



## 1. Project Data

<b>Operation ID</b> P111926	<b>Operation Name</b> CR CAT DDO	
<b>Country</b> Costa Rica	<b>Practice Area(Lead)</b> Social, Urban, Rural and Resilience Global Practice	
<b>L/C/TF Number(s)</b> IBRD-75940	<b>Closing Date (Original)</b> 30-Oct-2011	<b>Total Financing (USD)</b> 65,000,000.00
<b>Bank Approval Date</b> 16-Sep-2008	<b>Closing Date (Actual)</b> 30-Oct-2017	
	<b>IBRD/IDA (USD)</b>	<b>Co-financing (USD)</b>
Original Commitment	65,000,000.00	0.00
Revised Commitment	65,000,000.00	0.00
Actual	65,000,000.00	0.00

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## 2. Project Objectives and Policy Areas

### a. Objectives

The overall development objective of the proposed operation was "to enhance the government's capacity to implement its Disaster Risk Management Program for natural disasters" (Program Document (PD), para 2). The operation had the following four sub-objectives stated in the Policy Matrix (PD, page 42), which will be used to assess the achievement of the PDO since they correspond to the main elements of the PDO:

- Strengthen disaster risk management regulatory and institutional framework



- Ensure resource allocation for disaster risk prevention and reduction programs
- Mainstream disaster risk management in the country's development programs
- Reduce the generation of new risk by ensuring that new investments are compliant with safe disaster management practices

**b. Were the program objectives/key associated outcome targets revised during implementation of the series?**

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**c. Pillars/Policy Areas**

Costa Rica's Disaster Risk Management Program supported by this Development Policy Loan (DPL) with a Catastrophe Deferred Draw Down Option (CAT DDO) covered the following two key areas defined in the Appendix to the Loan Agreement (LA), Section I, paragraph 12:

- Strengthening of the Borrower's disaster risk management institutional and legal framework
- Mainstreaming disaster risk management in the National Development and Investment Programs

While the PD contained references to strengthening of the institutional and legal framework and mainstreaming disaster risk management, neither the PD nor the LA included a clear description of these policy areas.

**d. Comments on Program Cost, Financing, and Dates**

**Program Cost:** The DPL with a CAT DDO's commitment of US\$65 million was fully disbursed for responses to three disasters through six drawdowns. The Cinchona Earthquake, with a magnitude of 6.2 on the Richter Scale at a depth of 7.1 km and the epicenter located 4 km southeast of Cinchona de Poás (Alajuela Province), took place on January 8, 2009. Most damages and losses resulted from about 180 landslides on the slopes and along the rivers and in creeks of volcanoes. The earthquake resulted in 22 casualties, 17 missing people, about 100 injured people, and 986 displaced people. The total damages and



losses were over US\$500 million. Following the disaster, the Government requested an amount of US\$25.318 million through four withdrawal applications.

Tropical Storm Nicole affected Costa Rica between September 28-30, 2010. It caused heavy rainfalls that led to landslides and floods. The saturated soils resulting from Tropical Storm Matthew on September 23–24, 2010 exacerbated the magnitude of these events and led to significant damages to the road network. The total damage caused by Tropical Storm Nicole was US\$14.85 million. The Government requested a withdrawal of US\$8.665 million.

Hurricane Otto, a category 3 hurricane, passed over the northern part of the country on November 17-25, 2016 as the first storm of hurricane strength that directly affected Costa Rica since records began in 1851. In addition to strong winds and gusts, Hurricane Otto caused torrential rains, with accumulations of up to 300 mm in 24 hours in the northern part of the country and extreme cumulative rainfall during the entire event of up to 700 mm in the southern part of the country. This resulted in landslides and floods. Impacts included significant infrastructure damage, disruption of critical services, 10 fatalities, and 10,831 people directly affected, of which 7,425 were displaced. Overall damages were estimated at about US\$186 million. Following this disaster, the Government requested a withdrawal of US\$31.017 million.

**Financing:** The Bank financed this DPL with a CAT DDO. The DDO made funds available within a three-year period and only after the Government provided the trigger condition, which was an official declaration of a catastrophe from a natural hazard or disaster. The DPL with a CAT DDO was renewable up to four times provided that the adequacy of the macroeconomic framework and the Disaster Risk Management Program were reconfirmed and updated (PD, para 67).

**Borrower Contribution:** There was no Borrower contribution.

**Dates and Restructuring:** The operation was approved on September 16, 2008, and it became effective on March 5, 2009. The original closing date was October 30, 2011. The DPL with a CAT DDO was renewed twice. It had a total duration of nine years, and it closed on October 30, 2017. The Borrower had requested a third renewal, which was not granted because the macroeconomic framework had worsened.

Four additional performance indicators were agreed with the Borrower at the time of the second renewal in 2014 and regularly monitored, but no restructuring took place to formally add them to the operation (Implementation Completion and Results Report (ICR), para 40). The Bank task team clarified to IEG that since the results of the operation had already been achieved during the original implementation period, the additional indicators were meant as supplementary milestones for policy dialogue during the loan extension periods rather than to fine-tune the original indicators. Hence, and upon advice from OPCS, the Bank task team did not propose to restructure the operation.

For the Cinchona Earthquake, the four withdrawal applications for US\$12 million, US\$3.038 million, US\$9.02 million, and US\$1.26 million were issued on July 2, 2009, November 20, 2009, March 19, 2010, and December 17, 2010, respectively. They were received by the Bank on July 6, 2009, November 23, 2009, and March 25, 2010, respectively. The ICR did not include information on the receipt of the



withdrawal application for US\$1.26 million issued on December 17, 2010. The Bank released the payments on July 8, 2009, November 25, 2009, March 30, 2010, and December 30, 2010, respectively.

For Tropical Storm Nicole, a withdrawal request for US\$8.665 million was issued on July 26, 2001. The ICR did not mention the date of the receipt of the application by the Bank. The payment was released on August 10, 2011.

For Hurricane Otto, a withdrawal request for US\$31.017 million was issued on June 29, 2017 and received by the Bank on July 4, 2017. The payment was released on July 10, 2017.

The ICR noted that all disbursements were carried out within two to five business days after the receipt of the Government's withdrawal request "due to the excellent communications and good professional rapport established between the Government of Costa Rica and the World Bank team" (para 73).

### **3. Relevance of Objectives & Design**

#### **a. Relevance of Objectives**

At appraisal, to further enhance the capacity to implement the government's disaster risk management program, the PDO was designed to focus on gaps in the country's DRM development priorities. Due to its geographic location and geotectonic characteristics, Costa Rica is exposed to a large variety of natural hazards, including hydro-meteorological hazards, such as floods, cyclones, and landslides, and geophysical ones, including earthquakes and volcano eruptions (PD, para 19). According to the 2005 World Bank study on "Natural Disaster Hotspots: A Global Risk Analysis", Costa Rica is number two in the world among countries most exposed to multiple hazards, with 36.8% of the total area exposed to three or more adverse natural events (PD, para 20). Poor people are most at risk from the impacts of natural disasters since they often live in slums and squatter settlements on steep hillsides, in poorly drained areas, and low-lying coastal zones (PD, paras 4 and 75).

However, it remains unclear from project documentation whether there were clear weaknesses in the DRM regulatory and institutional framework of the country. It is also difficult to discern whether the disaster risk prevention and reduction programs were at risk of not being sufficiently resourced, that DRM was not sufficiently mainstreamed in country development programs, and that there was a risk that new investments would not be compliant with safe DRM practices. It is also unclear whether the prior actions were able to make useful contributions in these areas.

At that time, Costa Rica had a long and solid experience in managing disasters and was committed to disaster risk management. With the 2005 National Risk Prevention and Emergency Management Plan, it introduced the concept of disaster risk reduction as transversal axis across all development programs and projects at national and regional and levels (PD, para 33). Through the 2006-2010 National Development



Plan (ICR, para 7), all line ministries were required to mainstream disaster risk management into development programs and projects by including risk analyses and mitigation measures (PD, para 37). Costa Rica also had made substantial progress in strengthening its disaster risk legal and regulatory frameworks.

The FY2009-2011 Country Partnership Strategy (CPS) recognized that the Government was conscious of the fiscal risks associated with the unfavorable external environment and the ever-present threat of natural disasters, and it was moving to develop a comprehensive risk management framework. The CPS envisaged this operation to provide Costa Rica with a rapid source of funds in the event of a major natural disaster under its first development priority of “addressing emerging challenges to growth and competitiveness, including fiscal risk management”. The operation was expected to contribute to the CPS's development outcome of “risk reduction strategies for emergency response and diversified risk management instruments” (CPS FY2009-2011, Annex B1, Page 3).

When the operation closed, Costa Rica continued to be at significant risk for disasters, some of which were likely to increase in frequency because of climate change (Country Partnership Framework (CPF), FY2016-2020, para 87). The Government had also continued to enhance its risk and disaster management tools and measures. The 2016–2030 National Risk Management Policy and the 2016–2020 National Risk Management Plan are fully aligned with the 2015-2030 United Nations Sendai Framework for Disaster Risk Reduction. Among others, the Policy and the Plan showed the continued strong commitment of the Government to further strengthen and mainstream disaster risk management (ICR para 49).

The operation stayed relevant under the Bank’s CPF for Costa Rica for FY2016-2020, which under Objective 6 aims to: “Expand the capacity to promote climate-smart and environmentally sustainable development”, envisaging support in promoting climate-smart and environmentally sustainable development through a two-pronged approach that combines increased resilience to disasters and climate risks with low carbon growth options. To promote increased resilience to disasters, contingency financing was to be provided through a disaster risk management DPL with a CAT DDO. The availability of this contingency financing was expected to alleviate the need for the limited funds from the public budget and provide bridge-funding while other financing was mobilized in the event of a disaster. The operation was expected to contribute to the CPF Indicator 6.2, namely “Maintain Government capacity to respond to disasters, measured by the availability of policy and financial instruments for disaster risk management”, and the associated supplementary progress indicators in the CPF that captured (i) the development of a National Disaster Risk Management Financing Strategy, (ii) the integration of disaster risk information and resilience/response mechanisms into sub-national land-use plans, and (iii) the continuation and adequate funding of the National Emergency Fund (CPF FY2016-2020, Annex 1, Results Framework, page 43).

## **Rating**

Substantial

### **b. Relevance of Design**



The operation's theory of change was coherent, and the casual chain between prior actions, expected results, sub-objectives, and the overall PDO was clear.

The PDO "to enhance the government's capacity to implement its Disaster Risk Management Program for natural disasters" was straightforward, and the operation's four sub-objectives were causally linked to this PDO. In fact, "strengthening the institutional and regulatory framework for disaster risk management" and "ensuring resource allocation for disaster risk prevention and reduction programs" were expected to enhance the Government's institutional, regulatory, and financial capacity to implement its natural Disaster Risk Management Program. "Mainstreaming disaster risk management into the country's development programs" and "reducing the generation of new risk by ensuring that new investments were compliant with safe disaster management practices" were expected to decrease the overall disaster risk and free capacity and resources to implement the remaining parts of the Government's natural Disaster Risk Management Program.

The presentation of the expected results deriving from the prior actions in the Policy Matrix (PD, Annex 2, page 42) lacked specificity. While they were largely measurable, as pointed out in Section 9, the indicators had shortcomings.

The approval of the DPL was contingent on the following four prior actions (LA, Schedule 1 para 2, and PD, paras 71 and 72), each linked to one of the above-mentioned sub-objectives:

- "The Borrower has adopted the National Emergencies and Risk Prevention Law and the Executive Decree No. 34361 setting forth regulations to said National Emergencies and Risk Prevention Law." The Law (Law No. 8488) was published in 2016 and the Executive Decree in 2018. These documents established the legal framework to reduce the causes of risk and ensure timely and coordinated risk management in case of disasters, putting focus on prevention and risk reduction (PD, para 71 and Annex 2). Among others, the two legal instruments (i) defined the disaster risk management system and the Government's disaster prevention responsibilities, (ii) assigned the National Risk Prevention and Emergency Management Commission (CNE) to lead disaster risk management and relief, (iii) determined the composition of its board of directors to ensure cross-sectorial coordination and the incorporation of social and environmental considerations in all aspects of disaster risk management, (iv) required the development a National Risk Management Policy as overarching theme for government action and resources allocation to prevent disasters, (v) envisaged the preparation of procedures to properly address all phases of an emergency, (vi) required a general emergency plan, (vii) defined the state of emergency declaration, (viii) envisaged capacity strengthening of local government and civil society organizations, and (iv) determined the financial resources.
- "The Borrower, through CNE, has complied with the provisions of Article 46 of the National Emergencies and Risk Prevention Law, through the collection, administration and transfer to the National Emergency



Fund of an amount equivalent to 3% of the financial surplus or profit earned by all governmental institutions referred to in said Article 46 during the periods of January 1, 2007 to December 30, 2007 and January 1, 2008 to August 4, 2008, to support the National Risk Management System.” It was expected that this would adequately finance the National Emergency Fund and enable its correct functioning. In addition, Law no. 8488 required that all central government entities and local governments allocated resources for relevant disaster and risk activities in their own programs and budgets (PD, para 35).

- “The Borrower, through MIDEPLAN, has incorporated its Disaster Risk Management in the Borrower’s 2006-2010 National Development Plan.” The Plan was approved in 2007. It incorporated disaster risk management through the strategic action on land planning under the Social Development and Poverty Reduction component and required the inclusion of disaster risk analyses and mitigation initiatives in all annual programs of line ministries.

- “The Borrower has incorporated risk management considerations as part of the screening process of MIDEPLAN national investment projects.” This was done by adding a disaster risk review in the project proposal format for national investments (the LA, PD and ICR did not specify when this prior action was complied with; the Bank task team pointed out that it was envisaged in Article 28 of Law no. 8488, so it must have happened after its publication in 2006). Under this measure, government agencies submitting investment projects for approval by MIDEPLAN were required to conduct a disaster risk assessment of the proposed investment and include risk mitigation measures as appropriate.

These prior actions were relevant since they were aligned with the operation’s PDO, sub-objectives and expected results. They were enabling conditions in achieving the operation’s outcomes. However, most prior actions materialized at least a year before the date of the Program Information Document (PID). There is also no evidence in the PD that this DPL with a CAT DDO facilitated or accelerated the implementation of the prior actions. The PD and the ICR were silent on the involvement of the Bank in bringing about the institutional reforms in disaster risk management and financing embedded in the prior actions. The Bank task team advised IEG that prior to the DPL with a CAT DDO, the Bank had little involvement in Costa Rica and no engagement on disaster risk management policies. The dialogue started with the Ministry of Finance and focused initially on risk financing and the Bank’s new financing instrument, which immediately caught the Government’s attention. The Bank task team highlighted that this dialogue opened the door for the fruitful collaboration on disaster risk management and prevention between the Government and the Bank.

According to the PD (para 13), the macroeconomic “outlook for 2008-2010 was broadly positive, but a gradual moderation of growth was expected due to the global environment marked by the slowdown of the U.S. economy and rising fuel and food prices. Growth prospects for 2008 were somewhat weaker than originally expected and the central government was forecasting a 4.5% real GDP growth for 2008”.



Therefore, the macroeconomic framework was considered adequate for this operation” (PD, para 13). It was also adequate when the two extensions of the DPL with a CAT DDO were approved, but it worsened during the second extension period. The possible deterioration of the fiscal situation due to external or internal shocks was anticipated in the PD, and the consequent weakening of the macroeconomic situation was flagged as moderate risk. The mitigation measures of “demonstrating active, visible support to the Government’s proposed Disaster Risk Management Program” and “maintaining a close working relationship with the client” revealed inadequate to ease the worsening of the fiscal situation (PD, para 91).

As designed, the lending instrument (DPL with the CAT DDO) was innovative and appropriate to address the risks of natural disasters in Costa Rica and provided resources to complement mainly the National Emergency Fund and the sectoral allocations for disaster response and recovery.

Overall, in this case, given that the prior actions ensured that the Government had the necessary capability to respond to a disaster and use the resources of this DPL with a CAT DDO effectively, the limited dialogue on disaster risk management policy during preparation, and hence the absence of the Bank’s added value with respect to the materialization of the prior actions, is not considered a crucial design shortcoming. However, it was a missed opportunity to help the country enhance its capability even before the start of the operation and so increase the chances for success of the program. The relevance of design is therefore rated substantial.

**Rating**  
Substantial

#### 4. Achievement of Objectives (Efficacy)

##### **Objective 1**

##### **Objective**

Strengthen disaster risk management regulatory and institutional framework

##### **Rationale**

The theory of change for this sub-objective was based on the fact that the adoption of Law no. 8488 and the related Executive Decree no. 34361 would help strengthen the regulatory and institutional framework for disaster management and enhance the CNE’s capacity to coordinate and foster disaster risk management. This in turn was expected to increase the Government’s capacity to implement its natural Disaster Risk Management Program. The relevant results indicator was a “strengthened regulatory and institutional framework for disaster risk management through an enhanced capacity of the CNE to coordinate and incentivize disaster risk management activities” (PD, Annex 2). The indicator was ill-devised, with part of it being identical to the sub-objective, and it had no target value. The indicator of “implementing five selected





strategic goals of the 2010–2015 National Disaster Risk Management Plan”, added informally in 2014, was meant to capture the progress in the implementation of the Plan (ICR, Annex 7).

Therefore, this review looked at both the “strengthened regulatory and institutional framework” and the “enhanced capacity of the CNE to coordinate and foster disaster risk management activities”.

### **Outputs:**

The main outputs that contributed to the achievement of this sub-objective included the following:

- 2015 National Risk Management Policy, which set out the vision of disaster risk management as integral development concept (ICR para 49)
- 2010–2015 1st National Risk Management and 2016-2020 2nd National Risk Management Plans, which closely intertwined disaster risk management and poverty reduction and recognized the high impact of adverse events on the poorest people (ICR, para 57)
- Five goals of the 2010–2015 1st National Risk Management Plan complied with: the Bank task team explained that these goals were the following: (i) municipal emergency committees in all 81 municipalities in the country established, (ii) 100% of health centers apply the safe hospitals index, (iii) three disaster risk management science and technology workshops organized, (iv) all 81 municipalities with updated hazards information, and (v) the Ministry of Public Education implemented a sectorial disaster risk management plan
- Two goals of the 2016-2030 National Risk Management Policy and the 2016-2020 2nd National Risk Management Plan complied with: the Bank task team explained that these goals were the following: (i) progress monitoring by monitoring committees for each of the three management areas of the Policy and Plans, i.e. risk reduction, preparedness and response, and recovery, and (ii) annual National Risk Forms to discuss the above-mentioned Policy and Plans and assess progress toward their implementation
- 2012-2040 National Land Management Policy, which provided a comprehensive framework and guidance for strategic land use planning by underscoring disaster risk management and environmental sustainability in all land interventions and recognizing that decision-making processes on land management should take place at the level closest to the affected people and territory where they live, i.e. at subnational level (ICR, para 64)
- Executive Decree no. 36,721 of 2011, requiring the development of a model to evaluate the vulnerability produced by the natural disaster risk and its mandatory application for land use planning, public investments, infrastructure and services, and risk transfer mechanisms (ICR, para 65)

### **Outcomes:**

The ICR reported in detail how Costa Rica made substantial progress toward a “strengthened disaster risk management regulatory and institutional framework” during the lifetime of the operation. The ICR also



pointed out that the robustness of the legal and regulatory framework and the respective governance structures helped maintain the commitment of the Government to disaster risk management despite three changes in government (in 2010, 2014 and 2018), including a change of the ruling party in 2014. The new Government elected in April 2018 also committed to prioritize the approval of the Disaster Risk Financing Strategy (for details see sub-objective 2 below) and to improve the effectiveness of Law No. 8488 (ICR, paras 32 and 59).

The ICR (para 54) mentioned, and the Bank task team confirmed, that the strengthened disaster risk management regulatory and institutional framework moved Costa Rica from fragmented disaster risk management initiatives and a focus on emergency response to a comprehensive approach to disaster risk management. This approach strongly relies on prevention by mainstreaming disaster risk management into development and project planning and puts great emphasis on risk financing.

The ICR clarified that during the many emergencies that occurred since the adaption of Law no. 8488 and its Executive Decree no. 34361, the procedures and phases of emergency management and response and recovery financing were properly adhered to (ICR, para 58). The declaration of the state of emergency immediately after a disaster and the preparation by the CNE of an Emergency Management Plan were given as examples of such compliance (ICR, para 70). The Bank task team pointed out that Costa Rica had handled recent emergencies in a structured, clear and transparent way and that the country now had more tools and procedures for disaster risk management at national and subnational levels than at appraisal.

The efforts to improve the institutional and regulatory framework were led and coordinated by the CNE (ICR, para 56). The CNE facilitated and improved collaboration and coordination among key ministries, technical agencies and leading academic institutions involved in disaster risk management. The ICR pointed out that this enhanced coordination was reflected in the proactive role of line ministries, particularly of the Ministries of Public Works and Transport, Agriculture and Livestock, Health, and Public Education, in carrying out on-the-ground disaster risk management investments, such as retrofitting health and educational facilities, enforcing building codes, and organizing disaster risk awareness campaigns (ICR, para 59). Through this operation, collaboration on disaster management issues and risk financing became particularly strong among the Ministry of Finance, the CNE and MIDEPLAN, which created a solid basis to further develop the disaster risk management agenda (ICR, paras 80 and 81).

The CNE also led the multi-sectorial disaster risk management policy dialogue, which culminated in the inclusion of disaster risk management and environmental sustainability as an overarching theme in the 2012-2040 National Land Management Policy (ICR, para 64) and its reflection at subnational level. In its contribution to the ICR, the Government pointed out that the strengthened capacity of the CNE was demonstrated in the process of (i) formulating the medium and long-term planning instruments, such as the National Risk Management Plans, (ii) monitoring instruments and controlling public investments, (iii) generating historic information to facilitate decision making, and (iv) incorporating financial instruments to enable a better margin for financial maneuvering (Annex 4, para 8).

In summary, the disaster risk management institutional and regulatory framework was continuously improved over the lifetime of the operation. Measures and activities envisaged in the different legal and policy



documents and plans were implemented. Therefore, this assessment concludes that the expected outcome of a “strengthened disaster risk management regulatory and institutional framework” was achieved. However, due to shortcomings in the indicators, evidence on the precise extent of the achievement remains unclear, and therefore the achievement of this sub-objective is rated substantial.

**Rating**

Substantial

**Objective 2**

**Objective**

Ensure resource allocation for disaster risk prevention and reduction programs

**Rationale**

The theory of change for this sub-objective was simply for the Government to have access to resources to implement disaster risk prevention and reduction programs, which in turn increased its capacity to implement its natural Disaster Risk Management Program. The achievement of this sub-objective was to be measured by a “well-funded and functional National Emergency Fund as part of the Disaster Risk Management Program” and by the indicator informally added in 2014 of “designing a financial strategy for disaster risk management”, which is an output indicator.

**Outputs:**

The main outputs that contributed to the achievement of this sub-objective included the following:

- Feasibility study for a catastrophe insurance facility for public assets and design of a Catastrophic Risk Transfer Vehicle (ICR, para 52)
- Disaster Risk Financing Strategy prepared and the commitment by the current Government to adopt it quickly and to evaluate Costa Rica’s participation in the Caribbean Catastrophe Risk Insurance Facility (ICR, para 62)
- Risk financing included in the 2015 National Risk Management Policy by addressing financial resource availability and sustainability of disaster response

**Outcomes:**

Since 2011, the required 3% financial surplus/profit of all governmental institutions went into the National Emergency Fund, which provided sufficient resources throughout program implementation to respond to



several disasters (ICR datasheet). The Fund remained adequately financed with a sound capitalization strategy to serve its purpose as a national contingency fund (ICR, para 60). A historical analysis of government liabilities from catastrophic events showed that US\$8 million was on average required per event to address humanitarian needs in case of a disaster. In line with this finding, the CNE's Fund management strategy was to ensure that adequate liquidity of this order was always available (ICR, para 60). During the preparation of the 2016-2020 National Risk Management Plan, the Government proposed to separate the funding for disaster response and prevention. The main reason cited in the ICR (para 61) was to "ensure the financial sustainability of activities in both disaster risk management areas and enable the allocation of financial resources and their utilization". The Bank task team clarified that although risk prevention and emergency response activities received adequate financing from the Fund, the separation was proposed to emphasize the importance of prevention, which in times of disasters might be neglected.

The line ministries and several local authorities also allocated their own resources for disaster management activities (ICR, paras 9, 58, 69 and 100). The DPL with a CAT DDO constituted another source of funds to be used to respond to major natural disaster. Additionally, the Government designed a Disaster Risk Financing Strategy, which according to the Bank task team, Costa Rica was planning to put in place quickly.

The satisfactory functioning of the Fund and the natural disaster risk management financing system was evidenced by the fact that the proceeds of this DPL with CAT DDO were used strategically. For each qualifying emergency, the resources from the Fund together with the line ministries' budget allocations for emergency response were used first before requesting withdrawals from the DPL with CAT DDO to preserve this form of risk funding (ICR, para 69). In several instances, such as the 2012 Samara Earthquake, the 2014 El Nino Drought, and the 2016 Health Crisis caused by mosquito-transmitted diseases, the Government considered the use of the loan proceeds but eventually financed the disaster response with its own resources. The Bank task team emphasized that this strategic use of the DPL with CAT DDO, making sure there were sufficient resources for any subsequent disaster, was unique in their experience.

The ICR pointed out that through the various financing mechanisms, the Government was effective and efficient in its urgent emergency interventions to restore the conditions of affected communities, particularly low-income rural and indigenous people that became isolated due to floods, damaged roads, or collapsed bridges. Their timely actions reduced the negative impacts since they facilitated the delivery of humanitarian aid, provided access to health services, markets and employment, and restored and improved livelihoods. The dedicated funds for disaster risk management enabled the Government to cover the most urgent needs and ensure that ongoing social and public programs could continue without interruption after the disasters (ICR, paras 77 and 78).

In summary, (i) the Fund was resourced as planned and enabled an adequate response to emergencies and the promotion of risk prevention and reduction programs during the life of the operation, (ii) line ministries and local authorities allocated their own resources for emergency response, and (iii) Costa Rica's Disaster Risk Financing Strategy designed under the program is capable of being implemented quickly.



However, when Hurricane Nate hit after the somewhat unexpected closing of this operation due to the worsening of the macroeconomic situation, the Government had to go to the market to obtain further credits to cover the significant damages and losses (ICR, Annex 3). Therefore, by project end, the achievement of this sub-objective of “ensuring resource allocation for disaster risk prevention and reduction programs” was not complete even though it is likely to be fully achieved where there the Disaster Risk Financing Strategy is implemented. Thus, the sub-objective is rated substantial.

**Rating**  
Substantial

### **Objective 3**

#### **Objective**

Mainstream disaster risk management in the country's development programs

#### **Rationale**

The theory of change for this sub-objective was that requiring disaster risk management in the 2006-2010 National Development Plan would lead to mainstreaming disaster risk management into the country's development programs. This in turn was expected to increase resilience and therefore enhance Costa Rica's capacity to implement its natural Disaster Risk Management Program. The sub-objective was to be measured by “the inclusion of risk analysis and risk reduction initiative in key line ministries annual programs”. The additional indicator informally introduced in 2014 measured “mainstreaming of disaster risk management in planning programs at subnational level”.

#### **Outputs:**

The main outputs that contributed to the achievement of this sub-objective included the following:

- 2012–2040 National Land Management Policy (for details see sub-objective 1)
- Executive Decree no. 36,721 of 2011, requiring the development of a model to evaluate the vulnerability produced by the natural disaster risk and its mandatory application for land use planning, public investments, infrastructure and services, and risk transfer mechanisms
- Evaluation of the water and sanitation system disaster risk and increased use of disaster risk information in the planning process of the Costa Rican National Water and Sanitation Institution (AyA), using seismic risk modeling tools as part of the Central America Probabilistic Risk Assessment Initiative (ICR, para 52)
- Comprehensive monitoring tool to track the resources allocated to disaster risk management-related activities by ministries and government agencies at all levels, including municipalities (ICR, paras 57 and 100 and Annex 7)



**Outcomes:**

The ICR mentioned in the Data Sheet that disaster risk management was included in the line ministries annual programs. The Bank task team subsequently pointed out that these programs included chapters on disaster risk management, which varied by sector. For infrastructure sectors, for instance, in addition to risk assessment and management, they often also referred to more resilient standards.

The ICR (para 64) specified that disaster management considerations were included in 25 municipal master plans and that there was increased disaster management capacity in 23 municipalities. The Bank task team explained that in the 25 municipalities the master plans included risk assessments, risk mitigation measures and a resource envelope. The Bank task team also clarified that the CNE carried out training in 23 municipalities.

Based on the above, the sub-objective of “mainstreaming disaster risk management in the country's development programs” was exceeded because including disaster risk management considerations at subnational level was more than originally envisaged.

**Rating**  
High

**Objective 4**

**Objective**

Reduce the generation of new risk by ensuring that new investments are compliant with safe disaster management practices

**Rationale**

With respect to this sub-objective, the theory of change linked the incorporation of disaster risk management in MIDEPLAN's screening of national investment projects to an increased number of projects with proper disaster risk management considerations. This in turn was expected to reduce the disaster risk and therefore enhance Costa Rica's capacity to implement its natural Disaster Risk Management Program. The sub-objective was to be measured by the “increased proportion of projects approved by MIDEPLAN with properly integrated disaster risk management considerations”. The additional indicator informally introduced in 2014 measured the “increased capacity to incorporate disaster risk analysis in the public investment process”.

**Outputs:**

The main outputs that contributed to the achievement of this sub-objective included the following:



- 2009 MIDEPLAN methodological guide to identify, formulate, and evaluate public investment projects, which included a chapter on risk analysis and provided guidance on the evaluation of risk, cost-benefit analysis of mitigation measures, and risk reduction alternatives (ICR, para 66)
- MIDEPLAN Technical Norms, Guidelines, and Procedures for Public Investment in Costa Rica (Decree No. 35374-PLAN of July 2009) (ICR, para 67)
- Trained public officials to integrate disaster risk considerations in public investment decision-making processes
- MIDEPLAN methodology designed to strengthen disaster risk considerations in all phases of the investment process and not only in the pre-investment phase
- Establishment of a MIDEPLAN database with historical data on natural disasters and the respective losses

**Outcomes:**

This sub-objective was achieved because since 2011, all new public investment projects registered in the MIDEPLAN Bank of Investment Projects incorporated risk information and disaster risk management considerations (ICR, para 66), hence contributed to reduce the generation of new risk.

With respect to the supplementary indicator of “increased capacity to incorporate disaster risk analysis in the public investment process”, tools to facilitate this inclusion were developed and used, public officials were trained, and the inclusion of disaster risk assessments and mitigation measures happened. Consequently, this assessment concludes that the capacity to incorporate disaster risk analysis in the public investment process was increased.

**Rating**  
High

**5. Outcome**

The PDO was relevant to the country context and aligned with both the Government’s and the Bank’s strategies, but there were shortcomings relating to the actual targeting of the policy actions. The relevance of the program design was substantial even in the absence of evidence on the additionality of this operation in the materialization of the prior actions since the latter constituted enabling conditions to ensure the necessary Government capability to use the resources of the DPL with CAT DDO effectively in case of natural catastrophes. The PDO of “enhancing the government’s capacity to implement its Disaster Risk Management Program” was achieved with minor shortcomings. Costa Rica was able to successfully respond to several natural disasters during the life of this operation due to its legal and regulatory framework for disaster risk



management, which was steadily improved, and the availability of varied resources to finance disaster relief, including the National Emergency Fund, budget allocations by line ministries and several municipalities, and this DPL with CAT DDO. The criticality of the available resources became apparent when Hurricane Nate hit Costa Rica very shortly after the third extension of the program's closing date in October 2017 was not approved by the Bank because of the deterioration of the macroeconomic situation. At the time, the Government was obliged to obtain additional funds from the private market. To avoid the need to go to the market after future disasters, the Government is expected to swiftly implement its recently designed Disaster Risk Financing Strategy. This Review concludes that with the support of this project Costa Rica was partly successful in mainstreaming disaster risk management in development programs and investment projects. As a result Costa Rica has become more able to cope with the negative impact of natural disasters. Based on the above, the outcome of this operation is rated satisfactory.

**a. Outcome Rating**  
Satisfactory

## **6. Rationale for Risk to Development Outcome Rating**

The risk to the operation's development outcome is considered moderate. When the operation closed, Costa Rica's legal framework for disaster risk management was strongly anchored in the national development process, and the country continued to be politically stable. The recently elected Government confirmed its commitment to the disaster risk management agenda, and the President of the country instructed its officials to expedite the final review and adaptation of the Disaster Risk Financing Strategy (ICR, para 47). The country was considering its participation in the Caribbean Catastrophe Risk Insurance Facility. Costa Rica was also interested in a new DPL with CAT DDO and additional technical assistance from the Bank (ICR, paras 44 and 45). The Bank task team added that with the recent approval of the tax reform in Costa Rica, the Government is expected to prioritize disaster risk management and financing issues, including a request for a new DPL with CAT DDO.

While the fiscal situation had not yet improved and a continuation of the deterioration of the macroeconomic situation could jeopardize financial resources available for disaster risk management, during the October 2018 Bank mission, the team was informed that funding of the National Emergency Fund in 2019 was assured. Additionally, about US\$79 million were expected to be added to the Fund to close the financing gap that arose from disaster response and reconstruction related to past emergencies. The coordination risk, identified at appraisal as low, further decreased since cross-sectoral dialogue and coordination among the Ministry of Finance, the CNE and MIDEPLAN on disaster risk management was enhanced. Mechanisms were put in place to ensure a participatory and collaborative approach, for instance, through the yearly National Risk Forums (ICR, para 87).

**a. Risk to Development Outcome Rating**





Modest

## 7. Assessment of Bank Performance

### a. Quality-at-Entry

The DPL with a CAT DDO instrument was introduced in 2008 and this operation was the first one to use it. Therefore, the Bank task team had to face the limitations of the newly established and often unclear procedures and the lack of specific guidance for program design and implementation. The Bank task team approached the process in a creative way, drawing on experiences and formats from otherworld Bank instruments (ICR, para 30).

A multidisciplinary Bank team prepared the operation in only two and a half months (ICR, para 88). The selected program addressed key strategic concerns in the country, which remained relevant during the nine years of implementation and beyond. Similarly, the PDO had a strong relevance for the country and was closely anchored in the Bank's CPFs. The prior actions for this program, while dated, contributed importantly to the enabling policy environment for this operation and hence facilitated the implementation of improved disaster risk management. The implementation arrangements were appropriate.

The team carried out a satisfactory evaluation of the macroeconomic framework at appraisal. The possibility of a deterioration of the fiscal situation due to external or internal shocks was anticipated in the PD, and the consequent weakening of the macroeconomic situation was flagged as a moderate risk. The mitigation measures of "demonstrating active, visible support to the Government's proposed Disaster Risk Management Program" and "maintaining a close working relationship with the client" revealed to be inadequate to ease the worsening of the fiscal situation (PD, para 91). As discussed in Section 9, the operation had shortcomings in the design of the indicators.

### Quality-at-Entry Rating

Moderately Satisfactory

### b. Quality of supervision

The Bank task team regularly monitored the implementation progress and maintained a close policy dialogue with the Government on disaster risk management during and beyond this operation. The Bank team was readily available and regularly present in the country for strategic discussions and technical advice to achieve the goals of this operation and more broadly to strengthen disaster risk management.

The Bank task team was also able to create a good technical working relationship and earn the Government's trust. This is demonstrated by the fact that the team was regularly invited to disaster risk management events in Costa Rica even after the operation closed (ICR, para 90). The Bank task team advised the Government regarding decisions on the use of the loan proceeds. The Bank was quick in processing withdrawal applications to ensure the timely availability of funds in the post-disaster situations.



According to the ICR (para 38), the Bank task team drew attention to the deteriorating macroeconomic situation in 2014. On the other hand the ICR (para 91) also stated that “The World Bank could perhaps have anticipated a deteriorating macroeconomic situation and made the Government aware that this situation would prevent the World Bank from extending the operation” a third time. The Bank task team, on the advice of OPCS, did not arrange for the operation to be restructured to improve the policy matrix/add supplementary indicators (ICR, para 92) and meant that these indicators had no formal status in the policy matrix.

### **Quality of Supervision Rating**

Moderately Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **8. Assessment of Borrower Performance**

### **a. Government Performance**

The Government showed outstanding political commitment to the disaster risk management agenda, which did not weaken despite three government changes, including a change of the ruling party in 2014 (ICR, para 32). The Government also fully recognized the value of this risk financing tool, and it strongly supported the DPL with a CAT DDO during preparation and implementation. The Government agreed on adding an additional set of indicators and to regularly monitor them, using the monitoring exercise as an opportunity to foster the technical dialogue and the reform agenda on disaster risk management.

The ICR pointed out that even as the fiscal situation in the country was deteriorating, the Government was disciplined in the use of the loan proceeds, requesting funds only to complement the resources of the National Emergency Fund and emergency resources allocated by the different government institutions. Through this strategy of not withdrawing the full balance at once, the Government ensured the availability of funds to respond to subsequent emergencies (ICR, para 96). The Government also was transparent in the use of funds even though this is not required for budget support operations (ICR, para 98).

However, the Government was not able to prevent the macroeconomic situation in the country from worsening to a point that a third extension of the DPL with a CAT DDO could not be approved by the Bank. This left the Government with an inadequate resource allocation when Hurricane Nate hit.

### **Government Performance Rating**

Moderately Satisfactory



## **b. Implementing Agency Performance**

The Ministry of Finance shared the program implementation with MIDEPLAN, the National Budget Office, and the CNE (PD, para 84). Despite staff turnover, these agencies showed strong commitment to the operation. They worked well together under this operation, which strengthened their collaboration on the broader disaster risk management agenda (ICR, para 97). They regularly prepared progress reports with the adequate information to monitor the loan implementation, candid observations, and lessons learned (ICR, para 98).

The officials from these agencies presented their disaster risk management approach and the experience with this risk management tool in the neighboring countries and fostered the disaster risk management agenda in the region.

### **Implementing Agency Performance Rating**

Highly Satisfactory

### **Overall Borrower Performance Rating**

Satisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The Ministry of Finance was the main counterpart of this DPL with a CAT DDO. The Ministry of Finance together with the CNE were responsible for program monitoring and the preparation of the monitoring reports (LA, para 3.01(b)).

The original outcome indicators were identical to the expected results of the operation, and they had no baselines and target values. As seen in Section 4, the first indicator also partially coincided with the sub-objective itself. The additional four supplementary performance indicators informally added in 2014 were a mix of outcome and output indicators. They were used by the Bank task team as milestones and helped measure specific aspects of the operation or intermediate steps in the achievement of the overall objective. These indicators had baselines and target values, but not all of them had quantitative measures.

### **b. M&E Implementation**

The Ministry of Finance provided periodic progress reports, which included the status of achievement of the indicator targets (ICR, para 42).



### c. M&E Utilization

The reporting requirement under this operation enhanced communication between the various government agencies. The preparation of progress reports required coordination between the three stakeholders mentioned in Section 9.a and brought them together for discussions with the Bank team. This process strengthened collaboration and information exchange. Given the non-quantitative and non-specific nature of the indicators, the progress reports included a rich narrative on each of them, which served as basis for a productive dialogue on the overall progress of the disaster risk management agenda (ICR, para 89). In particular, the indicators added in 2014 aimed at advancing and expediting the implementation of the National Risk Management Plans (ICR, para 43).

In addition, since the DPL with a CAT DDO was the first operation using this instrument, the monitoring results influenced the design of a series of similar operations in the region and elsewhere (ICR, para 41).

### M&E Quality Rating

Modest

## 10. Other Issues

### a. Environmental and Social Effects

The PD (para 73) pointed out that the operation was expected to have a positive poverty and social impact, and that improvements in natural disaster risk management and vulnerability reduction strategies were expected to benefit especially the poor. Costa Rica had a relatively well-developed set of social protection programs, in particular in terms of assistance during disasters, but many poor people still fell outside their scope.

The PAD (para 81) also stated that the operation was to have significant positive impacts on the environment and natural resources, by providing the Government with critical funding for measures to reduce environmental degradation and their adverse consequences on the population. The operation, among others, was to enhance risk identification, assessment, and monitoring capacities, reduce underlying risk factors, such as developing new projects in safe areas, and foster preparedness for effective response and recovery.

At appraisal, Costa Rica's regulation to reduce adverse and enhance positive environmental effects was reviewed. This review showed that all risk prevention activities were to be subject to environmental impact assessments. Although emergency response, rehabilitation, and reconstruction activities were in principle exempted from an *ex ante* environmental assessment, a report on their impacts was often prepared and



filed. Thus, the review concluded that social, economic, and environmental considerations were considered by the Government during an emergency situation (PD, para 83).

The ICR explained that the Government's efforts on disaster risk management, including the prior actions supported by the program, benefited poor and vulnerable people. Law no. 8488 considered responding to the needs of the most vulnerable people a priority. The 2010–2015 National Risk Management Plan dedicated the first of seven pillars to “poverty reduction and increasing resilience” and the 2016–2020 National Risk Management Plan dedicated its first five pillars to “increasing resilience and social inclusion”. The specific objectives of the 2016-2020 Plan included the development of a register of the population exposed to natural hazards, with a special focus on poor and disabled people, and the integration of socially excluded people vulnerable to disasters in social programs to reduce exposure and increase resilience. It also envisaged dedicated support to poor families affected by disasters (ICR, para 76).

Several legal and regulatory instruments adapted under this operation focused on environmental sustainability, such as the 2012–2040 National Land Management Policy, which underscored disaster risk management and environmental sustainability considerations as overarching themes to guide land interventions.

In addition, making development programs and investment project more resilient was expected to have a positive environmental impact. The ICR did not explain if and how environmental considerations were taken on board during emergency responses and reconstruction activities related to events for which the loan proceeds were used.

## **b. Fiduciary Compliance**

The ICR did not mention this matter, but the Bank task team confirmed, that adequate financial management arrangements were maintained during the life of the operation. The Bank task team also added that financial audit reports were submitted on time and included unqualified opinions.

## **c. Unintended impacts (Positive or Negative)**

After a period of limited Bank engagement in Costa Rica and without a permanent presence in the country, this operation opened the door for closer collaboration between the Government and the Bank. It led to the request of a US\$500 million Public Finance and Competitiveness DPL with DDO (ICR, para 82). In addition,



according to the Bank task team, the operation helped create awareness on the importance of disaster risk management and spurred interest for this type of financing instrument in the region.

**d. Other**

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**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Satisfactory	Because (i) the relevance of design is rated substantial, (ii) the precise extent of achievement of the disaster risk management regulatory and institutional framework strengthening objective is unclear, and (iii) the worsening of the macroeconomic framework, which led to the unexpected closing of this operation, left the country with insufficient resources to cope with the consequences of Hurricane Nate
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Satisfactory	Moderately Satisfactory	Due to deficiencies in the operation's quality at entry and shortcomings in the Bank's dialogue with the Government on trends in the macroeconomic situation in the country.
Borrower Performance	Highly Satisfactory	Satisfactory	Due to the deterioration of the macroeconomic framework in the country, this DPL could not be extended and left the government with a insufficient resources to respond to Hurricane Nate
Quality of ICR		Substantial	---



## Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

## 12. Lessons

The following five lessons were drawn from the ICR (paras 106 to 111) with some modification in language:

- **Well-established institutional arrangements and an advanced understanding of disaster risk financing instruments together with a close dialogue with the Bank enable the Government to make strategic use of the DPL with a CAT DDO.** When this operation became effective, Costa Rica had an advanced understanding of disaster risk financing. The National Emergency Fund was already in place. Financial contributions of each ministry for emergencies and reconstruction and the insurance of public assets were mandatory. Being able to use these three disaster risk funding instruments in a complementary manner, the Government was able to withdraw the loan proceeds in response to several disasters instead of using the entire funds for a single event.
- **A DPL with a CAT DDO and the related technical assistance constitute an opportunity to establish and strengthen the dialogue on disaster risk management among government agencies.** Before this operation, the Ministry of Finance, the CNE, and MIDEPLAN had only a limited understanding of each other's roles in and contributions to disaster risk management. Successful disaster risk management and financing required close collaboration among these institutions, which jointly developed a dialogue and a common understanding on the topic. With the support of complementary technical assistance, such as the one to develop a risk financing strategy, this collaboration was further strengthened.
- **A DPL with a CAT DDO is not only an instrument to provide quick liquidity after a disaster.** Given its flexibility, the DPL with a CAT DDO can also be used to reduce the fiscal impact of disasters in the longer term. In Costa Rica, immediate liquidity after natural disasters was not always required since financial resources from the national budget allocated for other purposes were used. However, replenishing these resources is critical to avoid compromising on development goals. The DPL with a CAT DDO offered a flexible source of funds to close this funding gap due to its soft trigger, namely the declaration of a state of emergency and a withdrawal request. The Government was free to decide if, when, and how much to draw down.



- **Having in place a carefully planned exit strategy before a DPL with a CAT DDO closes is critical.**

With the somewhat unexpected closing of this operation because of the deterioration of the macroeconomic framework, Costa Rica lost a flexible and convenient instrument in its overall disaster risk financing strategy before being able to put an alternative in place. Therefore, when Hurricane Nate hit very shortly after the project closed, the country had to go to the private financial market for additional resources, which was time consuming and expensive. An earlier effective dialogue on the implications of an inadequate macroeconomic situation and alternate arrangements before the operation closed could have avoided this problem with hurricane Nate but would not have forestalled the need for a carefully planned robust disaster risk management framework in place when external support ended.

- **Withdrawal amounts from the DPL with a CAT DDO that are tailored to the country's absorptive capacity enable an effective use of resources.** With the first withdrawal of loan funds in response to the Cinchona Earthquake, the Government realized that the implementation capacity was limited and that the response activities take time. Learning from this experience, the Government adopted a withdrawal strategy that focused on smaller amounts based on both the need for funds and the absorptive capacity of the line ministries.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR is well written, comprehensive, internally consistent, and candid. The quality of the analysis and the evidence provided are satisfactory.

The lessons learned are based on analysis and results evidenced in the ICR. They are generally well-formulated and are of interest for both Bank task teams and government counterparts.

The ICR largely followed the OPCS guidelines for the preparation of ICRs. A minor shortcoming included the limited explicit reference to the theory of change, with a section on quality of design that mostly verged on quality at entry.

#### a. Quality of ICR Rating





Substantial