The World Bank

Second Panama Disaster Risk Management Development Policy Loan with a CAT DDO (P174191)

Program Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 24-Jan-2022 | Report No: PIDA31744

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Panama	P174191	Second Panama Disaster Risk Management Development Policy Loan with a CAT DDO (P174191)	
Region	Estimated Board Date	Practice Area (Lead)	Financing Instrument
LATIN AMERICA AND CARIBBEAN	09-Mar-2022	Urban, Resilience and Land	Development Policy Financing
Borrower(s)	Implementing Agency		
Republic of Panama	Ministry of Economy and Finance		

Proposed Development Objective(s)

The PDO is to enhance the Government of Panama's technical and institutional capacity to manage the disaster risk resulting from the occurrence of natural and health-related hazards, including the adverse effects of climate change and disease outbreaks.

Financing (in US\$, Millions)

World Bank Lending

SUMMARY

Total Financing

Decision

The review did authorize the team to appraise and negotiate

100.00

100.00

B. Introduction and Context

Country Context

- 1. **Despite being classified as an upper middle-income economy, Panama's institutional development and social outcomes are comparable to those of countries with lower levels of income.** Notwithstanding robust economic growth, Panama's progress toward reducing inequality has been slower than in other countries in the region and remains a major challenge. While the poverty headcount (at US\$ 5.5/day, PPP 2017) stood at approximately 12.1 percent in 2019; rural poverty surpassed 30 percent; poverty among Indigenous People (IPs) surpassed 44 percent; and the Femininity Index¹ for poor households in 2019 was 129.3. Education and health outcomes also lag with respect to other middle-income countries. Panama's Human Capital Index (HCI)² is 0.50, lower than that of middle-income countries such as Colombia (0.60), Peru (0.61), and Ecuador (0.59). The strength of Panama's institutions is also below that of countries with similar levels of income, ranking in the bottom 25th percentile for political institutions sub-indices (fundamental rights of and access to power of different social groups) and public sector institutions (regulatory enforcement, regulatory governance, regulatory quality, government effectiveness).
- 2. The country's high level of socioeconomic vulnerabilities and exposure to multiple natural hazards and extreme climate events pose an increasing development challenge with disproportionate impacts on the poor. Panama is at high risk of exposure to earthquakes, tsunamis and epidemics.³ Panama has been the most affected country by the COVID-19 pandemic in LAC, reaching a peak of 830 new cases per million inhabitants by early January 2021. Moreover, according to the analytical tool ThinkHazard, ⁴ climate-related hazards such as wildfires, landslides and urban, riverine and coastal floods are classified high for the country, with present hazard levels likely to increase in the future due to the effects of climate change. For instance, modeled projections of the future climate identify a likely increase in temperature and greater variance in rainfall. In areas already affected by wildfire hazard, the fire season is likely to increase in duration due to longer periods without rain during fire seasons. These catastrophic events have a disproportionate impact on the poor and other vulnerable groups that have a limited capacity to cope with the loss of housing, access to basic services and livelihoods.
- 3. Panama's geographic location along the tropical belt of the Western Hemisphere exposes it to the increasing frequency and intensity of multi-hazard and climate-induced events, including ENSO (both *El Niño and La Niña* phase) episodes, which affect the Caribbean and Central American regions. The ENSO event during the 2015-2016 dry season caused major economic losses, estimated at US\$72 million in the agriculture sector⁵ and US\$40 million in Panama Canal revenues.⁶ In the first half of 2019, the impacts from an El Niño-triggered drought led to economic losses estimated at US\$15 million in Canal revenues, as well as a significant loss of crops and an alarming decline in fresh water.⁷ In 2020, despite Hurricane Eta not making a landfall in Panama, the country was severely impacted by the storm, with heavy rains, floods and landslides resulting in 17 deaths, 62 missing people, 3,332 affected people by losses or displacement, 999 homes damaged or destroyed and US\$11 million in losses in the agriculture sector.⁸ In addition, flood events are predicted to increase in the Tocumen River Basin in Panama City as a result of the combination of increased rainfall intensity and increased sea level rises caused by climate change.⁹

¹ This index, published by the Gender Equality Observatory of Latin America and the Caribbean, measures disparities in the incidence of poverty (extreme poverty) between women and men. A value greater than 100 indicates that poverty (indigence) affects women to a greater degree than men; a value less than 100, the opposite situation. https://oig.cepal.org/es/indicadores/indica-feminidad-hogares-pobres

² The index measures the amount of human capital that a child born today can expect to attain by age 18, given the risks of poor health and poor

Relationship to CPF

4. This second Development Policy Loan (DPL) with a Catastrophe Deferred Drawdown Option (Cat DDO) operation is fully consistent with the twin goals and with the Panama Country Partnership Framework (CPF) for FY2015—FY2021 (Report No. 93425-PA), discussed by the Executive Directors on April 7, 2015. The main objective of the CPF is to support the government's efforts to maintain high and inclusive growth, in line with the government's program and with the priority areas identified in the Systematic Country Diagnostic (SCD). The operation supports, in particular, the CPF's Pillar 3: Bolstering Resilience and Sustainability, by strengthening the government's capacity to adapt fiscal and policy management quickly and flexibly to respond to disasters, within the framework of a comprehensive strategy for risk management. Acknowledging the government's measurable progress on fiscal management with the adoption of the Fiscal and Social Responsibility Law, the CPF highlights the importance of mainstreaming risk management into public policy and the active protection of critical infrastructure and services.

C. Proposed Development Objective(s)

5. The Program Development Objective (PDO) is to enhance the Government of Panama's technical and institutional capacity to manage the disaster risk resulting from the occurrence of natural and health-related hazards, including the adverse effects of climate change and disease outbreaks. This objective will be achieved through strategic support to policy, regulatory and institutional reforms implemented by the government in furtherance of its Disaster Risk Management (DRM) program. The operation builds on the successful implementation and achievements of the first DPL with a Cat DDO and reflects the ongoing policy dialogue and collaboration between the Bank and the Government of Panama on DRM and climate change adaptation. The proposed operation is fully aligned with the government's DRM program and its efforts to strengthen identified institutional, financial and policy gaps. It is also closely aligned with the priorities under the Government Strategic Plan (PEG) 2019-2024. Structured around three policy areas, the operation supports strategic interventions aimed at integrating climate, natural hazard and gender-responsive climate risk reduction considerations into the government's investment planning processes.

education that prevail in the country where she lives.

³ INFORM. 2021. INFORM Risk (database). https://drmkc.jrc.ec.europa.eu/inform-index

⁴ A tool of the Global Facility for Disaster Reduction and Recovery (GFDRR). https://thinkhazard.org/en/report/191-panama

⁵ FAO. 2018. Panamá albergará datos agroclimáticos regionales para enfrentar la sequía. http://www.fao.org/panama/noticias/detail-events/es/c/1145277/#:~:text=En%20Panam%C3%A1%2C%20en%20los%20dos,)%2C%20seg%C3%BAn%20las%20autoridades%20agropecuarias.

⁶ Rodríguez, M. 2019. El Canal de Panamá perderá millones de dólares en ingresos por la sequía. ALnavío, April 3.

https://alnavio.es/noticia/18099/economia/el-canal-de-panama-perdera-millones-de-dolares-en-ingresos-por-la-sequia.html.

⁷ UNDP. 2019. *Garantizar la seguridad hídrica y enfrentar la crisis climática: retos para que Panamá avance en equidad y desarrollo.* https://www.pa.undp.org/content/panama/es/home/presscenter/articles/2019/alianzas-publico-privadas-para-garantizar-la-seguridad-hidrica-y.html.

⁸ IFRC. 2020. Panama: Hurricane Eta. https://reliefweb.int/report/panama/panama-hurricane-eta-dref-operation-n-mdrpa013
⁹World Bank. 2020. Flood Risk and Coastal Assessment of the Tocumen River in Panama City. Washington, D.C.

¹⁰ Koehler-Geib, Friederike (Fritzi), Kinnon Scott, Ayat Soliman, J. Humberto Lopez. 2015. Panama: Locking in Success. Systematic Country Diagnostic. Washington, DC: World Bank. License: Creative Commons Attribution CC BY 3.0 IGO (Report No. 97719). This report identified five priority areas: (a) infrastructure with a focus on energy; (b) education and skills; (ci) public sector institutions; (d) Indigenous Peoples; and (e) water resources management. The report emphasizes that, in addition to the relevance of each of these areas for growth, inclusion and sustainability, it is important to also highlight the complementarities that exist across them.

¹¹ Ley de Responsabilidad Social y Fiscal of 5 June 2008, published in the Official Gazette (Gaceta Oficial Digital) No. 26056 on 6 June 2008.

Key Results

- 6. The operation addresses the following policy areas:
- **Policy Area 1.** Strengthening the institutional framework for management and response to the impact of climate and disaster risk in a post-COVID context.
- Policy Area 2. Strengthening climate risk hazards identification and disaster risk assessment capabilities.
- Policy Area 3. Development of territorial responsibilities for disaster risk management.

D. Project Description

- 7. This operation will support policy reforms focused on DRM, climate change adaptation (CCA) and financial resilience to compound disaster risks. All Prior Actions will directly contribute to building climate resilience. Prior Action 1 will support the institutional framework for improving comprehensive disaster risk management as well as institutional capacities to respond to multi-hazard and climate events. Prior Action 2 aims at improving disaster health preparedness and response, particularly for diseases that can be exacerbated by climate change. Prior Action 3 will support operationalization of the recently created National Meteorological and Hydrological Service (NMHS) as an autonomous government agency tasked with improving the tracking, identification, forecasting and risk management of hydrometeorological climate events. Prior Action 4 will help to embed a prospective territorial approach into climate change vulnerability assessments through the promotion and incorporation of DRR/CCA considerations and resilience-building interventions into the design of subnational planning instruments.
- 8. The proposed operation provides a dedicated line of contingent financing to enable the government to quickly disburse funds upon the declaration of a qualified State of Emergency resulting from a natural catastrophe, including public health emergencies. The DPL with Cat DDO also allows borrowers to prepare for climate disasters and epidemics by securing access to financing before a disaster materializes and before funds from other sources (e.g., concessional funding, bilateral aid, reconstruction loans) are mobilized. By combining an important liquidity tool with the equally important component of DRM policy advice and dialogue, this operation will provide adequate resources and technical assistance to enhance the sustainability of reforms and support the achievement of program outcomes, thereby helping to break the vicious cycle of unresolved social and economic development gaps exacerbated by the impacts of recurring shocks.

E. Implementation

Institutional and Implementation Arrangements

- 9. The Ministry of Economy and Finance (MEF) will be the main counterpart agency and will share responsibility for implementation of the program with the Ministry of the Interior, Ministry of Health (MINSA), Ministry of the Environment and the National Civil Protection System (SINAPROC). The MEF will be responsible for coordinating actions across these and other ministries and agencies involved in the operation.
- 10. Throughout the drawdown period, the Bank will periodically monitor the satisfactory implementation of the DRM program. Such periodic monitoring may take place at a frequency consistent with the information needs of the Bank, but no less than every 12 months, and could be initiated by either the Bank or the Borrower. If at any time during the drawdown period the Bank concludes that the DRM program is not being implemented in a manner satisfactory to the Bank, the Bank would promptly advise the Borrower of the need for improvement and the suspension of eligibility for disbursement. A subsequent review would be necessary to confirm that the DRM program is once again being

implemented satisfactorily before any further drawdown requests can be submitted. Once the Bank is satisfied that drawdown conditions are again in place, the Bank would inform the Borrower that its eligibility to submit disbursement requests has been restored.

F. Poverty and Social Impacts, and Environmental, Forests, and Other Natural Resource Aspects

Poverty and Social Impacts

- 11. This proposed second DPL with Cat DDO is expected to have a positive effect on poverty reduction, as well as positive social and environmental impacts. Policies supported under this operation will contribute to poverty reduction by supporting the government's efforts to increase its fiscal space and strengthen its DRM framework to respond to natural catastrophes and health-related emergencies, while protecting ongoing programs aimed at improving the lives of vulnerable groups. Global experience has shown that catastrophic events have a disproportionate impact on the poor and other vulnerable groups that have a limited capacity to cope with the loss of housing, access to basic services and livelihoods. The policies supported under this operation are not expected to reduce poverty directly, but rather contribute to ensuring the sustainability of ongoing social protection programs for the poor in the event of a shock. Improvements in the national DRM and vulnerability reduction strategies are expected to benefit the poor by preventing increased poverty in the event of an adverse natural event that leads to damaged productive assets, job losses and disruption of public services.
- 12. Policies supported under this operation are expected to reduce vulnerability to natural hazards and health emergencies of indigenous populations and other vulnerable groups. Policy Area 1 will provide services such as simulation exercises, in coordination with Indigenous People's authorities and other relevant authorities, to better prepare at-risk populations to cope with specific natural and health-related hazards. Additionally, the institutional strengthening reforms under Policy Area 1 should help to shorten the interval between a disaster and response/recovery efforts, thereby reducing the prevalence of negative coping strategies by impoverished families. The reforms will also result in better access to information on the flow of disaster financing, helping to increase social accountability around this financing. Policy Area 2 will provide reliable hydromet and climate information and services to vulnerable populations, to enable them to better adopt measures for disaster preparedness and contingency planning. Lastly, Policy Area 3 will likely generate direct positive poverty and social impacts by improving the quality of provincial and municipal plans and ensuring that the specific disaster-related needs of poor and vulnerable communities are considered.

Environmental, Forests, and Other Natural Resource Aspects

13. The policy actions supported under this DPL with a Cat DDO are expected to have positive effects on the environment and natural resources, by providing the government with critical funding to implement measures that reduce environmental degradation in support of its DRM program. For example, the creation of the DRM Cabinet under PA 1 will allow the government to count on the right institutional setup to mainstream DRM and CCA within government programs and policies, including those related to environmental protection and sustainable development. The protocols to prepare and respond more effectively to different hazards under PA 2 will minimize the impacts of such hazards on the population and the environment. Further, the creation of the NMHS under PA 3 will provide critical climatic information to strengthen the country's early warning systems and inform a more efficient use of natural resources. Finally, the creation of the DDT under PA 4 will directly have positive environmental impacts at the local level by supporting local governments to develop risk informed territorial planning instruments.

- 14. Specifically, this operation directly supports efforts aimed at achieving the PEG's Comprehensive Disaster Risk Management Strategy Area's Priority Action 93, which seeks to "Prevent and reduce disaster risks"; and the Environment Strategic Area's Priority Action 92, which seeks to "Implement agreed upon strategic environment protection and climate change frameworks." The implementation of the Prior Actions and results will directly contribute to the following commitments established in the PEG:
 - Prevention and Management of (Natural) Disaster Risks: (a) Strengthen the institutions in charge of disaster management, so that they have the capacity to prevent and respond with the necessary speed, in order to avoid or reduce the loss of life; (b) Promote a plan for the prevention of natural disasters, in conjunction with Local Governments and educational authorities; (c). Review the Comprehensive Disaster Risk Management National Policy, in accordance with international policies and national reality; (d) Promote and support volunteering for the prevention and care of natural disasters; (e). The institutions in charge of civil protection will have the necessary support so that they can fulfill the tasks of prevention and emergency care.
 - Hydric Security: Develop plans and risk analysis to making basin comprehensive management investments and improvement of vulnerable areas, which links with the Cabinet working plan (PA1) and the implementation of the NMHS (PA3) and DDT (PA4). PA's will also contribute to: Study the alternatives of new water sources or improvement of the current ones, to be developed with the best practices in terms of social and environmental management, with the full participation of society (PA3).
 - Environment (Climate Change). Promote actions to combat Climate Change, including the enthusiastic promotion of clean energy and the protection of the country's natural forests. Consolidate an international policy around the conservation of the environment and biodiversity, as well as the fight against climate change at a global level.

G. Risks and Mitigation

15. **The overall risk of the operation is Moderate.** The most relevant risk to the achievement of the program's development objective is the macroeconomic risk due to the impacts of the ongoing COVID-19 pandemic. However, this risk is rated moderate given the improvement of the country's fiscal and debt situation.

CONTACT POINT

World Bank

Jose C. Joaquin Toro Landivar, Felipe Montoya Pino Lead Disaster Risk Management Specialist

Borrower/Client/Recipient

Republic of Panama Hector Alexander Minister halexander@mef.gob.pa

Hector Alexander

Minister

halexander@mef.gob.pa

Implementing Agencies

Ministry of Economy and Finance Hector Alexander Minister halexander@mef.gob.pa

FOR MORE INFORMATION CONTACT

The World Bank 1818 H Street, NW Washington, D.C. 20433

Telephone: (202) 473-1000

Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Jose C. Joaquin Toro Landivar, Felipe Montoya Pino
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Approved By

Country Director:	Oyebimpe Olufunmilayo Adepoju	13-Dec-2021
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