



1. Operation Information

Operation ID P178285	Operation Name PY Green and Resilient DPL
Country Paraguay	Practice Area (Lead) Environment, Natural Resources & the Blue Economy

Non-Programmatic DPF

L/C/TF Number(s) IBRD-94250	Closing Date (Original) 15-Dec-2023	Total Financing (USD) 240,000,000.00
Bank Approval Date 30-Jun-2022	Closing Date (Actual) 15-Dec-2023	
	IBRD/IDA (USD)	Co-financing (USD)
Original Commitment	240,000,000.00	0.00
Revised Commitment	240,000,000.00	0.00
Actual	240,000,000.00	0.00

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2. Program Objectives and Pillars/Policy Areas

a. Objectives

The Program Development Objective (PDO) of this Development Policy Lending (DPL) operation as stated in the Program Document (PD, page 3) is:



(i) mobilize private capital for climate resilience and mitigation. (ii) promote climate resilience and mitigation in select sectors of the economy. and (iii) enhance fiscal transparency for climate actions.

b. Pillars/Policy Areas

There were three pillars/policy areas:

Pillar # 1. Mobilize private capital for climate resilience and mitigation.

Pillar # 2. Promote climate resilience and mitigation in select sectors of the economy.

Pillar # 3. Enhance fiscal transparency for climate action.

c. Comments on Program Cost, Financing and Dates

Program cost. The estimated cost at appraisal and actual cost was US\$240.00 million.

Financing. The Program was financed by an International Bank for Reconstruction and Development (IBRD) credit of US\$240.00 million. The credit was fully disbursed.

Dates. The program was approved on June 30, 2022, became effective on December 15, 2022, and closed as scheduled on December 15, 2023.

3. Relevance of Design

a. Relevance of Objectives

Country and sector context. Favorable external conditions and prudent macroeconomic policies helped in sustaining Paraguay's economic growth in the years before appraisal. However, the growth relied on exploiting natural resources (forests), which rendered Paraguay vulnerable to climate shocks. Paraguay ranked 94th out of 182 countries on the Notre Dame Global Adaptation Initiative (ND-GAIN) index, which assesses countries vulnerability to climate change. This operation supported the government's emerging policy shift towards recognizing the adverse impacts of climate change factors.

Government strategy. The PDO was aligned with the Government priorities outlined in the Paraguay 2030 *National Development Plan* and the *Plan de Gobierno 2018-2023*. The Government enacted the 2017 Climate Change Law to update its Nationally Determined Contribution plan (NDP) in 2017. This plan included 25 priority objectives across 25 sectors for reducing greenhouse gas (GHG) emissions by 10% by 2030. The Government also extended the Zero Deforestation Law for ten years in 2020.

World Bank (WB) strategy. The PDO was aligned with the Country Partnership Framework (CPF) for 2019 - 2023. The CPF advocated the need for supporting the Government's emerging policy shift towards recognizing the adverse impacts of climate change factors. This operation specifically supported Focus Area



Two of the CPF of promoting environmentally sustainable and resilient growth. The Bank is currently preparing the new CPF for Paraguay.

Bank experience and current operation scope. The Bank had financed the First Economic Management Development Policy Loan in 2020 and several projects in the water sector. This current stand-alone operation, which contained first of its kind initiatives in Paraguay (discussed below), aimed to support an initial package of policy and institutional reforms for achieving a resilient development path. The Bank prepared this operation rapidly to respond to the Government's short-term budgetary needs in the wake of the COVID-19 pandemic, while sowing the need for a more comprehensive dialogue centered around climate change mitigation in the near future. Paraguay's macroeconomic outlook was deemed to be adequate for supporting a DPL operation.

b. Relevance of Prior Actions

Rationale

Pillar # 1. Mobilize private capital for climate resilience and mitigation. There were two prior actions (PA) under this pillar.

PA # 1. The Development Finance Agency (AFD) established a credit line in 2022 to finance energy efficient improvements including in the biomass energy sector, for incentivizing the small and medium-sized enterprises (SMEs) to reduce their GHG emissions.

Access to credit for SMEs was a binding constraint in Paraguay. This was particularly so for non-traditional areas such as adopting energy efficient and renewable biomass energy technologies, due to the unfamiliarity of financial institutions with such investments. This decree established a first-of-its kind US\$40 million credit at the AFD, a state-owned bank, to channel credit at market rates to SMEs investing in energy efficient technologies.

The analytical basis for this PA was sound and based on: (i) WB (forthcoming): *Comprehensive diagnostic on access to finance*. This work identified lack of credit as the fifth biggest challenge for SMEs in Paraguay; and (ii) Inter American Development Bank (2017): *Guide for the structuring of financial instruments for the promotion of energy efficiency: Case Study of the Financial Development Agency of Paraguay*. This study highlighted the constraints faced by SMEs in accessing credit for energy efficient investments.

The line of credit was expected to promote investments in energy efficient technologies and incentivize the SMEs to switch to renewable bio-mass energy technology. This PA addressed a binding challenge faced by SMEs in mobilizing capital for energy efficient technologies. This PA is necessary for the PDO of mobilizing capital for adapting energy efficient technologies. This PA is rated as satisfactory.

PA # 2. The superintendency of Banks issued resolutions to use standing timber as loan collateral in 2022 by establishing: (a) rules for the accreditation of professional valuers of the right to use standing timber; and (b) related technical valuation requirements, to facilitate lending to plantation forestry businesses. The resolutions were published on the Central Bank of Paraguay's (BCP) website.

The plantation forestry sector in Paraguay was underdeveloped due to competition from cheap and mostly illegal timber, unsustainable exploitation of forests, inadequate regulatory environment and weak access to finance. The resolution addressed the regulatory framework for the sector by enabling financial institutions to



use standing timber as collateral. The analytical underpinning of this prior action was based on the WB's 2020: *A Forests Worth: Policy Options for a sustainable and inclusive forestry economy in Paraguay*.

Given the forestry sector's potential for sustaining economic development, this PA action was necessary for the PDO. The PA besides helping in mobilizing capital, would help in decoupling land ownership from forestry operations. This PA is rated as satisfactory.

Pillar # 2. Promote Climate Resilience and Mitigation in select sectors of the economy (Water and sanitation sector, digital financial services, and the forestry sector). There were three prior actions in this pillar.

PA # 3. The Government, through its Executive Branch, issued a decree in 2022 for reforming the subsidy regime for water and sanitation service providers in 2022, by eliminating unsustainable water subsidies and encouraging a higher number of connections per water and sanitation system to increase climate resilience and generate economies of scale among the rural and peri-urban water and sanitation service providers.

The water sector in Paraguay was inefficient, with limited service coverage and poor quality, due to the large number of small service providers in areas outside the capital, Asunción. The service provided by the subnational entities (the municipalities) was financially, technically and environmentally unsustainable and not resilient to climate variations. This affected water availability and quality. This decree aimed at better targeting of subsidies by water service providers, by tying the water subsidies to communities' socio-economic factors, geographical location, availability of water resources and vulnerability to climate change.

The analytical underpinning of this prior action was sound and based on the WB (2020): *Water and Sanitation Services in Paraguay. Analysis of institutional aspects, governance and public spending*. This WB's public expenditure review of Paraguay recommended measures for incentivizing the water and sanitation service providers to generate scale economies.

This PA was relatively weak as the decree did not have a regulation in place. Also, the water and sanitation sector in Paraguay was mostly externally financed, with different donors requiring different funding modalities in the sector. The PA fell short of including key requirements that were needed to achieve the PDO. The relevance of this PA is rated as Moderately Unsatisfactory.

PA # 4. To promote enhanced efficiency, effectiveness and security of transactions, the Government enacted a law for trust service providers to ensure that electronic transactions are as verifiable and legally-binding as paper-based transactions in 2021.

Despite advances in technology, most business and public sector financial transactions in Paraguay relied on paper-based verification and in-person verification of identification documents. Besides being time-consuming, inability to complete such transactions through digital means contributed to exclusion from digital economy for citizens, especially women. This prior action, in line with international best practices, sought to lay the regulatory framework for the Trust Service Providers (the companies that ensured the validity of electronic information through digital verification).

The analytical basis for this PA was robust and based on the: (i) WB (2021). *Paraguay: Payment Aspects of Financial Inclusion*. This work argued that uptake of digital financial services was limited in Paraguay, partly due to the underdeveloped legal and regulatory framework and recommended legislation to advance the digital economy. The digitization of financial transactions was expected to help ensure continuity of financial services



in the face of climate-related events and help in narrowing gender gaps in digital inclusion. This PA is rated as satisfactory.

PA # 5. To strengthen resilience to climate change and conserve natural ecosystems, the Government enacted a law that regulated fire use, management and control and prevention of wildfires in 2021.

Record temperatures and dry conditions led to over 3.56 million hectares (ha) of land (8.7% of the total land area in 2020) destroyed by forest fires. Intense dry spells also led to dry seasons in 2021. This was partly due to the lack of clarity over institutional responsibilities of the various agencies in the forest sector. This PA sought to put in place an institutional framework for regulating the use of fire in the agricultural sector.

The analytical underpinnings for this PA were based on: (i) WB (2021): *A Forest's Worth: Policy Option for a Sustainable and Inclusive Forest Economy in Paraguay*. This work noted that land use change leading to deforestation cost Paraguay between 0.4% and 3% of Gross Domestic Product (GDP) and that wildfires contributed to this dynamic. The work noted that the resulting losses besides affecting disproportionately the vulnerable population, hampered climate mitigation and adaptation; and (ii) United Nations Economic Program (2022); *Spreading like wildfire - The Rising Threat of Extraordinary Landscape fires*. This work argued that the economic cost of wildfires and the necessary response outweighed the costs of preventing fire.

This legislation would help in strengthening Paraguay's institutional infrastructure regarding wildfire policy and prevention of wildfires. However, the law did not advance in regard to the issuing permits (ICR, para 29). This PA is rated as moderately satisfactory.

Pillar # 3. Enhance Fiscal Transparency for Climate Action. There were two PAs under this pillar.

PA # 6. The Government, through the Ministry of Finance (MoF), mandated the annual publication of a fiscal risk report, to better identify, mitigate and anticipate fiscal risks, including those related to climate change in 2022.

In Paraguay, economic growth reversals were partly due to climate shocks, as demonstrated by the droughts in 2009, 2012 and 2019. Fiscal policy following such shocks traditionally tightened and responses to disasters were not based on an integrated risk-based finance strategy, but based on ad hoc measures. Despite the evidence of adverse climate events on macro-fiscal outcomes, the risks and potential impacts were not incorporated into the budgetary process. This PA mandated the Directorate of Macro-Fiscal Policy in the MoF to publish and disclose for the first time an annual Fiscal Report, to assess and quantify the impact of climate-related risks on fiscal operations.

The analytical basis for this PA was sound and included: (i) Pillar III of the *IMF's Fiscal Transparency Code* (2014) which stipulates that "governments should disclose, analyze and manage risks to public finances "including "specific risks", such as natural resources and environmental risks; and (ii) WB's *Public Expenditure Review* (2018) of Paraguay demonstrated that the impact of volatility on fiscal revenues can exacerbate downswings. This prior action filled a crucial gap in the country context. The relevance of this prior action is rated as satisfactory.

PA # 7. To better align the central government budget with climate change policy priorities, the Government through its Executive Branch, mandated the MOF: (a) to promote identification and measurement of public initiatives focused on climate change; and (b) identify public expenditures of the Ministry of Agriculture and Livestock related to climate adaptation and mitigation in 2022.



In its updated Nationally Determined Contribution (NDC), Paraguay recognized the need to quantify climate mitigation and adaptation expenditures as a necessary step to meet its climate targets, Climate budget tagging (a tool increasing used by governments to identify, measure and track spending related to climate change objectives) can help in better prioritization of public expenditures for climate policy.

The analytical underpinnings of this PA were sound and based on: (i) WB (2022): *Paraguay Climate Change Institutional Assessment (CCIA)*: This work identified the strengths and weaknesses of Paraguay's institutional framework for climate change actions. The assessment noted the lack of climate budget tagging as a key obstacle to budget planning; and (ii) WB (2021): *Climate Change Budget Tagging: A Review of International Experience*. This work identified the main benefits of climate budget tagging.

This prior action will help in allowing the government to progress on quantifying public climate change expenditures as stipulated in the latest NDC update and help in transparency of public spending in matters relating to climate change. This prior action is rated as satisfactory.

Overall, the PAs were mostly relevant for achieving the PDO. With the exception of PA # 3, all the PAs had an explicit results chain linked to the respective PDO and were grounded in credible analytical work. One shortcoming of the prior actions is that for the most part they would likely help in realizing the intended outcomes in the medium term and not in the Operation's duration of under two years. Given this, the relevance of design is rated as Satisfactory.

Rating

Satisfactory

4. Relevance of Results Indicators

Rationale

Pillar # 1. Mobilize private capital for climate resilience and mitigation. There were two results indicators (RIs) under this pillar.

RI # 1. Projected direct GHG emission reductions enabled by the loans disbursed through the energy efficiency line of credit.

The indicator monitored the GHG emissions reduced through the newly established line of credit. There was a mismatch between the PDO and the RI. Although the PDO aimed to mobilize private capital for climate resilience, the RI sought to monitor reductions in GHG emissions. Further, the RI and methodology for calculating GHG emissions were not clearly specified in the Program Document. Therefore, the relevance of this RI is rated as moderately unsatisfactory.

RI # 2. Credits issued by financial institutions to forest plantation operators using as loan collateral the real right to standing timber.

Although the RI was pertinent, the relevance of this indicator for monitoring impact of the policy change was limited as there was no quantitative target for this indicator. The indicator only peripherally measures



the impact of the PA with the binary measure (Yes or No). Therefore, the indicator is rated as unsatisfactory.

Pillar # 2. Promote Climate Resilience in select sectors of the economy (Water and sanitation Sector, digital financial services and the forestry sector). There were three results indicators (RIs) under this pillar.

RI # 3. Average number of water and sanitation customers per new service provider established.

The relevance of this RI is limited, since the regulations required to implement the decree were not issued. The water and sanitation providers (mainly funded by external donors) in the municipalities were not required to provide the information required for monitoring the outcomes. Further, the definition and calculation of RI # 3 and sources of data were not specified. Therefore, it was not possible to monitor progress towards achieving this indicator. Therefore, this RI is rated as Unsatisfactory.

RI # 4a. # of electronic signatures registered in the electronic signature database of the Ministry of Industry and Commerce (MIC). RI 4b. # of electronic signatures held by women registered in the electronic signature database of the MIC.

These indicators were quantifiable. However, registration does not guarantee the use of e-signature. A more direct measure could have been an increase in the number of electronic transactions. These indicators are rated as moderately satisfactory.

RI # 5 a. The National Forestry Institute (INFONA) establishes an early warning system that allows the general public to report forest fires. RI # 5b. INFONA establishes a computerized administrative system to issue permits for prescribed burns.

The definition and calculation of RI # 5a were specified and sources of data were established at appraisal. However, RI # 5b, the indicator did not measure the use of the early warning system or to monitor and report the number of permits issued by the municipalities. The indicator is rated as Moderately Unsatisfactory.

Pillar # 3. Enhance Fiscal Transparency for Climate Action. There were two results indicators (RIs) under this pillar.

RI # 6. Number of fiscal risk assessments that include discussion of climate risks published on the MoF website.

This indicator could be verified. This indicator is rated as Satisfactory.

RI # 7. Share of the budgets of the Ministry of Agriculture and Livestock (MAG), Ministry of Industry and Commerce (MIC), Ministry of Environment and Sustainable Development (MADES), the National Forestry Institute, the Ministry of Public Works and Communication (MOPC) and the National Emergency Secretariat screened for initiatives focused on climate change.

This indicator could be verified. However, the indicator only measured the percentage of budgets screened for climate change related initiatives. It did not measure how many of the screened budgets actually included such initiatives and executed them and also, the RI did not measure the result of PA 7b,



which required identifying MAG's public expenditure to climate related initiatives. This indicator is rated as moderately satisfactory.

Overall, although the results framework was simple, it had significant limitations. Several RIS were limited to a yes/no target that provided little insight into impact. For instance, RI # 5 measured the establishment of an early warning system. However, it did not attempt to measure the number of times the general public had utilized the system to report fires. Some indicators were difficult to quantify without more technical follow up to quantify data (For example, RI # 1). RI # 3 could not be measured since the subnational agencies were not required to provide the data. Other indicators did not specify monitoring responsibilities. Overall, the relevance of results indicators is rated as moderately unsatisfactory.

Table. Results Indicators

RIs	Associated PAs	RI Relevance	Baseline (units and dates)	Target (units and dates)	Actual value as of target date	Actual change in RI relative to targeted change	Most recent value available relative to targeted change	RI achievement rating
PDO 1. Mobilize private capital for climate resilience and mitigation								
RI # 1. Projected direct GHG emission reduction by the loans disbursed through the energy efficiency line of credit	PA # 1	MU	Year (2022): 0	Target (2023): 3,075 tons of carbon dioxide emissions	Year (2023): 18.4 tons	Year (2024): 18.4 tons	Less than 25% of targeted change	Negligible
RI # 2. Credits issued by financial institutions to forest plantation using as loan collateral the real right to standing timber	PA # 2	U	Year (2022): No	Year (2023): Yes	Year (2023): NA	Year (2024): NA	NA	Negligible
PDO 2. Promote climate resilience and mitigation in select sectors of the economy								
RI # 3. Average # of water and sanitation customers per new service provider established	PA # 3	U	Year (2022): Less than 200	Year (2023): 500	Year (2023): NA	Year (2024): NA	NA	Negligible
RI # 4a. # of electronic signatures registered in the database of the MIC. RI # 4b. # of	PA # 4a and 4b	MS	Year (2021): 4a: 40,586	Year (2023): 4a: 1,500,000.	4a: 179,910.	4a: 179,910.	4a: Less than 25% of the	4a and 4b: Negligible.



electronic signatures held by women registered in the electronic database of the MIC			4b: 18,168	4b: 500,000	4b: NA by gender	4b: NA by gender	targeted change. 4b: NA by gender	
RI # 5a. INFONA establishes an early warning system that allows the public to report forest fires. R1 # 5b. INFONA establishes a computerized administrative system to issue permits forest fires	PA # 5a and 5b	MU	5a and 5b: No	5a and 5B: (2023): Yes	5a: (2023): Yes. 5b (2023): No	5a (2023): Yes. 5b: No	5a: Yes 5b: No	5a: Modest. 5b: Negligible
PDO 3. Enhance fiscal transparency for climate action								
RI # 6. # of fiscal risk assessments that include discussion of climate risks published on the MoF website	PA # 6	S	Baseline (2023): No.	Target (2023): 2	(2023): 1	(2024): 1	50% of the targeted change	Modest
RI # 7. Share of the budget of MAG, MIC, MADES, INFONA, MOPC and the National Emergency Secretariat screened for initiatives focused on climate change	PA # 7	MS	Baseline (Dec 2021): 0%	Target (2023): 100%	(2023): 100%	(2024): 100%	100% of the targeted change	Substantial

Rating

Moderately Unsatisfactory

5. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Mobilize private capital for climate resilience and mitigation.
 PA # 1 - 2 (a and b). RI # 1-2.

Rationale



Theory of change. Reforms in this area aimed at mobilizing private capital for climate change mitigation. Establishing a line of credit for SMEs wanting to invest in energy efficient technologies, were likely to help in mobilizing private capital for climate resilience and mitigation. Reforms aimed at enabling the financial institutions to use standing timber as collateral, were likely to mobilize private capital for forestry operations. These reforms are likely to help Paraguay's resiliency to climate change. One crucial assumption underlying the theory of change, which proved to be unrealistic in the face of realities on the ground, is that the reforms are effectively enforced.

Intermediate outcomes.

- The Development Finance Agency (AFD) operationalized the energy efficient financing product as targeted and certified professionals in energy efficiency. However, disbursements from the product were delayed due to the stringent loan prerequisites.
- The BCP issued resolution to the forest plantation operators indicating the real right to use standing timber as collateral for accessing credit from financial institutions as targeted.

Outcomes.

There were two intended outcomes. One, the projected direct GHG emissions enabled by the loans disbursed through the energy efficiency line of credit. Two, credits issued by financial institutions to forest plantation operators using the real right to standing timber as loan collateral.

- 18.4 tons of GHG emissions were reduced through the efficiency line of credit, far short of the specified target of 3,075 tons of emissions.
- There was no credible evidence that forest plantation owners used standing timber as collateral for borrowing from financial institutions. The ICR (page 12) noted that the financial institutions still required traditional collateral such as land rights or assets for extending credit to forest plantation owners.

Efficacy of this PDO is rated as Unsatisfactory in view of the limited outcome.

Rating

Unsatisfactory

OBJECTIVE 2

Objective

Promote climate resilience and mitigation in select sectors of the economy.
PA # 3 - 5. RI # 3, 4 (a and b). 5 (a and b).

Rationale

Theory of change. Reforms in this area aimed at promoting climate resilience in selected sectors of the economy (water and sanitation, digital financial services and the forestry sector). Reforms aimed at eliminating unsustainable water subsidies and encouraging a higher number of connections for water and sanitation sector, legislation to ensure that electronic transactions are legally binding as paper-based



transactions, legislation aimed at addressing the regulatory framework for fire use, management and control and prevention of wildfires in the forestry sector, are likely to help in promoting climate resilience and mitigation in the selected sectors. The theory of changes makes a critical assumption. The water and sanitation providers in the municipalities are willing to provide the information for monitoring the outcome.

Intermediate Outcomes.

Water and Sanitation Sector. The regulations required to implement the decree were not adopted, The independent water and sanitation sector providers were not required to provide the information for monitoring the outcome.

Digital financial services Sector. The Government enacted legislation for trust service providers to ensure that electronic transactions are as verifiable and legally binding as paper-based transactions.

Forestry sector. INFONA established an early warning system that allowed the general public to report forest fires as targeted.

Outcomes. There was three intended outcomes. One, increase in the number of connections provided by the water and sanitation service providers. Two, increase in the # of electronic signature database of MIC (disaggregated by gender). Three, INFONA establishes an early warning system and a computerized administrative system to issue permits for prescribed burns.

Water and Sanitation sector. At the baseline, water and sanitation service providers in municipalities were providing connections to less than 200 customers. The intended target was that the providers would serve 500 customers. Information to evaluate progress towards the targets was not available as the service providers in the municipalities were not subject to reporting requirements. The results for this RI is rated as negligible.

Digital Financial Services sector. At the baseline, 40,586 electronic signatures (including 18,168 by women) were registered in the electronic signature database of the MIC. When the operation closed, there were 179,910 electronic signatures, not meeting the target of 1,000,000 signatures. The data was not disaggregated by gender when the operation closed. The results of this indicator is rated as negligible.

Forest sector. The general public had access to a Fire Monitoring System that reported forest fires by region, land use and daily and a web site to submit forest fire reports by the regions. However, INFONA did not establish a computerized system to issue permits for prescribed burns. This indicator is rated as modest.

Overall efficacy of this PDO is rated as Unsatisfactory.

Rating

Unsatisfactory

OBJECTIVE 3

Objective

Enhance fiscal transparency for climate actions.



PA # 6 - 7 (a and b).

RI # 6 - 7.

Rationale

Theory of change. Reforms in this area aimed at enhancing fiscal transparency for climate actions. Reforms aimed at annual publication of a fiscal risk report (including climate-related risks) and mandating the Ministry of Finance to promote measurement of public spending initiatives focused on climate change and mandating the Ministry of Agriculture and Livestock to identify public expenditures related to climate information, were likely to help in enhancing the fiscal transparency for climate actions. The intended outcomes of these reforms are likely to help in the long-term development outcome of enhancing the Government's capacity to integrate climate-related risk in the budgetary process.

Intermediate Outcomes.

- The Ministry of Finance mandated the annual publication of a fiscal risk report, including climate related risks related to fiscal operations.
- The Government presented the report that included the methodology to identify and measure initiatives focused on climate change as targeted.

Outcomes.

There were to be two intended outcomes.

- One annual fiscal risk report was published by the Ministry of Finance, short of the target of two.
- The Government implemented the methodology to identify and measure initiatives focused on climate change for the following units: The Ministry of Agriculture and Livestock, the Ministry of Industry and Commerce, the Ministry of Environment and Sustainable Development, the National Forestry Institute, the Ministry of Public Works and Communications and the National Emergency Secretariat. The report was completed in 2023. With WB's technical assistance, the Government implemented the methodology in the 2022 budget for the units listed above. The report with the methodology was published in the Ministry of Finance website. The 2025 Budget Law included climate change oriented budget items.

Efficacy of this PDO is rated as moderately satisfactory, given the extent to which the intended outcomes were realized.

Rating

Moderately Satisfactory

Overall Achievement of Objectives (Efficacy)

Rationale



The efficacy rating for PDO # 1 and 2 is Unsatisfactory and for pillar/PDO # 3, moderately satisfactory. With these ratings, overall efficacy is Moderately Unsatisfactory.

Overall Efficacy Rating

Moderately Unsatisfactory

6. Outcome

Rationale

Given that depletion of the natural resource endowments of Paraguay due to climate change factors, the operation's objective were relevant to tackling country-specific constraints identified in robust analytical work. The PAs were for the most part necessary, although not sufficient by themselves to reach the PDOs. Overall efficacy is rated as Moderately Unsatisfactory, in view of the limited achievements. Outcome is rated as Moderately Unsatisfactory.

a. Rating

Moderately Unsatisfactory

7. Risk to Development Outcome

Macroeconomic risk. There is limited macroeconomic risk as Paraguay has traditionally followed prudent macroeconomic policies.

Government ownership/Commitment. There is limited risk of policy reversals that the Government would backtrack on its emerging proactive stance towards addressing the impacts of climate change. The ICR (para 52) notes that there has been no change in direction with the new government following the Presidential elections in April 2023 and there has been continuity in government programs regarding addressing Paraguay's vulnerability to climate change.

Institutional risk. There is risk that that follow up of some PAs may be undermined by inadequate budgetary allocations to the Ministry of Environment and Sustainable Development (MADES) and the National Forestry Institute (INFONA).

8. Assessment of Bank Performance

a. Bank Performance – Design

Rationale



The Bank prepared this project based on the lessons from the previously Bank-financed DPL. Lessons incorporated included: (i) recognizing the need for coordinating with other Multilateral Development Partners for building complementarities and avoiding duplication; and (ii) incorporating technical assistance (TA) activities for developing several prior actions for managing shortcomings in institutional capacity. The analytical underpinnings of the PAs were sound.

The preparation team identified several risks at appraisal including substantial risks with political and governance, institutional capacity for implementation and sustainability, sector strategies and policies and technical design. Even with mitigation measures, the overall risk was substantial (PD. para 81).

There were significant shortcomings at Quality-at-Entry. One, the Bank prepared this operation in a relatively short span of time to address the short-term budgetary needs. It is not clear if the preparation process clearly addressed the lessons of experience as summarized in the Bank's Paraguay's CPF. The CPF highlighted the need for implementing regulations of relevant laws rather than submission or approval of new laws as prior actions in a programmatic series. Two, while the design indicated the need for TA given the limited implementation capacity, it is not clear if there was adequate TA. Three, the DPL was ambitious and dispersed among several sectors. This required implementation by several executing agencies with weak capacities and required WB team members from different sector practice groups. This contributed to problems of coordination. Four, there were problems with the results indicators, with the methodologies for several indicators not clearly specified. and Five, while the prior actions were grounded in robust analytical work, they would have taken a longer term to show results.

Rating

Moderately Unsatisfactory

b. Bank Performance – Implementation

Rationale

The project design which required team members from different sector practice groups, created coordination problems. It is not clear if the Bank made adequate arrangements for technical assistance during implementation of this operation. The ICR provides little information about the continuity of leadership on the part of the Bank and little information for IEG to assess Bank performance during implementation.

Rating

Moderately Unsatisfactory

c. Overall Bank Performance

Rationale



Overall Bank performance is rated as Moderately Unsatisfactory.

Overall Bank Performance Rating

Moderately Unsatisfactory

9. Other Impacts

a. Social and Poverty

The policies supported by the DPL - increased access to credit (pillar one) and measures to strengthen the management of the effects of climate change in selected sectors of the economy (pillar two) - were likely to have a positive social impact in the medium run. The policies supported by Pillar three (fiscal measures), were likely to have positive social impact, as the poor and vulnerable are disproportionately affected by climatic-related shocks such as droughts.

b. Environmental

The policies supported by this DPL were expected to have broadly positive impacts on the environment and natural resources sector.

c. Gender

One of the prior actions of this operation (PA4) specifically had a gender dimension.

d. Other

Not applicable.

10. Quality of ICR

Rationale

The ICR is concise and adheres to the recommended page length. The theory of change provided in the text articulates the causal links between the prior actions, results indicators and intended outcomes. The ICR candidly discusses the challenges encountered while implementing this operation and draws good lessons from



the experience of implementing this operation. The evidence provided in the text is adequate for assessing outcomes.

Given that many of the outcomes were not realized due to underlying assumptions, the ICR could have benefitted by explicitly stating the critical assumptions underlying the theory of change. The ICR could have provided more information about bank performance during supervision.

a. Rating

Substantial

11. Ratings

Ratings	ICR	IEG	Reason for Disagreement/Comments
Outcome	Moderately Unsatisfactory	Moderately Unsatisfactory	
Bank Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	
Relevance of Results Indicators	---	Moderately Unsatisfactory	
Quality of ICR	---	Substantial	

12. Lessons

The ICR draws the following lessons from the experience of implementing this operation and Paraguay First Economic Management Development Policy Loan, with some adaptation of language.

1. Focusing on critical implementing regulations is as important as submission of new laws in stand-alone DPLs. In this operation, although the government enacted legislation for removing unsustainable subsidies in the water sector, regulations were not issued. This made it difficult to enforce the law that was enacted.

2. Continuous technical assistance during implementation is particularly required in countries with limited capacities. Although the program design had identified several areas where the Bank was providing technical assistance, these were not directly linked to implementation of PAs under the DPL. The lesson for this operation is that secured source of funding for technical assistance may raise the potential for success of DPL operations.

3. In low-capacity environments, continuity on the part of the Bank team may raise the potential for success. This DPL included prior actions that spanned the financial sector, public sector management, water and sanitation sector and natural resource management sector. As a result, the Bank team comprised of different World Bank team members, under the coordination of a task management. Lack of continuity on the part of the Bank team resulted in little continuity in supervision and progress monitoring.



13. Project Performance Assessment Report (PPAR) Recommended?

No