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BOLIVIA

DISASTER RISK MANAGEMENT PROGRAM II

(BO-L1107)

LOAN PROPOSAL

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4. Safeguards identification form
5. Project risk management (Excel table supporting the risk matrix)
6. Report on the Index of Governance and Public Policy in Disaster Risk Management (iGOPP) in Bolivia. IDB 2014
7. Regional iGOPP report. IDB 2014
8. iGOPP (methodology). Main technical document. IDB 2014
9. Seismic disaster risk profile for Bolivia. IDB 2014
10. Flood risk profile. IDB 2015
11. Assessment of damages and losses caused by climate events in Bolivia 2013-2014. Ministry of Development Planning 2014
12. Law 602 on Disaster Risk Management. 2014
13. Enabling regulations of Law 602 on Disaster Risk Management. 2015
14. Special report on risk management of extreme phenomena and disasters to promote adaptation to climate change. IPCC 2012
15. Disaster risk and risk management indicators for Bolivia. IDB 2014

ABBREVIATIONS

ACC	Adaptation to climate change
APMT	Autoridad Plurinacional de la Madre Tierra [Madre Tierra Plurinational Authority]
CONARADE	Consejo Nacional de Reducción de Riesgos y Atención de Emergencias [National Risk Reduction and Emergency Response Council]
DRM	Disaster risk management
ETAs	Entidades Territoriales Autónomas [autonomous subnational governments]
FORADE	Fondo para la Reducción de Riesgos y Atención de Desastres [Risk Reduction and Disaster Response Fund]
FPMT	Fondo Plurinacional de la Madre Tierra [Madre Tierra Plurinational Fund]
FSO	Fund for Special Operations
GDP	Gross domestic product
iGOPP	Index of Governance and Public Policy in Disaster Risk Management
IPCC	Intergovernmental Panel on Climate Change
ISDR	International Strategy for Disaster Reduction
MMAyA	Ministry of Environment and Water
MPD	Ministry of Development Planning
MTCC system	Sistema Plurinacional de Información y Monitoreo Integral de la Madre Tierra y Cambio Climático [Plurinational System for Comprehensive Monitoring and Information of Mother Earth and Climate Change]
PBP	Programmatic policy-based loan
SPIE	Sistema de Planificación Integral del Estado [comprehensive planning system of the State]
UIS	Update to the Institutional Strategy 2016–2020
VPC	Office of the Deputy Minister for Planning and Coordination
VIPFE	Office of the Deputy Minister for Public Investment and External Financing

PROJECT SUMMARY
BOLIVIA
DISASTER RISK MANAGEMENT PROGRAM II
(BO-L1107)

Financial Terms and Conditions

Borrower: Plurinational State of Bolivia

Executing agency: Ministry of Development Planning

Source	Amount (US$)	%
IDB (Ordinary Capital)	85,000,000	85
IBD (Fund for Special Operations - FSO)	15,000,000	15
Total	100,000,000	100

	Ordinary Capital	FSO
Amortization period:	30 years	40 years
Disbursement period:	12 months	12 months
Grace period:	6 years	40 years
Inspection and supervision fee:	[(a)]	N/A
Interest rate:	SCF-Fixed[(b)]	0.25%
Credit fee:	[(a)]	N/A
Currency:	U.S. dollars	U.S. dollars

Project at a Glance

Objective and description:

To improve the country's disaster risk management (DRM) governance and financial capacity by strengthening and modernizing the regulatory, institutional, and budgetary public policy framework for DRM. This operation is the second and final operation in a series of two programmatic policy-based loans (PBP).

Special contractual conditions:

The single disbursement of the Bank's loan proceeds will be contingent on the borrower's fulfillment of the policy reform commitments established in the Policy Matrix (Annex II) and the Policy Letter, in addition to the conditions established in the loan contract.

Exceptions to Bank policies: None.

Strategic Alignment

Challenges:[(c)]	SI ☑	PI ☑	EI ☐
Crosscutting themes:[(d)]	CC ☑	GD ☐	IC ☑

(a) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

(b) The borrower will pay interest on the outstanding balances of the Ordinary Capital portion of the loan at a LIBOR-based rate. Once the outstanding balance reaches 25% of the net amount approved or US$3 million, whichever is greater, the rate will be set for this balance.

(c) SI (social inclusion); PI (productivity and innovation); and EI (economic integration).

(d) CC (climate change and environmental sustainability); GD (gender equality and diversity); and IC (institutional capacity and rule of law).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problems addressed, and rationale

1. Introduction

1.1 The proposed program is the second and final operation in a series of two operations under the programmatic policy-based loan (PBP) modality aimed at supporting the Bolivian government in implementing a process of legal and institutional reforms intended to improve the country's governance and financial capacity for disaster risk management (DRM), by strengthening and modernizing the regulatory, institutional, and budgetary public policy framework for DRM, in line with Law 602 on Disaster Risk Management, and its enabling regulations, passed in April 2015 under the first operation in this series (3487/BL-BO). This programmatic series represents a core element in the Bank's agenda for promoting DRM in the country and is complemented with technical studies on risks financed through technical-cooperation projects,[1] IDB studies,[2] and an operation financed by the World Bank as part of the regulatory, institutional, and budgetary reform in DRM promoted by the Bolivian government. The World Bank operation contributed to the passage of Law 602, whose enabling regulations formed part of the commitments under the first PBP.

2. Macroeconomic context

1.2 Bolivia's economy has performed well, allowing it to reduce poverty levels. Growth averaged 5% annually between 2009 and 2014. The main source of growth has been capital accumulation, mainly public investment, which rose from US$629.2 million to US$4.519 billion between 2005 and 2014. This growth also led to an increase in household consumption. The favorable terms of trade over this period generated public revenue that, in addition to the aforementioned increase in public investment, made it possible for the nonfinancial public sector to run fiscal surpluses between 2006 and 2013. In 2014 and 2015, the fiscal deficit was 3.4% and 6.6%[3] of GDP. Total public debt fell from 40.4% of GDP in 2007 to 33.8% of GDP in 2015. The favorable terms of trade also enabled the external sector to post a surplus and generate a large increase in international reserves. The latter grew from US$2.205 billion to US$15.123 billion between 2005 and 2014. The exchange rate has not changed since November 2011 and inflationary pressure was contained by the Central Bank of Bolivia. In 2015, the inflation rate was 2.9%. As a result of the good macroeconomic performance and the public policies applied, moderate poverty was reduced from 60.6% to 45% and extreme poverty from 38.2% to 20.9% between 2005 and 2011. In the coming years the external context is expected to be less favorable due to the drop in oil prices, which will lead to lower oil revenues and slower economic growth. The shift to this new international scenario creates external and fiscal challenges that should be appropriately handled. However, Bolivia will continue

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1 ATN/JF-9349-RS, ATN/MD-13090-RG, ATN/MD-14209-RG, ATN/MD-14432-RG, ATN/MD-13414-RG, ATN/OC-14904-BO, and ATN/OC-15203-BO.

2 *The Economics of Natural Disasters: A Survey* (IDB; 2009); *Catastrophic Natural Disasters and Economic Growth* (IBD; 2010); *Foreign Aid in the Aftermath of Large Natural Disasters* (IDB; 2012).

3 The 2015 fiscal deficit figure was taken from the President's speech; there are still no official figures for the close of 2015.

to be one of the fastest growing countries in the region, with growth predictions for 2016 ranging from 3.5% to 5%. This first operation for US$100 million is equivalent to about 15% of the country's financing requirements from multilateral sources in 2016. In addition to lowering fiscal financing requirements, this programmatic series will help boost the State's financial capacity through a reduction in the need for resources, the savings obtained with the use of a more efficient mix of hedging instruments to address an emergency caused by a natural disaster, and the subsequent rehabilitation and reconstruction, and a reduction in disaster losses through the incorporation of risk management into the national public investment system (see section D, Economic evaluation).

3. Diagnostic assessment of the problem

1.3 According to the assessment conducted at the beginning of the programmatic series, Bolivia is one of the countries most heavily affected by natural disasters in the Andes region. In the period 1970-2015, Bolivia was hit by 66 disasters (IDB 2014) that caused 1,547 deaths and affected over 7.7 million people; 99.7% of whom were affected by hydroclimatic events (EMDAT 2015). The El Niño episodes in 1983-84 and 1997-98 stand out, with estimated losses equivalent to 15.3% and 6.3% of GDP, respectively. The 2007-08 La Niña caused losses amounting to 5.1% of GDP. More recently, the 2013-2014 floods affected more than 400,000 people, with the damage estimated at 1.3% of GDP (Bolivian government 2015). Disasters can reduce society's level of savings and, in turn, the amount of capital and product per person, and affect per capita income and long-term growth rates.[4] Apart from the impact of these economic losses on the most vulnerable population groups, the government is forced to redirect funds from public investments to respond to the emergencies. This widens the gap in access to infrastructure between the high- and low-income population, limiting access to basic services, creating obstacles for accessing markets that depend on the infrastructure, and increasing transaction costs. The intensive change in land use, particularly related to rapid urban growth, the building of infrastructure in risk areas, and the environmental degradation of watersheds contribute to the heightened physical exposure and vulnerability of the poorest members of the population, who often live in informal settlements located in areas exposed to natural disasters such as landslides and flooding.

1.4 According to the Seismic Disaster Risk Profile for Bolivia, the country could lose more than US$2.485 billion, equivalent to 3.1% of the exposed value of its infrastructure, in a low probability event with high consequences. The study's findings are considered conservative today because it is based on 2008 data and there has been an increase in exposed value since then as a result of the country's significant economic growth in recent years. Moreover, according to the Flood Risk Profile, the country could lose more than US$123 million to extreme events. This study is confined to two of the 270 major rivers in Bolivia (Rocha and Grande) and, in that regard, its results represent a fraction of the total losses that this threat could generate in the country as a whole. The historical data on the impact of hydroclimatic events cited in the previous paragraph reveal the true scale of the risks associated with such events. The Historical Analysis of Flooding, which has affected Bolivia more than any other type of

4 *Efectos de los desastres naturales sobre el crecimiento, el desempleo, la inflación y la distribución del ingreso: una evaluación de los casos de Colombia y México* (UN/ISDR 2011).

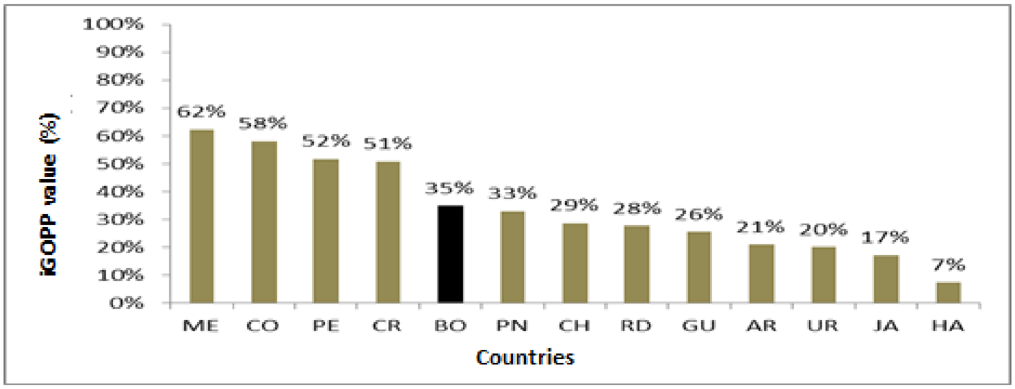
hydrometeorological event, shows that the greatest losses have been concentrated in the department of Santa Cruz. These losses could be reduced through the appropriate management of the new hydroelectric dams[5] that the government plans to build in the Grande River basin. According to the Economic Analysis of the First PBP (IDB 2015), the resource gap for responding to a catastrophic event amounts to US$3.691 billion. In such circumstances, the government of Bolivia would have to divert funds from development programs to cover those losses or obtain financing after the event. This would delay effective assistance for the affected population, resumption of basic services, and reactivation of economic activity. In addition, according to the Economic Evaluation conducted for this operation (paragraph 1.37), the Bolivian government could forgo income or suffer losses totaling US$5.363 billion by failing to appropriately implement DRM in the hydroelectric sector—where the principal investments of the country's new infrastructure portfolio are concentrated—thereby affecting the achievement of Bolivia's development goals.

1.5 In addition, according to the National Report of the Index of Governance and Public Policy in Disaster Risk Management (iGOPP[6]), prior to the reform process driven by the 2015 programmatic series, the governance conditions for DRM were incipient. Compared to other countries with a similar exposure to threats, the index showed a relatively lower score for Bolivia in 2014, indicating that there were opportunities for improvement. The iGOPP design is based on the understanding that disaster risk is essentially a development problem and, as a result, includes the verification of key aspects of risk governance such as the existence of a regulatory framework not only on disaster risk, but also on development planning, decentralization, land management, public investment, and oversight of public sector administration (IDB 2014). In this regard, iGOPP makes it possible to determine that Bolivia does not currently have regulations on measures to reinforce crucial public infrastructure, such as hospitals and schools; nor does it show evidence of the existence of sanctions for failing to comply with regulations on the design, construction, or location of public and private infrastructure (IDB 2014). Both of these regulatory elements are key to preventing the social construction of risk.

[5] The Plurinational State of Bolivia's 2025 Electricity Plan (Ministry of Hydrocarbons and Energy, 2014) aims to achieve full coverage by 2025 through hydroelectric projects whose surpluses will be earmarked for export. The Office of the Deputy Minister for Public Investment and External Financing (VIPFE) delivered the updated project portfolio through 2025 to the Bank during the January 2016 orientation mission. The portfolio includes 17 hydroelectric power plant projects requiring an investment of approximately US$23.544 billion over the next 10 years.

[6] The iGOPP measures whether a country has adequate legal, institutional, and budgetary conditions to implement a public DRM policy, based on a scale of 0% (minimum) to 100% (maximum). It was developed by the IDB in 2012-2014 and has been applied since then in 13 countries of the region. This index does not measure DRM performance, but rather whether a country has the governance necessary to implement a public policy on DRM.

Figure 1. Bolivia's iGOPP in the regional context (2013-2014)



4. Recent government advances in the sector and outstanding challenges

1.6 The approval of the enabling regulations of Law 602 under the first PBP laid the foundations for a modern regulatory framework for DRM that defines risk as a problem of poor development planning and assigns responsibilities for its administration to the development actors at all levels of government. This new regulatory framework provides for two ministries that are key for policy orientation and coordination: the Ministry of Development Planning (MPD), which focuses on prevention and mitigation and on ensuring that disaster risk is taken into account in planning by all government agencies, and the Ministry of Defense, which focuses more on preparedness and emergency response. The regulations under Law 602 allowed progress to be made in defining a series of quality attributes based on international good practices related to the regulatory framework for DRM and to the five corresponding public policies: (i) risk identification, (ii) risk reduction, (iii) response preparedness, (iv) post-disaster recovery planning, and (v) financial protection.[7] The problems identified at the start of the series, the progress achieved in each component through the Bank's support, and the outstanding challenges are:

1.7 **The DRM guiding framework.** This refers to: (i) the existence of an adequate regulatory foundation for organizing and coordinating DRM in each country, including specific DRM regulations and enabling rules at the subnational and sector levels to ensure they are viable; (ii) the availability of funding to implement DRM processes; and (iii) the establishment of effective mechanisms for citizen participation and information and for process monitoring, evaluation, and follow-up. Prior to the start of this reform, Bolivian planning lacked a legal framework to incorporate the DRM mandate into all the planning processes. There were also neither resources for disaster prevention and adaption to climate change (ACC), nor a mechanism to track public spending on DRM, which made it difficult to monitor this public policy. Although the coordination between DRM and AAC had an adequate regulatory framework under the Law 300 Madre Tierra [Mother Earth] Framework, the main strategic instruments for ACC had not been developed. The guiding framework scored 51% on the respective iGOPP subindex, with great room for improvement in terms of DRM planning, financing, and monitoring instruments.

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[7] The iGOPP is composed of six subindexes corresponding to these five public policies and the guiding framework.

1.8 Bolivia, with Bank support provided through the first operation (3487/BL-BO), issued the enabling regulations of Law 602, which it possible to: (i) control Risk Reduction and Disaster Response Fund (FORADE) financing of disaster prevention activities; (ii) define the DRM responsibilities of the ministries that sit on the National Risk Reduction and Emergency Response Council (CONARADE),[8] the main strategic coordination body for DRM; and (iii) establish the DRM evaluation responsibilities of the State's oversight agencies. The government also made headway with the draft law on the comprehensive planning system of the State (SPIE) that incorporates mandates for DRM within its area of responsibility.

1.9 The main outstanding challenges for the DRM guiding framework are: (i) authorizing resources to invest in DRM and ACC; (ii) creating economic incentives so that sectors and autonomous subnational governments (ETAs) can invest in DRM; (iii) passing a legal framework for comprehensive government planning that integrates DRM (SPIE law); (iv) defining monitoring mechanisms for investments in DRM and ACC; and (v) consolidating the coordination between the DRM and ACC policy frameworks.

1.10 **Risk identification.** Risk identification is the DRM public policy focused on risk analysis, in other words, the knowledge of the origins, causes, scope, frequency, and possible evolution of potentially dangerous phenomena, and of the location, causes, development, and resistance and recovery capacity of exposed socioeconomic elements, including infrastructure. Prior to the start of the reform, risk identification scored 45% on the iGOPP subindex. Among other shortcomings, Bolivia had failed to define institutional responsibilities for performing risk analyses or for providing advisory services for such analyses. Nor had the minimum content requirement been established for these analyses. No thought had been given to including information on risks and climate change in the State planning system, nor had critical infrastructure been defined, that is, any infrastructure considered critical to the functioning of a society, especially during a disaster.

1.11 Bolivia, with the Bank's support (first PBP), issued regulations under Law 602, which made it possible to define the responsibilities of ministries, ETAs, and public utility companies, and establish that risk studies should apply probabilistic methodologies. In addition, the government made progress in creating a regulatory framework to assign responsibilities for providing technical assistance and strategic guidelines for disaster risk analysis under the framework of the draft SPIE law.

1.12 The main outstanding risk identification challenges are: (i) integrating the information on risks and climate change into the State planning system, such that the possibility of dangerous natural events is taken into consideration in decisions on land use and development; (ii) designing the information and monitoring system for climate change so that studies of hydroclimatic risks include the effects of climate change; (iii) conducting probabilistic studies of the country's main threats to make it possible to define risk analysis methodologies; (iv) approving a regulatory framework that defines the key infrastructure in crucial sectors, so as to prioritize public investment in those sectors and services whose

[8] The following ministries sit on CONARADE: Development Planning; National Defense; Environment and Water; Public Works, Services, and Housing; Health; and Rural Development and Land.

operation is most critical during emergencies; and (v) approving a regulatory framework that assigns responsibilities for providing technical assistance and strategic guidelines to integrate disaster risk analysis into development planning.

1.13 **Risk reduction.** Risk reduction is the DRM public policy that focuses on minimizing vulnerabilities and risks in a society to avoid (prevent) or limit (mitigate) the adverse impact of threats, in the broad context of sustainable development. Prior to the start of this reform, risk reduction had a score of 34% on the iGOPP subindex. Among other shortcomings, Bolivia lacked specific budget programs for investing in risk reduction. Nor had the country established risk reduction responsibilities or standards for critical infrastructure at the sector, ETA, or public utility company levels. The country also lacked a mandate to include risk analysis in the different phases of public investment along with guidelines for its implementation.

1.14 Bolivia, with the Bank's support through the first PBP, issued regulations under Law 602 and included DRM in the preinvestment regulations, which allowed institutional responsibilities to be defined as well as the mandate to include DRM in public investment.

1.15 The main outstanding risk reduction challenges are: (i) the budget allocation for specific risk reduction programs; and (ii) the incorporation of DRM into the public investment system through the definition of acceptable risk standards and the drafting of preinvestment guides that integrate DRM and ACC for critical infrastructures and priority sectors. The Bolivian government prioritized the hydroelectric subsector based on the substantial public investment earmarked for that subsector over the coming years[9] and on the subsector's potential to reduce flood risk.

1.16 **Response preparedness.** The objective of this DRM public policy is planning, organizing, and testing procedures and protocols for society's response in the event of a disaster, ensuring effective and timely assistance for the people affected, and normalizing essential activities in the disaster area. Prior to the start of this reform, preparedness had a score of 34% on the iGOPP subindex. Among other shortcomings, in Bolivia there was no obligation to prepare emergency plans and conduct emergency drills to test them, or to carry out damage assessments or needs analyses to inform the emergency response activities. There were also no regulations on international disaster assistance, nor had mechanisms been established for citizen participation in emergencies.

1.17 Bolivia, with the Bank's support through the first operation, issued regulations under Law 602, which made it possible to mandate the preparation of emergency plans at the national and sector levels, the performance of drills, and the assessment of damages as a foundation for emergency response.

1.18 The main preparedness challenges are: (i) developing guidelines for formulating emergency plans; (ii) preparing sector emergency plans; (iii) controlling international disaster assistance; and (iv) activating mechanisms for citizen participation in emergencies.

1.19 **Recovery planning.** Recovery planning is the DRM public policy that focuses on preparedness for the rapid and effective reestablishment of acceptable and

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9 The project portfolio through 2025 includes 17 hydroelectric projects for an investment of US$23.544 billion.

sustainable living conditions, through the rehabilitation or reconstruction of infrastructure, goods, and services that have been destroyed, cut off, or deteriorated in the affected area, and reactivation of economic and social community development under lower risk conditions than before the disaster. This public policy presents a greater challenge in terms of developing a regulatory framework, as is also the case in the other countries of the region. Prior to the start of this reform, recovery planning had a score of 9% on the iGOPP subindex. There was no definition of sector and subnational responsibilities for the formulation of recovery plans seeking to reduce preexisting vulnerabilities; there was no obligation to update development plans after a disaster or for civil society to participate in the recovery. The maximum duration of the economic reactivation and reconstruction stages had also not been defined.

1.20 Even though in the first operation, the enabling regulations of Law 602 defined institutional responsibilities for disaster recovery, certain quality attributes for this DRM process remained an outstanding challenge, such as requiring development plans to be updated following a disaster, with a focus on avoiding the repetition of the preexisting risk conditions; establishing the maximum duration of the economic reactivation and reconstruction stages; or defining the interagency coordination mechanisms and guidelines for effectively implementing the regulatory mandates for recovery.

1.21 **Financial protection.** Financial protection is the public policy that seeks an optimum mix of financial mechanisms and instruments to contain and transfer risk in order to gain access to timely financial resources. This boosts disaster response capacity and cushions the impact on the government's fiscal balance. Prior to the start of this reform, financial protection scored 35% on the iGOPP subindex. The country had not determined the level of financial coverage needed to fund emergency spending or the most suitable financial instruments for providing that coverage (budget provisions, reserve funds, contingent credit lines, disaster insurance and bonds), nor had it developed policies for insuring public infrastructure.

1.22 Although institutional responsibilities and the main financial instruments were defined under the first operation, challenges remained in terms of leveraging resources for risk reduction and emergency response (paragraph 1.9) and determining the optimum mix of financial instruments for DRM based on probabilistic studies on losses.

5. Design of the operation and strategic alignment

1.23 The program seeks to promote a process of regulatory and institutional reform that comprehensively addresses the three types of DRM: (i) prospective management that seeks to avoid the creation of future risk; (ii) corrective management aimed at reducing existing risk; and (iii) reactive management that seeks to respond to emergencies, either because an imminent threat exists or because a risk has materialized.

1.24 With the first operation, institutional responsibilities for DRM and the main financial instruments for implementing the policy were defined and the DRM mandate was integrated into the public investment system mainly by approving the enabling regulations of Law 602 and the preinvestment regulations. Under the second operation, public policy on DRM will be implemented by, among others: (i) including DRM and ACC in comprehensive planning by the State and in public investment in key sectors; and (ii) funding the main financial instruments to implement DRM and ACC policies at the sector and subnational levels, among others. Although the current reform process driven by this programmatic series of two operations contributes significantly to the strengthening of regulatory, institutional, and budgetary conditions for effective implementation of DRM public policy, reform in some areas will remain outstanding challenges for the future, including: (i) the inclusion of DRM and ACC in public investment for sectors not considered in the context of the current reform; (ii) the formulation and implementation of emergency plans, operational continuity, and the National Recovery Plan (paragraph 1.32.d.); and (iii) the formulation and adoption of a strategy for the financial management of risk based on the studies performed in the context of this programmatic series (paragraph 1.32.e).

1.25 The program involves full application of the principles of the Bank's Disaster Risk Management Policy (OP-704) by proposing a proactive stance to reduce the toll of disasters with an emphasis on the measures taken before a hazard results in a disaster rather than on post-disaster response. This approach proposes comprehensively tackling risk through the following activities: risk analysis to identify the types and magnitude of potential impacts on development investments; risk reduction measures (prevention and mitigation) to address the sources of vulnerability; financial protection to spread financial risks over time and among different agents; preparedness to enhance a country's readiness to cope quickly and effectively with an emergency; and rehabilitation and reconstruction planning to support effective recovery and to safeguard against future disasters. Based on empirical evidence from similar reforms in Peru and Colombia, promoted through Bank operations and incorporating this comprehensive vision of the DRM components, reforms of this kind have significant impacts on governance for DRM, measured through the iGOPP. Peru improved its iGOPP score from 31% in 2011 to 52% in 2014, and Colombia, from 40% in 2010 to 56% in 2012. An analysis performed to evaluate the contribution of improved governance for DRM to reducing natural disaster risk in the case of Bogota shows that the conditions that favor DRM created by changes in national regulations have led to changes in regulations at the local level that have translated into effective disaster risk reduction actions with considerable economic benefits.

1.26 The program will take into account lessons learned during similar Bank-supported reforms in Peru and Colombia, including the importance of: (i) providing for predictable funding to implement DRM and ACC policies, which will be done through the allocation of funding for budget programs and specific funding for DRM and ACC; (ii) defining mechanisms to track public spending on DRM, by incorporating a DRM classifier into the public investment system; (iii) considering DRM to be an intrinsic part of development planning processes through its incorporation into the legal frameworks and development planning instruments, and the integration of risk and climate change information into decision-making platforms; (vi) promoting DRM as the main mechanism for ACC in the case of extreme climate events, through explicit coordination between DRM and ACC legal frameworks; (v) establishing institutional and financial agreements for recovery prior to a disaster by defining a strategic recovery framework; and (vi) comprehensively planning the financial management of disaster risk by defining the optimum mix of instruments for risk reduction, containment, and transfer based on probabilistic calculations.

1.27 **Strategic alignment with national priorities and the country strategy.** This operation is aligned with the National Economic and Social Development Plan 2016-2020 approved by the National Assembly in February 2016. As for synergy between DRM and ACC, the program is aligned with the opinion of the Intergovernmental Panel on Climate Change (IPCC) expressed in the Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (IPCC 2012), which recognizes that, for extreme events, the main way in which climate change reveals itself at the local level is in the form of risk. For this reason, and in accordance with that report, DRM activities in general are found to be ACC activities when the risk under consideration involves hydrometeorological or climate events. This is a fortunate situation for establishing a public policy on adaptation, since it means that in the past and in the present, when DRM actions have been or are being taken, they are ACC actions as well. The program is aligned with the Bank's strategy with Bolivia 2016-2012 (document GN-2843) insofar as it contributes to the strategic area of increasing economic diversification and productivity through the strategic objective of reducing vulnerability to natural disasters and climate change. It has been included in the Country Programming Document for 2016.

1.28 **Strategic alignment with the Update to the Institutional Strategy (UIS) 2010-2020 (document GN-2788-5), the Corporate Results Framework 2016-2019 (document GN-2727-4), and the Sustainable Infrastructure Sector Strategy.** This programmatic series is in line with the UIS and the development challenges of (i) productivity and innovation, and (ii) social inclusion and equality, and the crosscutting areas of (i) climate change and sustainability and (ii) institutional capacity and rule of law, through its contribution to the Country Development Results indicator: beneficiaries of improved management and sustainable use of natural capital. Lastly, the program is aligned with the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5) since it promotes better governance of critical infrastructure.

B. Objectives, components, and costs

1.29 The objective is to improve the country's DRM governance and financial capacity by strengthening and modernizing the regulatory, institutional, and budgetary public policy framework for DRM. The program will make it possible to establish a DRM system with an institutional structure that has clearly defined responsibilities for the different levels of government and ministries, and with preestablished financial resources for emergency prevention and response. The programmatic series will benefit: (i) the entire Bolivian population and, in particular, groups that are most vulnerable and exposed to natural threats, comprising an estimated two million people (World Bank 2014); and, ii) the principal entities in CONARADE (paragraph 3.1), which is the senior decision-making and coordination body and has a mandate to propose DRM policies and strategies. The Policy Matrix (Annex II) establishes the sequence of commitments for the program, many of which are supported by the Bank's technical-cooperation operations (paragraph 2.2), structured into the following components:

1.30 **Component 1. Macroeconomic stability.** The objective of this component is to ensure a macroeconomic environment consistent with the program's objectives, in accordance with the Policy Matrix.

1.31 **Component 2. Development of the guiding framework.** The objective of this component is to develop and strengthen the general governance framework for DRM. The main policy commitments in this component are: (i) establishing FORADE and the Madre Tierra Plurinational Fund (FPMT for ACC); (ii) creating economic incentives to implement DRM actions at the sector (ministries) and ETA levels; and (iii) passing the SPIE law. When the first operation of the programmatic series was designed, only the "preparation" of the draft SPIE law was planned. In view of the country's progress in processing the draft law, the commitment level was increased to "passing" the SPIE law; (ii) approving the Economic and Social Development Plan 2016-2020, including DRM criteria; (iii) incorporating DRM and ACC into the State Investment Information System classifier (SISIN-WEB); (iv) adopting at least one of the principal climate change planning instruments, incorporating DRM (Plurinational Climate Change Policy or the Third National Climate Change Communication); and (v) adapting the sector planning of a ministry that sits on CONARADE in the context of its DRM mandate.

1.32 **Component 3. Development of regulations, institutions, and sector and subnational management instruments.** This component complements the governance reforms by developing the following lines of intervention:

a. **Risk identification.** The objective of this line is to improve public policy conditions for risk identification. Its main policy commitments are: (i) approving the regulations to assign responsibility for providing technical assistance and guidelines for including risk analysis in development planning; (ii) incorporating DRM into the SPIE information system (INFO-SPIE). This is an additional commitment that was not included in the original design of the series. The enabling regulations of Law 602 on DRM established a clear mandate for taking into account information on risks as an input for State planning. With the passage of the SPIE law (paragraph 1.31), the government was able to make headway in implementing said mandate. The new commitment measures this progress; (iii) performing a probabilistic study on flooding that serves as a baseline for defining a risk analysis methodology; and (iv) approving a regulatory framework that identifies the critical infrastructure in the hydroelectric subsector. In addition, it would lay the foundations for the design of the Plurinational System for Comprehensive Monitoring and Information of Mother Earth and Climate Change (MTCC System), through the drafting of guidelines for the design. This is an additional commitment that will contribute to improved coordination between DRM and ACC and will be a valuable input for the design of the MTCC System, a crucial tool for ACC.

b. **Risk reduction.** The objective of this line is to improve public policy conditions for risk reduction. Its policy commitments are to: (i) allocate resources to key ministries and ETAs for risk reduction activities that can be verified through budget classification instruments. This is an additional commitment (not included in the original design) that makes it possible to measure budget support for public policy on risk reduction, a crucial area of progress. Under the enabling regulations of Law 602, the Bolivian government adopted new budget guidelines for 2016 that include risk management as a new budget item. Based on these guidelines, in the 2016 budget, resources have been allocated to risk reduction, which is a clear indication that this public policy is being implemented; (ii) identify acceptable risk benchmarks for two threats in the hydroelectric subsector; (iii) prepare the preinvestment guide for that subsector, incorporating DRM and ACC; and (iv) formulate guidelines to assist sectors and ETAs in preparing regulations to reduce the vulnerability of key infrastructure.

c. **Response preparedness.** The objective of this line is to improve public policy conditions for response preparedness. The policy commitments include: (i) approving the methodological guidelines for the formulation of contingency plans at the different ETA levels; (ii) formulating a protocol to govern mutual assistance in the event of disasters; (iii) activating a mechanism for civil society participation in responding to a declared emergency; and (iv) approving the Contingency Plan for the El Niño Southern Oscillation of the Ministry of Environment and Water (MMAyA).

d. **Recovery planning.** The objective of this line is to improve public policy conditions for recovery planning. The policy commitments include: (i) defining a strategic framework that establishes, among other things, the duration of the phase to restore livelihoods and infrastructure in the wake of a disaster, and a mechanism for civil society participation in the recovery. Originally the preparation of a National Recovery Plan had been envisaged, but the Bolivian government felt that a strategic framework should be generated first to guide key sectors in preparing the National Plan; (ii) approving regulations to govern the evaluation, review, or updating of ETA development plans and territorial plans in the wake of a disaster. Initially only the “preparation” of regulations was envisaged, but given the headway made by the government in passing the SPIE law, the level of commitment was increased to “approving” the regulations; and (iii) approving the strategic guidelines and methodology for updating post-disaster development plans such that the same vulnerability conditions are not reproduced.

e. **Financial protection.** The objective of this line is to improve public policy conditions for financial protection. The policy commitments include: (i) scaling of funding to cover the losses associated with catastrophic and recurrent events; and (ii) defining the optimum mix of instruments for risk reduction, containment, and transfer, based on the aforementioned scaling of losses, as an input for designing a comprehensive financial strategy for disaster risk. This commitment was originally part of Component II but has been transferred to Component III, Line 5, since it is one of the main inputs for formulating the comprehensive financial management strategy for risk.

1.33 A comparative matrix shows the commitments of the second PBP, adjusted in light of the approval of the enabling regulations of Law 602. The level of a number of commitments has been increased given the headway made by the Bolivian government, and additional policy commitments have been incorporated to propel forward the reform started under the first PBP, and minimal adjustments[10] have been made without altering the original objective (paragraph 1.29).

C. Key results indicators

1.34 The main expected impact of the programmatic series is to help improve the country's governance and financial capacity for DRM. Governance for DRM will be measured using the iGOPP (paragraph 1.5) for Bolivia compared with the 2014 baseline (iGOPP>35%). The number of beneficiaries of improved management and sustainable use of natural capital will be used as an impact indicator, since this is a disaster risk management program. The population groups most vulnerable and exposed to natural threats, estimated to comprise some two million people (World Bank 2014), are expected to benefit. The increase in financial capacity—thanks to savings from the use of a more efficient mix of hedging instruments—will be measured in terms of the reduction in new debt incurred as a percentage of GDP to respond to a disaster emergency and for rehabilitation and reconstruction, and in terms of the losses avoided by implementing the preinvestment guide in the hydroelectric subsector.

1.35 These program activities will establish a substantially improved regulatory, institutional, and budgetary framework consistent with international best practices, leading to decentralized, interagency, multisector DRM. This new framework will ensure that the results of the operation are sustainable. The program is designed to have a direct impact on certain indicators that measure the existence of effective governance conditions to implement public policy for DRM, reflected in the iGOPP subindexes for the guiding framework, risk identification, risk reduction, preparedness, recovery planning, and financial protection. Table 1 identifies the subindexes on which the program is expected to have an influence in order to raise the values identified in the 2014 baseline.

Table 1. iGOPP subindexes

Indicator	Baseline	Target
General framework	51%	85%
Risk identification	45%	59%
Risk reduction	34%	51%
Response preparedness	34%	48%
Post-disaster recovery planning	9%	34%
Financial protection	35%	43%

1.36 The results matrix describes the impact and results indicators, the baseline, and the program's targets. Details on the construction and implementation of the iGOPP, its methodology, and its components can be found in the monitoring and impact evaluation plan.

D. Economic evaluation

1.37 The economic evaluation presents an analysis of the main policy commitments under this programmatic series, which are associated with the components of risk reduction, development of the guiding framework, and financial protection,

[10] The only commitment for which the tenor has been reduced is the one relating to the formulation of the National Recovery Plan. This is because the government wanted first to generate a strategic framework for recovery that would guide the key sectors in the formulation of the National Plan (paragraph 1.32.d).

combining cost-benefit and cost-effectiveness methodologies. In the context of the components to develop the guiding framework and financial protection, the Bolivian government has set up FORADE, which will help to lessen the government's fiscal vulnerability to disasters by providing funds for disaster response and the contracting of risk transfer instruments. This tool will lower the amount of funding that the government has to obtain from other sources, such as ex post external borrowing. Table 2 shows the resource requirements and additional borrowing, as a percentage of GDP, that the country would incur to deal with an emergency, rehabilitation, and reconstruction caused by events with different probabilities of occurrence. In conclusion, in the scenario with the PBP, the Bolivian government increases its financial capacity for DRM.

Table 2. Resource requirements and borrowing

	Recurrent event (with 18% probability)		Severe event (with 10% probability)		Catastrophic event (with 2% probability)	
	Without PBP	**With PBP**	**Without PBP**	**With PBP**	**Without PBP**	**With PBP**
Resource requirements (US$ million)	470	387	841	758	4,666	4,583
Borrowing/GDP	0.47%	0.11%	1.62%	0.79%	13.48%	12.65%

1.38 As regards risk reduction, the Bolivian government prioritized the hydroelectric subsector for the preparation of a preinvestment guide with the aim of incorporating DRM into the design of such projects. This guide seeks to ensure that the substantial investments planned for the hydroelectric subsector in the country have baseline technical standards that are aligned to international best practices. The economic evaluation conducted, using a cost-benefit analysis with a 50-year horizon and a discount rate of 12%, shows that the implementation of a preinvestment guide for the hydroelectric subsector will reduce losses estimated to total up to US$5.363 billion by: (i) reducing the operating and maintenance costs and expenses of the hydroelectric dams; (ii) reducing the losses caused by operating failures at the dams; (iii) cutting the costs resulting from dam breaches; and (iv) reducing losses caused by flooding. In general terms, this component generates an internal rate of return of 17.7% and a cost-benefit ratio of 5.1. The results are robust vis-à-vis the sensitivity analysis.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Lending Instruments

2.1 The program was set up as a series of two independent but technically-related PBPs. It was structured in accordance with the guidelines and provisions of Policy-based Loans: Guidelines for Preparation and Implementation (document CS-3633-1), because it allows for flexibility to adapt to changing circumstances that may arise during execution and to revise the scope of the program over time. The amount of this second operation totals US$100 million, which was determined based on the country's financial needs (paragraph 1.2). This PBP will be funded as follows: US$85,000,000 from the Ordinary Capital and US$15,000,000 from the FSO.

2.2 The design of the PBP and implementation of its policy commitments have been supported by technical-cooperation operations ATN/OC-14904-BO and ATN/OC-15203-BO, approved in 2015, in the amount of US$370,000 from the Small and Vulnerable Countries Program and US$380,000 from the Disaster Prevention Fund. The consulting services financed include support for preparing: (i) the preinvestment guide, which incorporates DRM, for the hydroelectric subsector; (ii) the methodology and strategic guidelines for the preparation of development plans; (iii) guidelines to facilitate the identification of critical structures; (iv) guidelines for the design of the MTCC System; and (v) the strategic framework for post-disaster recovery. Funds from two regional technical-cooperation operations (ATN/MD-14432-RG and ATN/MD-14209-RG, both from the Multidonor Disaster Prevention Fund) have financed the definition of an optimum mix of instruments for risk reduction, containment, and transfer and a probabilistic study on flooding, respectively.

B. Environmental and social risks

2.3 This operation has no negative environmental impacts and includes environmental sustainability as an intrinsic program requirement. According to directive B.13 of the Environment and Safeguards Compliance Policy (OP-703), this operation does not require classification, since it is a PBP.

C. Other Project risks and key issues

2.4 The operation's main risks are related to public management and concern possible delays in the administrative processing of: (i) the preinvestment guide for the hydroelectric sector; and (ii) the guidelines for identifying and reducing critical infrastructure risk. As mitigation measures, the Bolivian government has established focal points at the corresponding deputy ministers' offices (Power and Planning and Coordination) to monitor such processes and a system for periodical progress reporting has been adopted.

2.5 The sustainability of expected outcomes under this reform is guaranteed by the approval of several high-level regulatory instruments, such as the SPIE law or the enabling regulations of Law 602 for DRM. These regulations provide for: (i) an institutional framework to implement the DRM and ACC mandates, with clearly defined responsibilities at the sector and ETA levels; (ii) concrete tools to guide development planning and public investment, taking disaster risk into account; and (iii) specific budget instruments to implement these public policies that will remain in force after the programmatic series has concluded.

III. Implementation and Management Plan

A. Summary of execution arrangements

3.1 The borrower will be the Plurinational State of Bolivia. The executing agency will be the MPD, which will be responsible for tracking fulfillment of the commitments in the Policy Matrix by the different government institutions (Annex II). The MPD will: (i) maintain official communication with the Bank and submit evidence of compliance with the operation's conditions and any other report required by the Bank within the agreed terms and conditions; (ii) promote actions to attain the established policy objectives, in particular the conditions included as triggers for this program; and (iii) compile and submit to the Bank any information and indicators that would help the Bolivian government and the Bank monitor, measure, and evaluate the program's results. The MPD will coordinate the receipt of evidence related to the commitments assumed by the different government agencies (MPD, Ministry of Defense, Madre Tierra Plurinational Authority (APMT), and MMAyA), as specified in the means of verification matrix.

3.2 The single disbursement of the Bank's loan proceeds will be contingent on the borrower's fulfillment of the policy reform commitments established in the Policy Matrix (Annex II) and the Policy Letter, in addition to the conditions established in the loan contract. Given the country's progress since the first PBP, the majority of the commitments under this second operation are expected to be fulfilled prior to the submission of the project for consideration by the Board of Executive Directors.

B. Summary of arrangements for monitoring and evaluating results

3.3 The programmatic commitments set out in the Policy Matrix, the means of verification matrix, and the results matrix establish the parameters for program supervision and results evaluation. The MPD bears responsibility for these activities. It has coordinated bilaterally with the other participating government institutions and ministries. This coordination was helped by the fact that all the ministries involved in this programmatic series are part of CONARADE (paragraph 1.8).

3.4 A reflexive methodology will be used to evaluate the impacts and results of the program. It will measure the different indicators before and after the program. Most of the indicators correspond to the iGOPP methodology developed by the Bank. A 2014 baseline is available for all the indicators, as well as the targets for the end of the PBP series. Funds from technical-cooperation operation ATN/OC 14904-BO (paragraph 2.2) will be used for the impact evaluation, which will cover the two operations of the programmatic series and will be conducted, pursuant to current procedures, within six months of the closing of the second operation. The budget and timetable of activities for the evaluation are described in the impact monitoring and evaluation plan.

IV. POLICY LETTER

4.1 The Bank has agreed with the Bolivian government on the macroeconomic and sector policies included in the Policy Letter from the MPD, which describes the main components of the country's strategy for the program and reaffirms its commitment to implement the activities agreed upon in the Policy Matrix.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	**Aligned**		
Development Challenges & Cross-cutting Themes	**-Social Inclusion and Equality -Productivity and Innovation -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law**		
Regional Context Indicators			
Country Development Results Indicators	**-Beneficiaries of improved management and sustainable use of natural capital (#)***		
2. Country Strategy Development Objectives	**Aligned**		
Country Strategy Results Matrix	**GN-2843**	**Reduce vulnerability to natural disasters and climate change.**	
Country Program Results Matrix	**Not available**	**Document under revision.**	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	**Evaluable**	**Weight**	**Maximum Score**
	7.9		**10**
3. Evidence-based Assessment & Solution	**9.6**	**33.33%**	**10**
3.1 Program Diagnosis	**3.0**		
3.2 Proposed Interventions or Solutions	**3.6**		
3.3 Results Matrix Quality	**3.0**		
4. Ex ante Economic Analysis	**8.5**	**33.33%**	**10**
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	**4.0**		
4.2 Identified and Quantified Benefits	**0.0**		
4.3 Identified and Quantified Costs	**1.5**		
4.4 Reasonable Assumptions	**1.5**		
4.5 Sensitivity Analysis	**1.5**		
5. Monitoring and Evaluation	**5.5**	**33.33%**	**10**
5.1 Monitoring Mechanisms	**1.5**		
5.2 Evaluation Plan	**4.0**		
III. Risks & Mitigation Monitoring Matrix			
Overall risks rate = magnitude of risks*likelihood	**Medium**		
Identified risks have been rated for magnitude and likelihood	**Yes**		
Mitigation measures have been identified for major risks	**Yes**		
Mitigation measures have indicators for tracking their implementation	**Yes**		
Environmental & social risk classification	**B.13**		
IV. IDB´s Role - Additionality			
The project relies on the use of country systems			
Fiduciary (VPC/FMP Criteria)			
Non-Fiduciary			
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	**Yes**	**Technical assistance was provided to support the revision of existing policies and the design of new policies to be implemented with the PBP (ATN/OC-14904-BO).**	
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan			

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

This is the second of two planned operations of a series of programmatic loans supporting policy reforms (PBP) which aim to improve governance and financial capacity of the country for Disaster Risk Management (DRM), by strengthening and modernizing the regulatory, institutional and budgetary public policy framework for comprehensive disaster risk management.

A proper diagnosis of the overall risks and potential losses associated with disasters facing the country and the limited capacity of the Bolivian government to manage these risks is presented. The proposed intervention stems from deficiencies identified during the application ofthe Governability and Public Policy Index (iGOPP) and respective sub-indices in the diagnostic phase. The expected results translate into an improvement of these sub-indices and the final iGOPP index. Given the relationship between the sub-indices and the iGOPP, the vertical logic of the program is ensured by construction for this indicator. The results matrix includes 3 out of 4 impact indicators that are in line with the DEM guidelines; however, it is not appropriate to use the iGOPP as an indicator of impact because the index is "passive" in the sense that we do not know its level of effectiveness in mitigating vulnerability or reducing deaths or losses, or the effectiveness of providing support after of a disaster event.

The economic analysis is based on a Cost-Benefit Analysis (CBA) which provides an IRR of 17.7%. The analysis properly identifies the costs, and uses reasonable assumptions; however, the identification and justification of the benefits due to the intervention are not well substantiated or documented. The CBA performs a series of reasonable sensitivity analysis based on the most important variables.

Given the nature of this PBP, and given the impact indicator included in the MR (iGOPP), the document includes a Monitoring and Evaluation Plan according to the DEM standards.

The risks identified in the risk matrix appear reasonable and are classified as medium risk. Risks include mitigation actions and performance indicators.

POLICY MATRIX

General objective	To improve the country's disaster risk management (DRM) governance and financial capacity by strengthening and modernizing the regulatory, institutional, and budgetary public policy framework for comprehensive disaster risk management. Specifically, a series of reforms will be promoted to improve public policy conditions for: (i) risk identification; (ii) risk reduction; (iii) response preparedness; (iv) post-disaster recovery planning; and, (v) financial protection.

Expected Outcomes	Fulfilled commitments Programmatic Loan I (2015)	Agreed commitments Programmatic Loan II (2016)
Component I: Macroeconomic stability		
a. Maintain a stable macroeconomic environment.	Maintain a stable macroeconomic environment consistent with program objectives and the Policy Letter.	Maintain a stable macroeconomic environment consistent with program objectives and the Policy Letter.
Component II: Development of the guiding framework		
a. Develop and strengthen the general governance framework for DRM.	Rules governing a fund to finance DRM activities. **Responsible parties**: Ministry of Defense and Ministry of Development Planning (MPD)	Establishment of a fund to finance DRM activities. **Responsible party**: Ministry of Defense Creation of economic incentives for units in the subnational governments and the different sectors (ministries) to implement DRM actions. **Responsible party**: Ministry of Defense
	Formulation of proposed internal regulations for establishing a fund for climate change mitigation and adaptation (Madre Tierra [Mother Earth] Plurinational Fund). **Responsible party:** Madre Tierra Plurinational Authority (APMT)	Establishment of a fund for climate change mitigation and adaptation (Madre Tierra Plurinational Fund). **Responsible party:** APMT
	Formulation of a Five-year Development Plan that includes DRM criteria. **Responsible party:** MPD	Approval of the Social and Economic Development Plan 2016-2020 that includes DRM criteria. **Responsible party:** MPD/Office of the Deputy Minister for Planning and Coordination (VPC)
		Passage of the Comprehensive Planning System of the State (SPIE) Law that incorporates mandates for DRM within its area of responsibility. **Responsible party:** MPD/VPC
	Formulation of guidelines for incorporating DRM and adaptation to climate change (ACC) into the public investment system, with a classifier to identify DRM and ACC actions. **Responsible party:** MPD	Incorporation of the DRM and ACC focus in the Investment Information System classifier (SISIN Web). **Responsible Party:** MPD/Office of the Deputy Minister for Public Investment and External Financing (VIPFE)

Expected Outcomes	Fulfilled commitments Programmatic Loan I (2015)	Agreed commitments Programmatic Loan II (2016)
	Approval of enabling regulations of Law 602 identifying the specific responsibilities for DRM of the ministries that sit on CONARADE within their areas of responsibility. **Responsible parties:** Ministry of Defense and MPD	At least one ministry that sits on CONARADE has adapted its sector planning processes related to DRM within its area of responsibility. **Responsible parties:** Ministry of Defense
	Approval of enabling regulations of Law 602 establishing that DRM will be monitored and evaluated by the State's oversight agencies. **Responsible parties:** Ministry of Defense and MPD	
	Approval of enabling regulations of Law 602 establishing that FORADE will be subject to supervision, monitoring, and evaluation by the State's oversight agencies. **Responsible parties:** Ministry of Defense and MPD	
	Formulation of at least one of the main strategic instruments on climate change that incorporates DRM considerations. **Responsible party:** APMT	Approval of at least one of the main strategic instruments on climate change that incorporates DRM considerations. **Responsible parties:** APMT and Ministry of the Environment and Water (MMAyA)
Component III: Development of regulations, institutions, and sector and subnational management instruments		
a. Improve public policy conditions for risk identification.		Approval of regulations that assign responsibilities for providing technical assistance and strategic guidelines for integrating disaster risk analysis into development planning. **Responsible party:** MPD/VPC
		Approval of methodology and strategic guidelines for incorporating risk analysis into at least one type of development plan. **Responsible party:** MPD/VPC
		Incorporation of DRM into the SPIE Information System (INFO-SPIE) **Responsible party:** MPD/VPC
	Approval of enabling regulations of Law 602 assigning responsibilities for the definition of methodologies and/or strategic guidelines for studies on the effects of climate change. **Responsible parties:** Ministry of Defense and MPD	Drafting of guidelines to support the design of the Plurinational System for Comprehensive Monitoring and Information of Mother Earth and Climate Change (MTCC System). **Responsible party:** APMT
	Approval of enabling regulations of Law 602 establishing that studies on threats related to geological, climate, and hydrological events will consider the frequency of occurrence associated with the intensity of the events. **Responsible parties:** Ministry of Defense and MPD	Study containing a probabilistic calculation of floods in at least one pilot watershed to serve as a benchmark for defining a risk analysis methodology. **Responsible party:** MMAyA

Expected Outcomes	Fulfilled commitments Programmatic Loan I (2015)	Agreed commitments Programmatic Loan II (2016)
	Approval of enabling regulations of Law 602 establishing that public utility companies are responsible for conducting disaster risk analyses in their areas of responsibility. **Responsible parties:** Ministry of Defense and MPD	
	Approval of enabling regulations of Law 602 mandating the identification of essential buildings and critical infrastructure at the sector and subnational levels within their areas of responsibility. **Responsible parties:** Ministry of Defense and MPD	Formulation of guidelines containing criteria to guide the identification of essential buildings and critical infrastructure at the sector and subnational levels. **Responsible party:** MPD/VPC Approval of regulations for identifying essential buildings and critical infrastructure in the hydroelectric subsector. **Responsible party:** MPD/VIPFE
b. Improve public policy conditions for risk reduction.		Allocation of resources to key ministries and ETAs for risk reduction activities that can be verified through budget classification instruments. **Responsible party:** MPD/VIPFE
	Approval of enabling regulations of Law 602 establishing that public institutions must take steps to reduce the vulnerability of essential buildings and critical infrastructure by reinforcing or replacing them. **Responsible parties:** Ministry of Defense and MPD	Formulation of guidelines containing criteria to guide the sectors and ETAs in preparing rules to reduce the vulnerability of essential buildings and critical infrastructure by reinforcing or replacing them. **Responsible party:** MPD/VPC
	Approval of enabling regulations of Law 602 establishing that public utility companies are responsible for reducing disaster risks in their areas of responsibility. **Responsible parties:** Ministry of Defense and MPD	
	Approval of enabling regulations of Law 602 establishing that acceptable risk benchmarks must be defined for at least two types of threats. **Responsible parties:** Ministry of Defense and MPD	The hydroelectric subsector has established acceptable risk benchmarks for at least two types of threats. **Responsible parties:** MPD/VIPFE
	Approval of enabling regulations of Law 602 mandating the inclusion of risk analysis in all stages of public investment. **Responsible party:** Ministry of Defense and MPD	
	Approval of a rule for preinvestment that incorporates DRM and ACC. **Responsible party:** MPD	Formulation of a preinvestment guide for the hydroelectric subsector that incorporates DRM and ACC. **Responsible parties:** MPD/VIPFE

Expected Outcomes	Fulfilled commitments Programmatic Loan I (2015)	Agreed commitments Programmatic Loan II (2016)
c. Improve public policy conditions for response preparedness.	Approval of enabling regulations of Law 602 including the following quality attributes: (i) mandate the drafting of emergency and contingency plans at the national and sector levels; (ii) establish that response and humanitarian assistance activities should be based on damage assessments and needs analysis; (iii) call for drills and simulations to be carried out; (iv) mandate the drafting of methodological guidelines for the formulation of contingency plans at the different ETA levels; and (v) regulate the coordination of international disaster assistance. **Responsible parties:** Ministry of Defense and MPD	Approval of methodological guidelines for preparing contingency plans at the different ETA levels. **Responsible party:** Ministry of Defense Formulation of a protocol that governs mutual assistance in the event of disasters. **Responsible party:** Ministry of Defense
	Approval of enabling regulations of Law 602 establishing mechanisms for participation by civil society in these processes at the ETA level. **Responsible parties:** Ministry of Defense and MPD	Identification and activation of at least one mechanism for civil society participation in responding to a declared emergency. **Responsible party:** Ministry of Defense
	Formulation by the MMAyA of a contingency plan for the El Niño Southern Oscillation. **Responsible party:** MMAyA and Ministry of Defense	Approval of the MMAyA's contingency plan for the El Niño Southern Oscillation. **Responsible party:** MMAyA
d. Improve public policy conditions for post-disaster recovery planning.	Approval of enabling regulations of Law 602 establishing that each ministry, within its area of responsibility, will prepare post-disaster recovery plans that explicitly seek to reduce preexisting vulnerabilities. **Responsible parties:** Ministry of Defense and MPD	Formulation of a strategic framework for disaster recovery establishing that each ministry, within its area of responsibility, will draw up post-disaster recovery plans that define the duration of the phase in which support will be provided to restore livelihoods and infrastructure during the transition between response and reconstruction. **Responsible parties:** MPD/VPC Definition of a mechanism for participation by civil society or social and nongovernmental organizations in post-disaster recovery. **Responsible parties:** MPD/VPC
		Approval of rules governing the evaluation, revision, or updating of the development plans of the ETAs and land management plans after a disaster in the affected subnational management units. **Responsible party:** MPD/VPC Approval of a methodology and strategic guidelines for updating development plans in post-disaster scenarios so they will not reproduce conditions of vulnerability. **Responsible party:** MPD/VPC

Expected Outcomes	Fulfilled commitments Programmatic Loan I (2015)	Agreed commitments Programmatic Loan II (2016)
e. Improve public policy conditions for financial protection.	Regulations for a fund (FORADE) to finance emergency assistance activities. **Responsible party:** Ministry of Defense and MPD	Scaling of the financing required to cover recurrent and catastrophic events, based on an analysis of maximum probable losses for different return periods. **Responsible party:** MMAyA
	Approval of enabling regulations of Law 602 establishing functions relating to financial protection from disaster risks. **Responsible parties:** Ministry of Defense and MPD	
	Commencement of a study that examines the optimum mix of risk reduction, containment, and transfer instruments for Bolivia based on probabilistic risk studies. **Responsible party:** MPD	Definition of the optimum mix of risk reduction, containment, and transfer instruments for Bolivia based on probabilistic risk studies. **Responsible party:** MPD/VIPFE

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-__/16

Bolivia. Loan ____/BL-BO to the Plurinational State of Bolivia
Disaster Risk Management Program II

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a disaster risk management program II. Such financing will be for the amount of up to US$85,000,000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, which corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on __ _______ 2016)

BO-L1107
LEG/SGO/CAN/IDBDOCS#40176267-16

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-__/16

Bolivia. Loan ____/BL-BO to the Plurinational State of Bolivia
Disaster Risk Management Program II

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a disaster risk management program II. Such financing will be for the amount of up to US$15,000,000 from the resources of the Bank's Fund for Special Operations, which corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on __ _________ 2016)

BO-L1107
LEG/SGO/CAN/IDBDOCS#40176235-16