State Secretariat of Economy (*Secretaria da Economia - SE*) is responsible for collecting and monitoring information related to program implementation and progress toward the achievement of the results**. SE is responsible for coordinating all necessary actions among the agencies involved in the reform program supported by this DPF. SE will be directly responsible for the first pillar of the operation in coordination with other State agencies. The State Secretariat for the Environment (SEMAD) and the State Secretariat of Agriculture, Livestock and Supply (SEAPA) oversee policies and coordinates different institutions under the second pillar of the program. The World Bank team has worked closely with the above agencies as well as the Federal Treasury to define results indicators that are clearly spelled out and measurable, giving preference to those that are already collected by the government on a regular basis so as to avoid duplication.

95. **Grievance Redress**. Communities and individuals who believe that they are adversely affected by specific country policies supported as prior actions or tranche release conditions under a World Bank Development Policy Operation may submit complaints to the responsible country authorities, appropriate local/national grievance redress mechanisms, or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the GRS, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org."

96. **Brazil has a robust legislation on access to information and grievance redressing**.[89] The 1988 Federal Constitution (Art. 103 and Art. 130) and Constitutional Amendment 45/2004 also provide for the creation of Ombudsmen at all levels of government and major advances have been made in this area. Hundreds of Ombudsman offices in the federal, State and municipal bodies and agencies operate in the country and are integrated into two systems: the governmental ombudsman system (e-Ouv) and the governmental system of access to information (e-Sic), which have been recently integrated in the Fala.BR web system developed for the National Ombudsman Network. This platform allows citizens to make requests for public information and manifestations to the ombudsman. To use Fala.BR, it is not necessary to register. The system works 24 hours a day, allows you to follow the progress of an already registered event and also has the option to inform the name or make an anonymous event *https://www.gov.br/cgu/pt-br/assuntos/ouvidoria*. Finally, data on the performance of the network of Ombudsman Offices are publicly available in the webpage of “Painel Resolveu?” (*http://paineis.cgu.gov.br/resolveu/index.htm*). The **State General Ombudsman Office of Goiás** can be accessed by a Call Center, in presence, mail, phone, WhatsApp, e-mail (ouvidoria.cge@goias.gov.br), internet (http://www.cge.go.gov.br/ouvidoria/Register_1.php) and a digital platform (VaptVupt Digital - https://vaptvupt.go.gov.br/fale-conosco). Users of the system can have information on the processing of their complaints through the website http://www.cge.go.gov.br/ouvidoria/Consulta.php. Complaints can also be registered anonymously. Citizens can have access to reports on the ombudsman performance through the digital platform http://www.cge.go.gov.br/ouvidoria/relatorioGeral.php. This platform provides info on the number of grievances received, the status of processing, the average time of response, the reason of the complaint and the channel used for lodging them.

6. SUMMARY OF RISKS AND MITIGATION

97. **The overall risk of this operation is rated as substantial.** The principal risks to the objectives of this operation include macroeconomic shocks, political uncertainty, institutional capacity constraints, and the exposure of the agriculture sector to environmental shocks such as drought. These risks are presented below.

98. **Political and governance risks in the run-up to the 2022 electoral cycle are rated as high.** While there is strong State government commitment to the reform program supported by this DPF, there remains political uncertainty given that State and federal elections in October 2022 may potentially affect political consensus and/or political alignment for the reform agenda. Fiscal reforms were frontloaded to tame mandatory expenditure growth and preserve fiscal space, which supports the implementation of

[89] Including: Constitutional Amendment 19/1988, Federal Law 12,527/2011, Federal Law 13,460/2017, Federal Decree 9,492/2018, and Normative Instruction Ministry of Transparency and Federal Comptroller General (CGE)/Union General Ombudsman Office (OGU) 5/2018.

Goiás' fiscal plan and its green and inclusive growth reform agenda. The risk of policy reversal is mitigated by the strong incentives provided by the inclusion of Goiás in the FRR, that has clear and feasible sanctions to the State that does not comply to the agreed fiscal plan. In addition, the federal government's subnational credit worthiness scoring system (CAPAG), under which States that maintain fiscal discipline may have access to new federally guaranteed credit operations, provides additional incentives. In the second pillar, the DPF supports policy and institutional reforms under the responsibility of the State of Goiás, providing incentives to strengthen and institutionalize its reform agenda for integrating conservation and development. However, the State and federal elections in October 2022 may polarize political debate in the State and/or affect policy alignment between the State and federal governments, which in turn could affect reform momentum and implementation.

99. **Macroeconomic risks are rated as substantial.** Fiscal risks are significant, especially during this period of heightened political uncertainty. In particular, risks of growing demand for social transfers in a weak growth and slow labor market context could further delay the post-COVID-19 fiscal adjustment. Credible commitment to comply with constitutional expenditure ceiling will be critical to avoid a loss in market confidence. Mitigating factors include commitment by the authorities to complying with the federal expenditure ceiling, the implementation of the reforms submitted to Congress (Annex 6), and a large treasury position, reducing rollover risks. The risks to growth are also significant as inflationary pressures have motivated a monetary policy fighting cycle, which could dampen growth prospects. The war in Ukraine is causing higher commodities prices, supply shortages and increased risk aversion that can trigger additional exchange rate devaluations and inflation pressures in Brazil, inducing a more aggressive monetary policy stance that could reduce economic growth further. A deterioration in the external context, such as a slowdown in trading partners or an increase of the interest rates in advanced countries, could limit external demand and weaken the external balance, tough the flexible exchange rate and the substantive foreign reserves are sound buffers against external shocks. Low foreign currency exposure of public debt would limit the impact of currency depreciation on gross public debt. Progress in productivity-enhancing reforms could boost Brazil's growth potential and deliver faster fiscal consolidation in the medium term.

100. **Economic and fiscal risks at the State level are rated as substantial.** Goiás' economic growth, which is highly dependent on agricultural exports, would be affected by a slowdown of exports or fall in agricultural prices, reducing State Government's revenues and jeopardizing fiscal adjustment. Fiscal decisions at the federal level (such as the increase of the national minimum wage, a raise of the national minimum salary for teachers, a raise of the national civil service salary ceiling or changes in tax rates that impact the sharing of federal tax collections with the states) or judicial decisions that can increase expenses or reduce state revenues, can pose significant fiscal risks to the state and impact the fiscal outcomes of the program supported by this DPF. Fiscal reforms supported by the operation would help to contain the fiscal deficit and proceeds of the operation would allow the State to maintain an appropriate level of public investments, but some residual risks on the fiscal side could remain. Similarly, a fall in agricultural prices would also affect the possibility for farmers to adopt new technologies and practices, such as the bio-inputs (PA#4). This risk is mitigated through the implementation (under the Bio-

inputs program) of several incentives (both technical and financial) to foster the adoption of these climate-friendly technologies by family farmers.

101. **Risks related to institutional capacity in some policy areas are rated as substantial.** The institutional capacity required to implement fiscal reforms is adequate given the existing institutional capabilities of the State. Implementation of the expenditure rule will require careful management of recurrent expenditures to provide space for public investment, environmental management and other priorities, which will be led by the States Secretariat of Economy. Capacity constraints are more of a risk in relation to the policies under the second pillar. The uptake of bio-inputs by farmers (PA#5) will depend on the rapid issuance of environmental licensing specific to bio-inputs that is to be issued by the SEMA. Collaboration between the SEAPA and SEMA will thus be key. To mitigate this risk a working group has been set in place between SEAPA and SEMA to develop a specific environmental licensing process for bio-inputs. Another risk with regards to the uptake of bio-inputs by farmers, particularly the smallest ones, would be to have access to training and financial incentives to facilitate their adoption, a risk that is being mitigated by the inclusion of those measures in the Bio-inputs program and dedicated financing included in SEAPA budget line starting in 2022. The main challenge for efficient implementation of the IPÊ environmental licensing system (linked to PA#6) is the availability of human resources to validate the licensing matrices. To mitigate this risk, SEMAD is recruiting an expanded cohort to support effective implementation of the IPÊ System and carry out the associated compliance monitoring program. In addition, the recent streamlining of the environmental licensing system will introduce greater efficiency and lower the staffing gap.

102. **Environment are rated as substantial.** Climate-related environmental risks like heat waves, droughts, floods may affect farmers' incomes and thus their ability to invest in new technologies, which could jeopardize the achievement of PA#5. This risk is mitigated by the fact that climate-smart technologies tend to cost less than traditional ones and also contribute to climate change adaptation and mitigation. The incentives of the bio-inputs program also help to mitigate this risk, since the program enhances resilience to climate shocks. Moderate environmental risks may also be linked to the possibility that the lack of financial resources or political will might limit the effectiveness of the implementation and monitoring of environmental compliance. For this reason, the DPF focuses on raising the credibility of the state's climate change approach and environmental institutions. Strengthening their links to federal and community efforts introduces incentive systems and broadens the coalition to mitigate environmental impacts across the State.

103. **Stakeholder risks are rated as substantial.** These risks relate to sensitivities about the reform agenda—especially on public spending, public-sector payroll, and public pensions—which may lead to disagreement with public-sector unions. Furthermore, the legislative and judicial branches of government resist fiscal adjustment efforts that may affect their budgets. Improving the governance of the policies under Pillar II may also create tensions with and among economic actors interested in an unsustainable use of rural resources. In order to mitigate these risks, authorities have been and continue to be engaged in close consultations with several stakeholder groups, with the goal of exchanging on the rationale of the reforms and increasing their overall acceptance.

Table 9: Summary Risk Ratings

Risk Categories	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Low
4. Technical Design of Project or Program	Low
5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Substantial
8. Stakeholders	Substantial
9. Other	Substantial
Overall	Substantial

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ANNEX 1: POLICY AND RESULTS MATRIX

Prior actions under the DPF	Results		
	Indicator Name	Baseline	Target
Pillar I - Supporting the State of Goiás in improving fiscal sustainability			
PA#1: Fiscal rule. The Borrower has amended its Constitution to adopt an expenditure rule, under the Federal Fiscal Recovery Regime (Regime de Recuperação Fiscal), that limits growth of the primary expenditures to inflation as a medium-term fiscal anchor for the Borrower's public finances, as evidenced by the Constitutional Amendment No. 70 modifying articles 40 and 41 of the transitory provisions of the Borrower's Constitution, dated December 7, 2021. published on the Borrower's official gazette on December 8, 2021.	Current expenditures as a share of net current revenue[90]	98.1 percent (2020)	93.1 percent (2024)
PA#2: Pensions. The Borrower has enacted a law to reduce the pension deficit for civil servants by: (i) increasing the minimum retirement age, (ii) broadening the contribution base, and (iii) mandating a unified management of the Borrower's pension system under the responsibility of a single agency (Goiás Previdência – GOIASPREV), as evidenced by articles 4, 18 and 68 of Law (Lei Complementar) No. 161, dated December 30, 2020, published on the Borrower's official gazette on December 30,	Pension deficit (excluding the military pension scheme) Gender gap in retirement ages (for new civil servants).	R$ 5.9 billion (2024 with no reforms) 5 years (2020)	R$ 4.9 billion (2024) 3 years (2024)

[90] This indicator is calculated using the Federal Treasury CAPAG rating methodology, which consider the weighted average of 3 years. The years of 2017, 2018 and 2019 are included in the baseline, and the years of 2022, 2023 and 2024 are considered in the target. The target is aligned with the fiscal projections of the state's Fiscal Recovery Plan.

Prior actions under the DPF	Results		
2020.			
PA#3: Medium-term fiscal adjustment plan. The Borrower has issued a decree establishing a fiscal adjustment plan ("Plano De Recuperação Fiscal Do Estado De Goiás") that sets medium-term targets to increase the primary balance and reduce arrears, as evidenced by Decree No. 10,013, dated December 27, 2021, published on the Borrower's official gazette on December 27, 2021 and rectified (*Errata*) on the Borrower's official gazette on December 29, 2021.	Primary balance as a share of net current revenues[91]	10.3 percent (2020)	3.0 percent (2024)
Pillar II - Supporting the State of Goiás in adopting climate-smart, resilient, and inclusive policies for its agricultural sector			
PA#4: Climate Change Adaptation and Mitigation. The Borrower has issued a decree establishing a plan for climate change mitigation and adaptation and sustainability in agriculture (*Plano Estadual de Mitigação/Adaptação às Mudanças Climáticas e Sustentabilidade na Agropecuária*) to foster a low-carbon economy in the agricultural sector, as evidenced by Decree 9,891, dated June 22, 2021, published on the Borrower's official gazette on June 23, 2021.	Number of low-carbon agricultural projects supported by the State Development Council receiving concessional financing	91 (2021)	250 (2024)
PA#5: Climate-smart agriculture. The Borrower has enacted a law	Area planted with the use of bio-inputs (in ha).	300,000 ha (2021)	400,000 ha (2024)

[91] Primary balance calculated as the difference between primary revenues and executed primary expenditures ("despesas pagas"), including "restos a pagar". Intra-budgetary revenues and expenditures are not included in the calculation. The target is aligned with the fiscal projections of the state's Fiscal Recovery Plan.

Prior actions under the DPF	Results		
establishing a program on bio-inputs (*Programa Estadual de Bioinsumos*) to enhance the adoption of climate-smart agricultural practices, as evidenced by State Law No 21,005, dated May 14, 2021, published on the Borrower's official gazette on May 17, 2021.			
PA#6: Environmental licensing. The Borrower has issued a decree to reduce compensation fees for environmental licenses to carbon-neutral farms and firms, as evidenced by Decree No. 9,821, dated March 1, 2021. published on the Borrower's official gazette on March 2, 2021.	Share of compensation agreements that qualify for a carbon neutrality discount.	0 (2020)	20 percent (2023)
PA#7. Smallholder land tenure. The Borrower has approved regulation establishing criteria to facilitate the access to regularized land tenure for small-scale farmers, which strengthen the inclusiveness, environmental protection, and gender balance of its land regularization program, as evidenced by Portaria SEAPA No. 153/2022, dated March 21, 2022, as published on the Borrower's official gazette on March 22, 2022.	Number of families on State land receiving a land title issued by SEAPA; Share of land titles issued under the name of women as sole or joint owners.	214 (2019-2021) 34 percent (2021)	1,000 (2022-2024) 50 percent (2024)

ANNEX 2: FUND RELATIONS ANNEX

FUND RELATIONS

(As of February 28, 2022)**Membership status:** Joined on January 14, 1946; article VIII

General Resources Account:

	SDR, millions	Percent of Quota
Quota	11,042.0	100.0
Fund holdings of currency (exchange rate)	7,960.1	72.1
Reserve tranche position	3,092.3	28.0

SDR Department	SDR, millions	Percent of Allocation
Net cumulative allocation	13,470.3	100.0
Holdings	13,963.0	103.7

Outstanding Purchases and Loans: None

104. **Safeguards Assessments.** A safeguards assessment of the *Banco Central do Brasil (BCB)* was completed in June 2002 and updated in March 2005.

105. **Exchange Rate Arrangement.** Since January 18, 1999, Brazil's de facto and de jure foreign exchange regime has been classified as floating. Brazil accepted the obligations under article VIII, sections 2(a), 3, and 4, effective as of November 30, 1999. The IOF (*Imposto sobre Operações Financeiras*) is a tax up to 6.38 percent on financial transactions, among which exchange transactions carried out by credit card, debit card, and traveler's check companies (including cash withdrawals) in order to fulfill their payment obligations for the purchase of goods and services abroad by their customers. The IOF gives rise to multiple currency practices (MCP) subject to Fund jurisdiction under article VIII, sections 2(a) and 3. In January 2008, the IOF for these exchange transactions was raised to 2.38 percent, and further increased

to 6.38 percent in March 2011. The scope of operations was expanded to other foreign exchange transactions in addition to credit cards in December 2013.

106. **Last Article IV Consultation**. The last article IV consultation with Brazil was concluded by the Executive Board on September 10, 2021. Brazil is on the 12-month cycle. Joint Fund/World Bank missions visited Brazil in 2018 for the Financial Sector Assessment Program (FSAP), which was discussed by the Board in July 2018.

107. **Technical Assistance**. The Statistics Department (STA) provided technical assistance (remotely) in August 2020 to support the Brazilian Institute of Geography and Statistics (IBGE) in dealing with COVID-19 related challenges in compiling GDP data in the Quarterly National Accounts. The Fiscal Affairs Department (FAD) is supporting the Brazilian authorities in their efforts to strengthen the tax administration system, enhance medium-term fiscal planning, and strengthen public financial management. A TADAT Performance Assessment was conducted in January 2020 and was followed by a 2021 mission which advised on 'Options for Improving the RFB's Capacity to Enhance Compliance and Better Serve Taxpayers of the Future'. FAD also provided technical advice in February 2020 on "Strengthening Fiscal Responsibility at the Subnational Level", the design of subnational fiscal rules in Brazil. That mission built on the findings of an earlier (April 2019) mission titled "Strengthening the Framework for Subnational Borrowing", which provided recommendations to strengthen the institutional framework for subnational public finances with a focus on programs to support States and municipalities under financial distress. In previous years, FAD carried out a Public Investment Management Assessment (PIMA), published in November 2018, and a Fiscal Transparency Evaluation, published in May 2017. The IMF has been supporting the State of São Paulo in implementing a cost accounting system for the public sector, over several years. The last mission was conducted (remotely) on February 2022.

108. **Resident Representative**. The IMF resident representative is Ms. Joana Pereira, who assumed the post in July 2018. The Fund representation office in Brasilia is expected to close by June 30, 2022.

ANNEX 3: LETTER OF DEVELOPMENT POLICY

Secretaria de Estado da Economia

Somos todos GOIÁS
GOVERNO DO ESTADO

CARTA DE POLÍTICAS DE DESENVOLVIMENTO

À Sua Senhoria
PALOMA ANOS CASERO
Diretora – Brasil
Região da América Latina e do Caribe
The World Bank

Assunto: Contratação de Operação de Crédito
Development Policy Financing (DPF)

Senhora Diretora,

Este documento compreende um conjunto de medidas de políticas de ajuste fiscal e sustentabilidade econômica e socioambiental. Tem como objetivo integrar políticas públicas de desenvolvimento socioeconômico e sustentabilidade ambiental e melhorar a qualidade de vida dos goianos e reduzir as desigualdades regionais em Goiás.

O Governo de Goiás entende que o apoio técnico-financeiro do Banco Internacional para Reconstrução e Desenvolvimento – BIRD, por meio do *Development Policy Financing (DPF)*, será essencial ao sucesso do programa de ajuste e sustentabilidade fiscal do Estado. Relevante salientar que o supracitado programa tem o intuito de, no médio prazo, elevar a capacidade de poupança do Estado e os investimentos com recursos próprios. Desta forma, acreditamos em um Estado de Goiás próspero na gestão ambiental, no desenvolvimento sustentável e no equilíbrio das contas públicas.

Panorama das finanças públicas estaduais:

Goiás tem enfrentado uma situação fiscal enfraquecida e desafios significativos de sustentabilidade ambiental que estão limitando sua capacidade de buscar uma recuperação sustentável pós-COVID-19. O Estado passou a enfrentar dificuldades fiscais mesmo antes da pandemia devido ao rápido crescimento dos gastos com pessoal e altos custos do serviço da dívida. Suas finanças foram ainda mais impactadas pela crise do COVID-19. O Estado também enfrenta desafios significativos para a sustentabilidade ambiental em razão das mudanças climáticas, estando num cenário mundial de alterações de regime de chuvas que afetam sua economia, devido às crescentes emissões de gases de efeito estufa (GEE) que afetam seu principal setor econômico, o Agropecuário.

O desequilíbrio fiscal e financeiro ficou evidente quando, em 2019, a atual administração assumiu e se deparou com inúmeros problemas: disponibilidade de caixa de, somente, R$ 11 milhões do Tesouro Estadual; compromissos com a folha de pagamento dos servidores estaduais em atraso de R$ 1,54 bilhão, referente à parte do salário de novembro e à folha integral de dezembro de 2018; Restos a Pagar da ordem de R$ 3,1 bilhões, Despesas de Exercícios Anteriores (DEA) da ordem de R$ 2,5 bilhões, além de problemas com repasses não realizados das contribuições para o Plano de Saúde dos servidores estaduais e de recolhimento aos bancos do pagamento dos empréstimos consignados em folha.

Essa situação, além de evidenciar a deterioração fiscal em que o Estado se encontrava, provocou situações constantes de insuficiência de caixa, queda nos investimentos públicos e sucessivos déficits orçamentários. Reconhecendo a insolvência fiscal, não restou outra alternativa senão a de declarar a situação de calamidade financeira (Decreto nº 9.392/2019) e impor severa restrição para o gasto de custeio, com a suspensão das licitações em andamento, da contratação de pessoal em regime temporário, dentre outras medidas. Além disso, o Estado pleiteou, em 2019, ingressar no Regime de Recuperação Fiscal - RRF, tendo realizado reuniões com a Secretaria do Tesouro Nacional já a partir de janeiro daquele ano.

Depois de um longo período de tratativas junto ao Tesouro Nacional para o desenho do Plano de Recuperação Fiscal, o Plano foi homologado pelo Presidente da República no final de dezembro de 2021, e terá vigência de 01/01/2022 a 31/12/2030. Para ter seu Plano homologado, o Estado de Goiás teve que realizar diversas medidas de ajuste, de caráter estrutural previstas no §1º do art. 2º da Lei Complementar nº 159/2017, dentre as quais, podemos destacar: (i) alienação total ou parcial de empresas públicas ou sociedades de economia mista ; (ii) reforma da previdência; (iii) redução em 20 por cento dos incentivos fiscais dos quais decorram renúncia de receitas; (iv) redução de benefícios a servidores públicos; (v) implementação de regra de teto de crescimento de gastos públicos; (vi) realização de leilões para negociação de pagamentos de despesas atrasadas; (vii) adoção de gestão financeira centralizada em uma conta bancária única estadual; e (viii) implementação do regime de previdência complementar.

Tal panorama de situação fiscal enfraquecida está comprometendo a criação de uma trajetória sustentável de crescimento e desenvolvimento. Apesar de algum alívio fiscal em 2021 relacionado ao aumento da arrecadação de impostos, causado pela recuperação da atividade econômica e pela inflação mais alta, os desafios fiscais estruturais persistem e têm exigido reformas substanciais para conter o crescimento das despesas. Em 2021, os desafios fiscais ressurgiram, uma vez que a assistência federal extraordinária de 2020 não foi estendida em 2021. Por outro lado, há o crescimento vegetativo da folha de pagamentos, os desafios para se conter e mitigar os déficits previdenciários e caminhar na direção do equilíbrio atuarial, assim como o reestabelecimento, ainda que gradativo, dos pagamentos relacionados à dívida pública.

Como a dinâmica da economia goiana está muito relacionada ao seu setor agropecuário, que impulsiona a renda interna, o mercado de *commodities* em alta em 2021 também teve um papel decisivo para sustentar melhorias nas receitas do Estado. No entanto, esses fatores são conjunturais e seus impactos no crescimento das receitas não devem persistir. Essas condições, aliadas às dificuldades fiscais vivenciadas pelo lado dos gastos anteriores à pandemia, motivaram o Estado a buscar uma trajetória de ajuste fiscal, como dito, por meio da adesão ao Regime de Recuperação Fiscal do Governo Federal (RRF). Este programa federal de apoio aos estados para implementação de um plano de ajuste fiscal, orientado pelos princípios da sustentabilidade econômico-financeira, da equidade intergeracional, da transparência das contas públicas, da confiança nas demonstrações financeiras, da celeridade das decisões e da solidariedade entre os Poderes e os órgãos da Administração Pública, tem o objetivo de corrigir os desvios que afetaram o equilíbrio das contas públicas. Para tanto, foram implementadas medidas emergenciais e reformas institucionais aprovadas pelo Ministério da Economia, constantes do Plano de Recuperação Fiscal.

Goiás também enfrenta desafios importantes com a mudança climática e sustentabilidade ambiental. O setor agropecuário, que ocupa importante espaço territorial no Estado, tem contribuído para aumentar as emissões de GEE do Brasil. Ao mesmo tempo, as mudanças climáticas impactam diretamente o setor agropecuário (e as pessoas cuja subsistência dele depende) por meio da redução e irregularidade das precipitações e aumento das temperaturas e, indiretamente, por meio de sanções que podem afetar as exportações oriundas de áreas desmatadas, pois Goiás exporta grande parte de sua produção agrícola e pecuária. É preciso que o Estado de Goiás esteja estruturado administrativa e financeiramente para estabelecer as ações de mitigação e adaptação às mudanças do clima que afetam a todos. De igual sorte, este setor deve também receber incentivos para contribuir para as mitigações dos efeitos do clima, como parte da contribuição brasileira para o equilíbrio do clima mundial.

O apoio do Banco via DPF:

Ante o exposto, o Governo do Estado de Goiás está pleiteando um empréstimo junto ao Banco Internacional para Reconstrução e Desenvolvimento - IBRD no valor de U$ 500 milhões (quinhentos milhões de dólares americanos), na modalidade DPF – Financiamento de Políticas de Desenvolvimento. Através do DPF, o Banco Mundial apoiará o Estado na implementação de políticas que contribuem para aumentar a sustentabilidade fiscal do Estado e em políticas climaticamente inteligentes, resilientes e inclusivas para seu setor agrícola. As reformas fiscais devem ajudar a controlar o crescimento das despesas obrigatórias de Goiás, com consequente aumento do resultado primário, e liquidar os seus atrasados nos próximos anos, permitindo-lhe satisfazer plenamente as suas necessidades de financiamento.

Aliado ao cumprimento do limite da Lei de Responsabilidade Fiscal para gastos com pessoal, o Estado recuperará sua classificação de capacidade de pagamento - CAPAG, permitindo o acesso a novas linhas de crédito e tornando-se elegível para receber garantias do governo federal. O Estado também espera apoiar novas tecnologias e medidas que visem à recuperação de áreas degradadas, buscando que sejam estabelecidas mudanças nos setores produtivos em direção a práticas climaticamente inteligentes, incluindo a adoção do Plano Estadual de mitigação e adaptação ao clima. O DPF também apoiará medidas que reduzem as emissões de GEE e aumentem o armazenamento de carbono no solo, como o Programa de bio-insumos. O Estado também fortalecerá o foco climático da sua estrutura de licenciamento ambiental, reduzindo as taxas de compensação ou provendo outros incentivos econômicos ou administrativos para empreendimentos neutros em emissões de GEE. Por fim, o DPF apoiaria a regularização fundiária para pequenos proprietários sob os regulamentos de posse da terra, com foco tanto na melhoria das condições de vida dessa população como nas questões ambientais e de igualdade de gênero.

É no conjunto de medidas de ajuste do Plano de Recuperação Fiscal do Estado de Goiás que se situa a operação de crédito de políticas de desenvolvimento pleiteada junto ao Banco Mundial, com amparo no inciso IV do artigo 11 da Lei Complementar nº 159, de 19 de maio de 2017, com o objetivo de redefinir o perfil do endividamento do Estado, permitindo reduzir os pagamentos de serviço de dívida no curto prazo e abrir espaço fiscal para financiar a melhoria dos serviços públicos para a população carente do Estado.

Contamos com essa operação que, associada ao Plano de Recuperação Fiscal, contribuirá para a construção de uma trajetória de reequilíbrio das contas públicas estaduais e para a promoção de um desenvolvimento sustentável.

Goiânia, Goiás, Brasil.

Em 23 de março de 2022.

Ronaldo Ramos Caiado

Governador do Estado de Goiás

[Unofficial translation]

LETTER OF DEVELOPMENT POLICY

To Mrs.

PALOMA ANOS CASERO

Country Director – Brazil

Latin America and Caribbean Region

The World Bank

Re.: Contracting of a Credit Operation

Development Policy Financing (DPF)

Mrs. Director,

This document comprises a set of fiscal adjustment, economic and socio-environmental sustainability policy measures. It aims to integrate public policies for socioeconomic development and environmental sustainability, improve the quality of life of Goiás' people and reduce regional inequalities in Goiás.

The Government of Goiás understands that the technical and financial support of the International Bank for Reconstruction and Development (IBRD), through Development Policy Financing (DPF), will be essential to the success of the State's fiscal adjustment and sustainability program. It is important to point out that the aforementioned program is intended to, in the medium term, increase the State's savings capacity and investments with its own resources. In this way, we believe in a prosperous State of Goiás in environmental management, sustainable development, and in the balance of public accounts.

State public finances overview:

Goiás has been facing a weakened fiscal situation and significant challenges in environmental sustainability that are limiting its ability to pursue a sustainable post-COVID-19 recovery. The State faced fiscal difficulties even before the pandemic due to rapid growth in personnel spending and high debt service costs. Its finances have been further impacted by the COVID-19 crisis. The State also faces significant challenges for environmental sustainability due to climate change, being in a global scenario of changing rainfall patterns that affect its economy due to the increasing emissions of greenhouse gases (GHG) that affect its main economic sector - Agriculture.

The fiscal and financial imbalance was evident when, in 2019, the current administration took over and faced numerous problems: cash availability of only BRL 11 million from the State Treasury; payroll of state civil servants in arrears of R$ 1.54 billion (referring to the part of the November salary and the full payroll of December 2018); arrears ("Restos a Pagar") in the order of BRL 3.1 billion, expenses from previous years in the order of BRL 2.5 billion, in addition to problems with unrealized transfers of contributions to the Health Plan of State employees and payment to banks for the payment of payroll-deductible loans.

This situation, in addition to highlighting the fiscal deterioration in which the State found itself, provoked constant situations of insufficient cash, a drop in public investments and successive budget deficits. Recognizing the fiscal insolvency, there was no alternative but to declare a situation of financial calamity (Decree No. 9,392/2019) and impose a severe restriction on spending, with the suspension of ongoing bids and hiring of personnel on a temporary basis, among other measures. In addition, the State requested, in 2019, to join the Fiscal Recovery Regime - RRF, having held meetings with the National Treasury Secretariat as of January of that year.

After a long period of negotiations with the National Treasury for the design of the Fiscal Recovery Plan, the Plan was approved by the President of the Republic at the end of December 2021, and will be effective from 01/01/2022 to 12/31/2030. To have its Plan approved, the State of Goiás had to carry out several structural adjustment measures provided in §1 of art. 2 of Complementary Law No. 159/2017, which we can highlight: (i) total or partial disposal of public companies or mixed capital companies; (ii) pension reform; (iii) 20 percent reduction in tax incentives resulting from the waiver of revenue; (iv) reduction of benefits to public servants; (v) implementation of a government spending growth ceiling rule; (vi) holding auctions to negotiate payments for late expenses; (vii) adoption of centralized financial management in a single state bank account; and (viii) implementation of the supplementary pension scheme.

Such a scenario of weakened fiscal situation is compromising the creation of a sustainable growth and development trajectory. Despite some fiscal relief in 2021 related to higher tax collections, driven by the recovery in economic activity and higher inflation, structural fiscal challenges persist and have required substantial reforms to contain expenditure growth. In 2021, fiscal challenges resurfaced, as the extraordinary federal assistance of 2020 was not extended in 2021. On the other hand, there is the growth of the payroll, there are challenges to contain and mitigate pension deficits and move towards of the actuarial balance, and there is the reestablishment, albeit gradual, of the public debt service payments.

As the dynamics of the Goiás economy is closely related to its agricultural sector, which boosts domestic income, the rising commodity market in 2021 also played a decisive role in sustaining improvements in State revenues. However, these factors are conjunctural and their impact on revenue growth is unlikely to persist. These conditions, combined with the fiscal difficulties experienced by the spending side prior to the pandemic, motivated the State to seek a trajectory of fiscal adjustment, as said, through adherence to the Federal Government Fiscal Recovery Regime (RRF). This federal program of support to States for the implementation of a fiscal adjustment plan, guided by the principles of economic-financial sustainability, intergenerational equity, transparency of public accounts, trust in financial statements, speed of decisions and solidarity between Powers and Public Administration entities, aims to correct the deviations that affect the balance of public accounts. To this end, emergency measures and institutional reforms were implemented, approved by the Ministry of Economy, and included in the Fiscal Recovery Plan.

Goiás also faces important challenges with climate change and environmental sustainability. The agricultural sector, which occupies an important territorial space in the State, has contributed to increase Brazil's GHG emissions. At the same time, climate change directly impacts the agricultural sector (and the people whose livelihoods depend on it) through reduced and irregular rainfall and increased temperatures, and indirectly through sanctions that can affect exports from deforested areas, since Goiás exports a large part of its agricultural and livestock production. It is necessary for the State of Goiás to be administratively and financially structured to establish mitigation and adaptation actions to climate change that affect everyone. Likewise, this sector should also receive incentives to contribute to the mitigation of the effects of the climate, as part of the Brazilian contribution to the balance of the world climate.

The World Bank support as DPF:

In view of the above, the Government of the State of Goiás is requesting a loan from the International Bank for Reconstruction and Development - IBRD in the amount of U$ 500 million (five hundred million American dollars), in the DPF modality - Financing of Development Policies. Through the DPF, the World Bank will support the State in the implementation of policies that contribute to increasing the fiscal sustainability of the State and in climate-smart, resilient and inclusive policies for its agricultural sector. Fiscal reforms should help in the control of the growth of mandatory expenditures in Goiás, and, as consequence, the primary balance should increase, and its arrears should be cleared in the coming years, allowing it to fully meet its financing needs.

Allied to the compliance with the Fiscal Responsibility Law limit for personnel expenses, the State will recover its payment capacity classification - CAPAG, allowing access to new credit lines and become eligible to receive guarantees from the federal government. The State also hopes to support new technologies and measures aimed at the recovery of degraded areas, seeking to establish changes in the productive sectors towards climate-smart practices, including the adoption of the State Plan for mitigation and adaptation to the climate. The DPF will also support measures that reduce GHG emissions and increase soil carbon storage, such as the Bio-Inputs Program. The State will also strengthen the climate focus of its environmental licensing framework, reducing compensation fees or providing other economic or administrative incentives for GHG-neutral ventures. Finally, the DPF will support land tenure regularization for smallholders under land tenure regulations, focusing both on improving the living conditions of this population and on environmental and gender equality issues.

It is in the set of adjustment measures of the Fiscal Recovery Plan of the State of Goiás that the credit operation for development policies coordinated with the World Bank is located, based on item IV of article 11 of Complementary Law nº 159, of 19 May 2017, with the aim of redefining the State's debt profile, allowing for a reduction in short-term debt service payments and opening up fiscal space to finance the improvement of public services for the State's needy population.

We count on this operation, which, associated with the Fiscal Recovery Plan, will contribute to the construction of a path to rebalance the State public accounts and to the promotion of sustainable development.

Goiânia, Goiás, Brazil.

March 23, 2022.

Ronaldo Ramos Caiado

Governor of the State of Goiás

ANNEX 4: ENVIRONMENT AND POVERTY/SOCIAL ANALYSIS TABLE

Prior Actions	Significant positive or negative environment effects	Significant poverty, social or distributional effects positive or negative
Pillar I - Supporting the State of Goiás in improving fiscal sustainability		
PA#1: Fiscal rule. The Borrower has amended its Constitution to adopt an expenditure rule, under the Federal Fiscal Recovery Regime (*Regime de Recuperação Fiscal*), that limits growth of the primary expenditures to inflation as a medium-term fiscal anchor for the Borrower's public finances, as evidenced by the Constitutional Amendment No. 70 modifying articles 40 and 41 of the transitory provisions of the Borrower's Constitution, dated December 7, 2021, published on the Borrower's official gazette on December 8, 2021.	No direct negative environmental impact is expected from this prior action. The Fiscal rules should not weaken environmental management and the capacity of agencies responsible for implementing environmental policies. It is expected that in the medium and long term this action will bring benefits in the environmental management through an improvement in State finances, ensure investments for environmental enforcement, investment in conservation units, and fire brigades.	No expected direct negative impacts on the poorest segments of the population. Civil servants in Goiás may be the most adversely affected group. However, this group is largely comprised by non-poor individuals and will remain a relatively privileged group in comparison to formal and informal workers in the private sector. Overall, the prior actions included under Pillar 1 would only be detrimental to the poor in the unlikely scenario that: a) the reduction of wages, benefits and pensions offered to public servants are perceived to be large enough to hamper the capacity of the State to attract and retain well qualified and talented professionals, reducing the quality of public services delivery, and b) this effect is larger than the potential increased spending in key sectors like health and education that directly benefit vulnerable citizens' wellbeing.
PA#2: Pensions. The Borrower has enacted a law to reduce the pension deficit for civil servants by: (i) increasing the minimum retirement age, (ii) broadening the contribution base, and (iii) mandating a unified management of the Borrower's pension system under the responsibility of a single agency (Goiás Previdência – GOIASPREV), as evidenced by articles 4, 18 and 68 of	This prior action is not expected to have direct negative impacts on environment. The capacity of the State to manage natural resources could be enhanced in the medium and long term with a more stable fiscal system and guarantee a better basic public service. However, a strong coordination of actions must be guaranteed in order to strengthen the State's capacity to	This prior action is not expected to have negative impacts on poverty. It can potentially have positive indirect distributive impacts, as it will contribute to the fiscal recovery of the State and may contribute to ensure – in the middle and long-term – the governmental capacity to provide basic public services, in which the most disadvantaged and vulnerable social groups rely heavily. The reform of the public servants'

Law (Lei Complementar) No. 161, dated December 30, 2020, published on the Borrower's official gazette on December 30, 2020.	manage these actions.	pension system is not expected to substantially reduce the wage and benefits premia of working in the public sector so as to reduce the attractiveness of the sector or to harm the living conditions of retired public servants. Despite potential feelings of losses among public servants, the main representative union of Goiás state public servants (SINDIPUBLICO) has expressed support to the endeavor of the pension system reform, only questioning the deduction of social security contributions above the minimum wage for retirees and pensioners.
PA#3: Medium-term fiscal adjustment plan. The Borrower has issued a decree establishing a fiscal adjustment plan ("Plano De Recuperação Fiscal Do Estado De Goiás") that sets medium-term targets to increase the primary balance and reduce arrears, as evidenced by Decree No. 10,013, dated December 27, 2021, published on the Borrower's official gazette on December 27, 2021 and rectified (*Errata*) on the Borrower's official gazette on December 29, 2021.	No direct negative environmental impact is expected from this prior action. It is expected that his action should in the medium and long term improve the governmental capacity to finance improvements in its environmental management.	This prior action is not expected to have negative impacts on poverty. The public sector in Goiás comprises 11 percent of the State labor force, but only 1.8 percent among the working poor. State civil servants are among the richest quintiles of the labor income population. Potentially, it can also contribute to ensure – in the middle and long-term – the governmental capacity to provide basic public services. Consequently, it may benefit the most the low-income population through increased access to better services, improved educational opportunities and enhanced health conditions.
Pillar II - Supporting the State of Goiás in adopting climate-smart, resilient, and inclusive policies for its agricultural sector		
PA#4: Climate Change Adaptation and Mitigation. The Borrower has issued a decree establishing a plan for climate change mitigation and adaptation and sustainability in agriculture (*Plano Estadual de Mitigação/Adaptação às Mudanças Climáticas e*	Positive impact. The adoption of the state plan is expected to have many benefits, including the increased sustainability of the agricultural sector, the protection or restoration of native vegetation, and the reduction of GHG gas that increase the negative impacts	The prior action is expected to have positive impacts on rural landholders (including 95,684 small family farmers) as it may contribute to avert the deleterious effects of climate change on the mostly rainfed agricultural production of the state. Depending on

Sustentabilidade na Agropecuária) to foster a low-carbon economy in the agricultural sector , as evidenced by Decree 9,891, dated June 22, 2021, published on the Borrower's official gazette on June 23, 2021	of climate change on the environment.	targeting and the amounts transferred, PES may help reduce poverty and income uncertainty among low-income households. It may also contribute to reduce the effects of climate-related events such as droughts and floods that tend to affect poor rural people disproportionately and to increase the protection of natural resources over which many traditional communities rely for their livelihood. These positive outcomes on poverty and livelihoods may be hindered by historical hurdles small rural landholders face to access credit and technical assistance to invest on new technologies.
PA#5: Climate-smart agriculture. The Borrower has enacted a law establishing a program on bio-inputs (*Programa Estadual de Bioinsumos*) to enhance the adoption of climate-smart agricultural practices, as evidenced by State Law No 21,005, dated May 14, 2021, published on the Borrower's official gazette on May 17, 2021.	Positive impact. Many benefits are expected from the adoption of bio-inputs. Food produced free of pesticides, reduction of emissions associated with the production process, and reduction of costs for producers.	The adoption of bio-inputs is expected to increase yields and lower production costs, raising direct beneficiaries' income. Despite the early focus on soy producers (who are mostly medium- and large landholders), the use of bio-inputs by farmers is expected to generate reductions in production costs as well as increases in seasonal jobs (as many production tasks are more labor intensive than using agrochemicals and fertilizers). Therefore, rural workers may find more job opportunities and temporary sources of earnings. As new production processes may be perceived as a risky investment, the adoption of bio-inputs should be accompanied by technical support and behaviorally-informed communication campaigns to maximize uptake among the target population. Furthermore, an indirect effect of bio-

		inputs use may be reducing harms to the environment and natural resources over which neighboring traditional communities rely in their livelihoods (a main threat and source of conflict between agrobusiness and traditional communities within the Cerrado biome). Thus, this prior action is expected to have direct and indirect positive poverty, social and distributional effects.
PA#6: Environmental licensing. The Borrower has issued a decree to reduce compensation fees for environmental licenses to carbon-neutral farms and firms, as evidenced by Decree No. 9,821, dated March 1, 2021, published on the Borrower's official gazette on March 2, 2021.	Positive impact. The reduction in the value of compensation is an incentive for more sustainable practices, with an adoption of climate mitigation and reduction of direct impacts on the environment. However, it is necessary to guarantee the environmental agency's capacity, technologies and equipment needed to carry out appropriate oversight of compliance with the environmental legislation.	Faster environmental licensing processes are expected to expand the number of legally operating businesses in the State with positive effects on job and income generation (indeed, there is evidence of this effect as 141,893 new business were opened in the state in the last year – mostly at the second semester). As some of these jobs are allocated to individuals at the bottom of the income distribution, the prior action is expected to have indirect positive poverty, social, distributional effects. Additionally, it is also expected that requirements of the licensing process related with activities to be carried out by larger size business within poor communities located in their surroundings on the promotion of productive activities and food and nutritional security, the generation of jobs and income, or the formation and training of the labor force will contribute to positive equity and social inclusive outcomes. Monitoring and enforcement of these conditionalities will be key for the positive effects to materialize. Finally, the exemption from paying the environmental compensation fees provided to family farms and traditional communities as well as to small size

		business with low polluting potential are expected to have positive distributional effects benefiting the earnings and livelihoods of low-income families in both urban and rural areas of the state.
PA#7. Smallholder land tenure. The Borrower has approved regulation establishing criteria to facilitate the access to regularized land tenure for small-scale farmers, which strengthen the inclusiveness, environmental protection, and gender balance of its land regularization program, as evidenced by Portaria SEAPA No. 153/2022, dated March 21, 2022, as published on the Borrower's official gazette on March 22, 2022.	Positive impact. Land tenure regularization allows the State to have greater environmental control over producers, and safeguards the maintenance of areas subject to protection, under the terms of the Brazilian Forest Code. The producer must comply with environmental legislation, protecting natural habitats as Permanent Protected Areas, improving ecosystem services. Land tenure security reduces defor4estation and increases long-term investments such as planting of trees, erosion control, reducing the impact of climate change and increasing carbon sequestration in the soil.	This prior action is expected to yield significant direct and pro-poor distributive impacts within its targeted areas of intervention. The amount of beneficiaries is not large in the context of the State population. However, this prior action contributes to land tenure security of disadvantaged and vulnerable social groups (including Quilombola and traditional communities) and increasing women's access to land rights. The prior action is expected to increase recipients' investments in the land brought by the higher certainty of property rights. Investments have the potential to raise productivity, income and the value of the properties themselves. The prior action is expected to have indirect positive poverty, social, and distributional effects (including the fostering of gender equity).

ANNEX 5: INTERGOVERNMENTAL FISCAL ARRANGEMENTS IN BRAZIL

Brazil is a highly decentralized federation, with subnational governments being responsible for the delivery of most public services. The Brazilian Constitution gives State and municipal governments substantive fiscal autonomy and large spending responsibilities. Municipalities provide primary education and health care, and States fund most secondary schools and hospitals. Public universities are mostly federal, but many States also maintain public universities of their own. States are the primary providers of policing and public security. State and municipal governments are also in charge of building and maintaining local and regional infrastructure and delivering social protection programs.

States and municipalities also raise significant tax revenues of their own. The Brazilian Constitution assigns taxation powers to different levels of government. Brazil's largest tax by revenue, the ICMS (*Imposto sobre Circulação de Mercadorias e Serviços*), is an indirect tax levied by States on goods and selected services (intermunicipal transport and communication). The States also tax motor vehicles (IPVA), and inheritances and donations (ITCMD). Municipalities levy a service tax (ISS) on services not covered by the ICMS, and tax urban properties (IPTU) and real eState transactions (ITBI). State and local governments have full autonomy to define their tax bases and rates. States also share 25 percent of the ICMS and 50 percent of the IPVA with municipalities.

In order to provide public services, subnational governments receive intergovernmental transfers. The federal government shares its tax revenues with States and municipalities through two general-purpose unconditional transfer funds, respectively the FPE (*Fundo de Participação dos Estados e do Distrito Federal*) and the FPM (*Fundo de Participação dos Municípios*). These are constitutionally mandated, and their allocation is based on demographic factors, with less developed States and municipalities receiving higher per capita allocations. As a result, these funds are the predominant source of revenue for poorer States, and poor rural municipalities. The federal government also provides specific transfers for education (FUNDEB) and health care (SUS), as well as capital transfers for specific programs.

Fiscal rules for subnational governments are enshrined in the 2000 Fiscal Responsibility Law (LRF—*Lei de Responsabilidade Fiscal*). With a view to reducing moral hazards in intergovernmental fiscal relations, the LRF explicitly prohibits debt refinancing operations between different levels of government. Complementary Senate resolutions also prohibit subnational borrowing if certain fiscal thresholds are not respected. The recent subnational fiscal crisis made it evident that the LRF and State-federal fiscal adjustment programs (PAFs) need strengthening. In response, the federal government approved: (i) a Fiscal Recuperation Regime for bankrupt States (LC 159/2017); and (ii) debt amortization extensions for States facing liquidity problems (LC 156/2016), conditional on fiscal adjustment measures. Following the tendency of improvement of the intergovernmental fiscal relations, Congress modified and approved fiscal rules to support fiscal adjustment at subnational governments (LC 178/2021). The main innovations of this law are: (i) the improvement of the FRR by changing LC 159/2017; (ii) creation of the Fiscal Equilibrium Plan (FEP), which was designed to support the adjustment of subnational governments with limited debt, but that were facing liquidity problems; (iii) clarified the definition of some limits of the Fiscal Responsibility Law, such as the one for personnel spending.

Subnational governments' borrowing capacity is tightly regulated, and States and Municipalities cannot issue debt securities. Much of the stock of subnational debt is in the form of long-maturity debt with the federal government as part of a 1997 bailout, and is governed by State-federal fiscal adjustment programs (PAFs). Since 2016, the repayment conditions for these loans have been restructured, lowering near-term payments required from States. Subnational governments also have significant debts with public banks

(BNDES, Banco do Brasil, and CEF), multilateral lenders (mostly IBRD and IADB), bilateral development partners, and, occasionally, commercial banks. The federal government's system for authorizing federally guaranteed subnational debts (CAPAG) was reviewed in 2017, with technical assistance from the World Bank, limiting federal discretion and requiring adequate fiscal space (measured by the current savings rate) from subnational governments to qualify for federal guarantees.

ANNEX 6: MAIN REFORMS IN BRAZIL

The current government of Brazil has passed several key reforms to contain fiscal expenditure, open markets to competition and trade, improve human capital, and accelerate productivity growth.

Pension Reform. At the end of 2019, a constitutional pension reform was adopted, establishing new retirement rules for urban private-sector employees and federal civil servants, offering transition rules to those nearing retirement. It set a minimum retirement age (65 for men and 62 for women, with some exceptions), phasing out pensions by length of service; raised the minimum contribution time for men working in the private sector in urban settings from 15 to 20 years; extended (to the whole working life) the period used to calculate average wages and determine pension benefits; and reduced survivor benefits to higher-income households with few survivors. Progressive contribution rates have also been established, and the contribution base for retired civil servants was expanded. The reform is expected to generate accumulated savings of R$84 billion during the first four years of implementation, and R$630 billion by 2030. The reform also opened the possibility for States and municipalities to apply similar parametric changes to their public servants, if they so decide.

Water and Sanitation Reform. The New Basic Sanitation Framework, enacted as Law 14,026 of July 15, 2020 (*Lei do Saneamento Básico*), calls for universal access to water supply and sanitation (WSS) services by 2033. The goal is to provide safely managed water supply to 99 percent of the population and safe access to sanitation (collected and treated wastewater) to 90 percent. There is a long road ahead, since current sanitation services only reach half of the population, leaving over 100 million out. Around 15 million Brazilians live without access to safely managed water in urban areas. In rural areas, 25 million only have access to basic service levels, and 2.3 million use unimproved sources of water for drinking, personal hygiene, and cleaning their homes. The Ministry of Economy estimates that R$700 billion are required to revert this scenario and reach the targets set by the new law. The water and sanitation sector is expected to boost the economy and create jobs. The successful implementation of the new law will require addressing a series of challenges, including limited capacity at the three levels of government, the complex intergovernmental dynamics embedded in the Brazilian federal system, and the introduction of new policy and institutional functions.

Air Transport Competition. The National Congress has enacted new legislation opening the whole air transport sector to foreign capital, that is, allowing foreign airlines to operate flights in the domestic market, or to increase their existing stakes in major Brazilian carriers. This will provide additional flexibility in reorganizing the market structure, and foster competition among air transport service providers. Additional improvements in the air transport sector business environment may be achieved through *Programa Voo Simples*, a program launched in October 2020 to modernize and simplify rules, reduce bureaucracy, and attract investment to general aviation in Brazil. The program provides differentiated measures according to the size of each air taxi company, so that new small operators can enter the market and provide services to the population at a lower cost. In addition, it aims to simplify processes for manufacturing, importing, or registering aircraft. The new legislation facilitates the authorization process for entering and overflying the Brazilian territory, and therefore should be able to improve current practices; streamline processes, eliminate unnecessary or disproportionate formalities; and reduce the waiting time for issuing permits and adopting new technological solutions for the provision of services.

Telecom Sector and Broadband Connectivity. A new general telecommunications law (Law 13879/2019) was enacted in October 2019, amending a 1997 law with a view to improving broadband development and bridging Brazil's digital divide (by increasing broadband penetration). Currently, internet access is not available to 47 million Brazilians. In rural areas, 56 percent of all households and 43 percent of all schools lack internet connection *(*https://www.gsma.com/latinamerica/the-industry-welcomes-brazils-reform-of-general-telecommunications-law/). In addition, an important telecommunications decree was approved in 2019 on rights of way and deployment facilitation.

Data Protection Law. Law 13709/2018 was sanctioned by the president and came into force on September 18, 2020. It is modeled on the European law and is considered a key building block for data protection. The Brazilian data protection law determines the creation of a data protection agency in the country *(*http://lawsofbrazil.com/2020/09/18/brazils-data-protection-law/*).*

Trade Liberalization. With a view to fostering Brazil's integration into the global economy, the government has signed new trade agreements. In addition to the Mercosur-EU Agreement and the Mercosur-EFTA Agreement, Brazil is currently in negotiation with Canada, Korea, and Singapore. These new trade agreements are deemed to be deeper than previous ones. Furthermore, Brazil has adopted resolutions aimed to reduce the abuse of antidumping measures by streamlining its antidumping framework; reinforcing public interest procedures (a mechanism that assesses whether antidumping duties cause more harm than benefits to the chain of production); and allowing the suspension of antidumping measures due to anticompetitive impacts.

Positive Financial Score Reform. A new law establishes a positive and negative credit rating system. The system works on an opt-out basis, and thus enables financial institutions to collect data on borrowers' credit history without their explicit consent, broadening the scope of credit bureaus and increasing competition in the credit market. This reform is expected to broaden access to funding for individuals and firms with a good credit history, and therefore contribute to productivity growth (as firms may be in a better position to obtain loans).

Education Financing Reform. In August 2020, the National Congress approved a constitutional amendment that will change the main pillar of education financing in Brazil: FUNDEB (National Basic Education Fund). FUNDEB has been made permanent, and federal government contribution levels have been raised, although part of the transfers will remain linked to improving education outcomes. States and municipalities that raise their education achievement levels may benefit in two ways: (i) 2.5 percentage points of federal FUNDEB funds (approximately R$4 billion) will be distributed according to education improvement indicators; and (ii) the distribution of State taxes on goods and services (ICMS) will follow a results-based model. The amendment has changed a constitutional article related to how ICMS revenues are shared with municipalities, making the successful results-based model adopted in the State of Ceará mandatory to all States, which will now be obliged to link from 10 percent to 35 percent of their ICMS transfers to education outcomes. Both changes are expected to spur the improvement of education outcomes if the incentive mechanisms are well designed. From a budget perspective, while the changes affecting ICMS transfers are budget neutral, federal spending with FUNDEB will more than double. By 2026, transfers to poorer States and municipalities will grow from 10 percent to 23 percent of the total FUNDEB funds received by States and municipalities (12 percent in 2021).

***Bolsa Família* Expansion and *Auxilio Brasil*.** In March 2020, Brazil's conditional cash transfer program known as *Bolsa Família (BF)*, the larger of its kind in the world, incorporated an additional 1.2 million new families. Those families were already eligible for BF support even before the COVID-19 pandemic, but had not been enrolled due to budget constraints. Data from *Cadastro Único* (Brazil's single registry for social programs) indicate that families benefiting from the expansion were substantially poorer: about 82 percent fall under the lower income threshold of R$89 per person per month (US$1.13 per day). Moreover, administrative data confirm that new beneficiaries include nearly 1 million women that are now registered as primary BF beneficiaries, and approximately 990,000 children and youth that are now receiving financial support. More recently BF was reformed and renamed *Auxilio Brasil*. The new program provides a more generous benefit for families with young children (0-3); extends coverage of teens up to 21 who need more time to complete secondary education; creates additional rewards to high achiever students in sport and science competitions; creates a benefit to partially cover early childcare costs of women; and funds economic inclusion programs at the local level.

Gas market reform. In June 2019, Brazil launched *Novo Mercado de Gas* (New Gas Market), a package of reforms aimed at improving the flexibility and competitiveness of natural gas. Gas is seen as a critical element for Brazil's clean energy transition because of its ability to provide flexibility and security of supply—which will be required as Brazil's generation mix moves toward increasing shares of hydropower, wind and solar. In addition, gas has the potential to replace more polluting liquid fuels in the industrial and transport sectors. *Novo Mercado de Gas* supports these objectives by enhancing the competitiveness of gas markets and integrating the regulatory and planning regimes for electricity and gas. Key reforms include enhancing third-party access to transportation infrastructure, and Petrobras's divestiture of its monopoly gas transportation and storage businesses.

Fiscal Consolidation. The fiscal consolidation process will rely heavily on the implementation of the reforms submitted to Congress. In 2021, the government approved a Constitutional Amendment (EC 109, of 2021) that creates emergency mechanisms to control public expenditure for federal, State and municipal governments. The amendment establishes that, whenever the ratio between mandatory federal expenses and federal revenues reaches the limit of 95 percent, a series of restrictions will come into play that basically aim to control expenses with civil servants, such as the prohibition to readjust wages and promote contests. The text authorizes States and municipalities to trigger the same triggers as the Union if they reach the limit of 95 percent in their accounts. If they choose not to activate them, they will be prevented from obtaining loans guaranteed by the Federal Government or from renegotiating their debts. With the aim of supporting fiscal consolidation and reducing the wage bill, the federal government has also submitted another constitutional amendment bill for Congress approval, introducing an administrative reform at federal and subnational levels. This proposed amendment is the first part of the administrative reform, which would include another two stages in which public service careers structures, salaries and rules of promotion would be reviewed. However, this reform would apply only to new public servants, and should have limited impacts in the short term.

Independence of the Brazilian Central Bank. The Complementary Law 179/2021 was approved by Congress in February 2021 and seeks to prevent political interference in the monetary authority, giving autonomy to the Central Bank autonomy. The Law reinforces the Central Bank's independence from a technical, operational, administrative and financial perspective. The Law establishes that the Central Bank's president and directors will have fixed terms of office of four years, not coinciding with that of the President of the Republic. It also sets out the reasons for the resignation of the president and directors. Price stability remains the central objective of the BC which, without prejudice to this objective, will also ensure the stability and efficiency of the financial system, smooth out fluctuations in the level of economic activity and promote full employment.