Public Disclosure Authorized

Report Number: ICRR0022867

1. Project Data

Project ID P131094	Project Name HN Disaster Risk Management Project		
Country Honduras	Practice Area(Lead) Urban, Resilience and Land		
L/C/TF Number(s) IDA-51900	Closing Date (Original) 30-Apr-2019		Fotal Project Cost (USD) 23,752,619.83
Bank Approval Date 13-Dec-2012	Closing Date (Actual) 30-Jun-2021		
	IBRD/IDA (USD)		Grants (USD)
Original Commitment	30,	000,000.00	0.00
Original Commitment Revised Commitment		000,000.00 000,000.73	0.00
	26,		
Revised Commitment	26,	000,000.73	0.00

2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (FA, p. 5) and the Project Appraisal Document (PAD, paragraph.10), the Project Development Objectives (PDOs) were to support Honduras to (a) continue strengthening its capacity for integrated disaster risk management at the municipal and national level; and (b) improve its capacity to respond promptly and effectively to an eligible emergency.

This review will assess the project against the following objective:

- To continue strengthening its capacity for integrated disaster risk management at the municipal and national level.
- To improve its capacity to respond promptly and effectively to an eligible emergency.
- b. Were the project objectives/key associated outcome targets revised during implementation?
 Yes

Did the Board approve the revised objectives/key associated outcome targets? Yes

Date of Board Approval 08-Apr-2019

- c. Will a split evaluation be undertaken?
- d. Components
 - 1. Strengthening of National-level disaster risk management (DRM) capacities: (US\$2.2 million at appraisal, increased to US\$4.7 million at the June 2020 restructuring, US\$4.47 million actual). This component was to finance training, equipment, software, studies, a communication strategy, and the establishment of a grievance redress mechanism (GRM). It included the following subcomponents: (i) territorial planning; (ii) the DRM capacity of the Permanent Commission of Contingencies (Comisión Permanente de Contingencias or COPECO) and Ministry of Planning and External Cooperation (Secretaría Técnica de Planificación y Cooperación Externa or SEPLAN / the General Directorate of Territorial Planning (Dirección General de Ordenamiento Territorial, or DGOT); (iii) good practice environmental code for DRM, an updated construction code, studies on climate change and environmental sustainability; and (iv) the risk monitoring and modeling capacity of the Secretary of State for Natural Resources and Environment (Secretaría de Recursos Naturales y Ambiente, or MiAmbiente).
 - 2. **Strengthening of Municipal and Community-level DRM Capacities** (US\$2.9 million at appraisal, increased to US\$4.3 million at the June 2020 restructuring, US\$4.25 million actual). This component was to finance training, equipment, software, emergency simulation exercises, studies on risk and territorial planning, the development of a DRM Geoportal, and outreach activities to strengthen municipal and community DRM capacity. The capacity-building efforts were to support the Municipal Committees for Emergency Response (*Comité de Emergencia Municipal* or CODEMs) and Local Committees for Emergency Response (*Comité de Emergencia Local or* CODELs), in engaging communities in participatory DRM, in incorporating DRM in territorial planning, land use, and emergency plans, in institutionalizing risk management in local planning, and in improving local monitoring and early warning systems.
 - 3. **Implementation of Mitigation Measures** (US\$13.05 million at appraisal, slightly increased to US\$13.7 million at the June 2020 restructuring, US\$11.76 million actual). This component was to finance the design and implementation of structural and nonstructural measures to reduce local vulnerability to natural hazards. Activities financed in Component 2 above would identify the structural risk mitigation measures (i.e., physical construction such as riverbank protection and/or drainage). Nonstructural measures included workshops on environmental (climate change), social (gender), and technical (DRM)

aspects. Nonstructural measures were prioritized for Indigenous Peoples and Afro-Descendant communities.

- 4. **Project Management, Monitoring and Evaluation** (US\$1.85 million at appraisal, increased to US\$2.77 million at the June 2020 restructuring, US\$2.82 million actual) This component was to finance costs associated with project management, monitoring and evaluation (M&E), audits, conducting the baseline, Mid-Term Review (MTR), and final evaluation. This component would also finance the oversight of the communication and gender strategies.
- 5. Contingency Emergency Response Component (CERC) (US\$ US\$10.0 million at appraisal, cancelled US\$4.0 million in the April 2014 restructuring, further revised to US\$0.53 million at the June 2020 restructuring, US\$0.42 million actual). This component was to provide immediate liquidity to the Government to respond to an eligible emergency. This would finance a positive list of goods, works, services, including audit, and emergency operating costs to recover from an eligible emergency. CERC had an initial allocation of US\$10 million. In 2014, the government requested to cancel US\$4.0 million. In April 2019, the reduced CERC funds were reallocated to Components 1, 2, 3, and 4 (see above). In June 2020, CERC funds were further revised to US\$0.53 million reallocated from project components 1 to 4. CERC was triggered twice - the first in June 2020 for the Government's response to the COVID-19 pandemic; and the second, in May 2021 in response to the impact of the Tropical Cyclones Eta and Iota. The Emergency Action Plan (EAP) for the first CERC for COVID-19, was to finance the refurbishment of twelve (12) centers Mass Attention Units (Unidades de Atención Masiva or UAMs) and International Sanitary Offices (Oficinas Sanitarias Internacionales or OSIs) to support the COVID-19 response. Tropical Cyclone Eta and lota in November 2020 flooded 90% of the centers. In May 2021, the second CERC refocused available funds to address the damages caused by the tropical cyclones. A new EAP was developed to finance equipment, transport for COPECO, computer equipment, early warning system equipment, a hydrological study, a geologist, and remote sensing specialists.
- e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project Cost: The original total project cost was US\$30 million. US\$4.0 million was cancelled at the 2014 restructuring (see below). The credit disbursed US\$23.8 million at closing. The balance was cancelled.

Financing: The International Development Association fully financed this credit.

Borrower Contribution: None.

Dates and Restructuring: The credit was approved on December 13, 2012 and became effective on March 18, 2013. The Mid Term Review was on May 16, 2016. The original closing date was on April 30, 2019 but was extended three times for a total of 26 months to close on June 30, 2021. There were 5 level 2 restructurings:

- April 22, 2014 to cancel US\$4.0 million from the initial CERC allocation at the request of the government, and make changes to component costs. The cancelled IDA Credit was made available to the Honduras and Nicaraguan Catastrophe Risk Insurance project (P149895).
- **September 2**, **2015** to change the institutional arrangements after a new administration was elected. The DGOT was moved from SEPLAN to the Ministry of the Presidency (*Secretaría de Estado del*

Despacho Presidencial, or SDP); (ii) the Secretary of State for Natural Resources and Environment (Secretaría de Recursos Naturales y Ambiente or SERNA) became the Secretary of State for Natural Resources and Environment (Secretaría de Recursos Naturales y Ambiente or MiAmbiente); and (iii) the Ministry of the Interior and Population (Secretaría del Interior y Población or SEIP) became the Secretariat for Human Rights, Justice, Government and Decentralization (Secretaría de Derechos Humanos, Justicia, Gobernación y Descentralización or SDHJGD).

- April 8, 2019 to introduce changes to the results framework, reallocate funds from CERC to the other components (see above) and extend the closing date of the credit by14 months from April 30, 2019 to June 30, 2020. A new core PDO Level outcome indicator was added: "Cities with improved livability, sustainability, and/or management." In the PDO outcome level indicator evaluating mitigation measures, the technical, economical, and environmental "soundness" of mitigation measures was replaced for "satisfactory or above". Satisfactory was defined as achieving a level of at least 4 on a 5 level-scale (see Section 4 Efficacy, PDO outcome level indicator 4 below).
- June 10, 2020 to introduce changes to the results framework, trigger CERC, reallocate resources to other components, and extend the closing date of the credit a second time for an additional 6 months, from June 30, 2020 to December 31, 2020. During the extension, 5 mitigation works delayed by the COVID-19 restrictions would be completed. The CERC component added a new intermediate results indicator. The project's risks (macroeconomic, institutional capacity for implementation, sustainability) were updated to consider the impact of the COVID-19 pandemic.
- December 18, 2020 to extend the closing date of the credit a third time for 6 months from December 31, 2020 to June 30, 2021 following Tropical Cyclones Eta and lota, which struck the country in November 2020. The impact from the two cyclones resulted in delays and damage to the minor refurbishment works in the 12 selected UAMs and OSIs that were planned when CERC was first triggered in June 2020. The Project Implementation Unit (PIU) suspended the refurbishment works because the tropical storms destroyed 90 percent of the works, and access to the sites of the 3 remaining structural mitigation measures also proved difficult. This third extension was 26 months from the original closing date.

Split Rating: A split rating of the outcome was not carried out. The PDOs remained the same throughout implementation. Changes in target values of indicators expanded the scope of work. The cancellation of US\$4 million from the contingency component at the beginning of the project to be reallocated to another project did not lower the ambition of the project. The reduced CERC allocation was not fully utilized (see Section 4 Efficacy below). The project is assessed based on the revised outcome targets.

3. Relevance of Objectives

Rationale

Honduras is a country highly vulnerable to natural hazards, including hurricanes, tropical storms, floods, droughts, earthquakes, and landslides. Following the devastating impact of Hurricane Mitch in 1998, the government focused its attention from recovery to prevention and mitigation, embodied in their various plans and institutional arrangements. The project area covers the Sula Valley region, with its two biggest

cities, San Pedro Sula and Choloma, characterized by high vulnerability to natural disasters, and rapid population growth (PAD, paragraph 50).

Country Context: Increasing poverty, rapid urbanization, environmental degradation, and climate change contributed to the country's high vulnerability to natural hazards. Several gaps in the DRM sector were identified, such as the need to: (i) strengthen the capacity of national institutions, including COPECO (whose mandate has been expanded mandate but without commensurate capacity or budget), and the new SEPLAN; (ii) better understand the environmental perspective behind disaster risk; (iii) generate new and publicly available information on disaster risk to inform risk reduction decision-making; (iv) improve DRM local capacity and invest in mitigation measures as people living in high-risk areas increase; (v) adopt disaster risk financing strategies to manage fiscal vulnerability and provide rapid access to funds post-disaster; and (vi) develop risk reduction strategies that mainstream prevention and mitigation issues into key sectors such as transport, water and sanitation, and energy.

Country Plans: The project was aligned with Honduras' Country Vision for 2010-2038 and the National Plan for 2010-2022. Both plans included DRM provisions in national laws. Both plans linked environmental degradation, high poverty levels, and increased vulnerability to natural disasters. The National Plan included goals and objectives to strengthen resilience; the DRM legal, institutional and planning frameworks; mitigate risks; and improve enforcement mechanisms. The Country Vision aimed to consolidate regional development using an environmentally sustainable process. This project directly contributed to building the national DRM agency, COPECO, and its National Center for Atmosphere, Oceanography and Seismic Studies (Centro Nacional de Estudios Atmosféricos, Oceanográficos y Sísmicos or CENAOS). CENAOS produced and disseminated hydrometeorological/seismologic information. The project supported the integration of disaster risk information in national and local territorial planning processes and engaged local authorities and communities CODEMs and CODELs, to identify risks and prepare local plans, including Municipal Land Use Plan (Plan Municipal de Ordenamiento Territorial or PMOTs), Municipal Disaster Risk Management Plan (Plan Municipal de Gestión de Riesgos or PMGRs), and Municipal Emergency Plan (Plan de Emergencia Municipal or PEMs).

World Bank Country Partnership Framework: The PDOs were relevant to the current World Bank Country Partnership Framework (CPF) for FY2016 - FY2019. At closing, the Bank was preparing the CPF for FY22-FY26 (ICR, footnote 10). The PDOs were relevant to Pillar 3: "Reducing Vulnerabilities". This pillar was to strengthen institutions and activities to build resilience; integrate hazard risk information in development planning decisions; improve financial response capacity following disasters; and strengthen national and municipal capacity for integrated climate change resilience and DRM. The project complemented the CPF emphasis on local planning capacity building, promoting decentralization and financing high-impact DRM measures. The project would also improve financial response capacity in the aftermath of disasters by implementing the CERC. The project contributed to the outcome of the CPF pillar 3 by "Increasing the government's ability to respond to natural disasters and manage climate change resilience risks." The catastrophic floods from the Tropical Cyclones Eta and lota, reminded Honduras of the primacy of managing floods risk. In this project the CERC recovery response to the tropical storms Eta and lota showed that small-scale mitigation measures could reduce the loss of life and assets of vulnerable population.

Prior World Bank Experience in the Country and in the Sector: Over the past 23 years, following Hurricane Mitch in 1998 the Bank has supported the country's DRM agenda by partnering with the National System for Risk Management (*Sistema Nacional de Gestión de Riesgos or* SINAGER) and COPECO. In 2000, the World Bank-financed Natural Disaster Mitigation Project (*Proyecto de Mitigación de Desastres*

Naturales, or PMDN, P064913) and in 2007, provided the project with Additional Financing (P105386) to further reduce disaster risk. The government then requested this follow-on project to address institutional gaps identified by PMDN. This project complemented existing Bank projects that addressed multi-sectoral risks, including climate, crime, violence, poverty, and social exclusion in Honduras. These projects included the Second Land Administration Project (PATH II, P106680), the Barrio-Ciudad Project (P088319), and the Safer Municipalities Project (P130819). The World Bank continues to support COPECO and SINAGER through the first Catastrophe Deferred Drawdown Option (Cat DDO, FY20, P172567, that has a pillar focusing on COPECO), and a second Cat DDO (P177001, currently in preparation, with a pillar on the SINAGER reform, reinforcing COPECO's central role in it). The World Bank also approved the Tropical Cyclones Eta and lota Emergency Recovery Project (P175977) in FY 2021 for Honduras' response and recovery needs and to strengthen institutional capacity to manage a resilient and inclusive recovery and reconstruction. The Bank has also provided the following technical assistance (TA) over the years: Disaster Risk Financing TA, Urban Resilience and Hydromet TA, Hands-on Implementation Support to the Emergency Recovery Project TA).

The PDOs were pitched at the appropriate level, addressing capacity needs simultaneously at the national and local levels.

Overall, the relevance of the objectives is rated High. The PDOs were highly relevant to both the country's and the Bank's priorities. The PDOs were pitched at an appropriate level although a somewhat timid ambition of the PDOs reflected in the shortcomings in measuring the outcome indicators of the second objective (see Sections 4 Efficacy, and 9 M&E below).

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To continue strengthening its capacity for integrated disaster risk management at the municipal and national level.

Rationale

Theory of Change: The PAD did not include a Theory of Change (ToC) (ICR, paragraph 8). The Results Framework (PAD, Annex 1) showed the logical causal link between inputs that led to outputs and expected outcomes of the project. The ICR provided a ToC (Figure 1). **Inputs** were to include training, studies, equipment, and software to enhance the capacity of COPECO, SEPLAN / the DGOT and improve risk monitoring and modeling capacity of the Secretary of State for Natural Resources and Environment (Secretaría de Recursos Naturales y Ambiente, or MiAmbiente). **Outputs** were to include a communication strategy, a number of staff trained in territorial planning, risk monitoring and modeling, and a grievance redress mechanism (GRM). After the MTR, the third (April 2019) restructuring, the extension increased the

number of municipalities to be reached (ICR, paragraph 23), with the following changes: 1 output was dropped and 3 new outputs were added. The output, "Environmental Management Unit in COPECO" was deleted because its proposed function was now to be implemented under the newly created *MiAmbiente*. The 3 new outputs referred to the number of (i) annual climate and meteorological reports/bulletins issued by the COPECO-CENAOS; (ii) municipalities with new and/or updated municipal planning or management tools; and (iii) community early warning systems strengthened or rehabilitated. Another output was redefined from "seismic" to "hazard monitoring stations collecting and transmitting data" to include not only seismic but hydromet stations. Target values were increased. **Outcomes** were to include a consolidated institutional and policy DRM framework, improved DRM coordination at the national and community level, and increased environmental sustainability. A participatory approach was adopted throughout the project cycle (design, implementation, supervision of the works). The 2019 restructuring made changes to **four** PDO outcome level indicators (see below).

The ToC included the following critical assumptions for the operation to achieve its objectives. These assumptions materialized at implementation.

- Inter-institutional coordination was adequate to strengthen national-level DRM capacities.
- Municipal authorities and communities participated in identifying, prioritizing, and supervising mitigation measures to promote ownership and sustain investments.
- Communities were involved in planning and implementing the operations and maintenance (O&M) of the structural mitigation measures.
- The quality of the structural mitigation works and their impact on risk reduction depended on adequate supervision, design, and construction.
- Municipalities allocated budgets for O&M of the structural mitigation measures.

OUTPUTS:

- 40 priority mitigation measures were implemented (original target 60 but no separate targets
 for structural or nonstructural measures). A target of 40 structural mitigation measures was adopted at
 the third (April 2019), restructuring, target achieved). Structural measures refer to physical
 construction such as bridges, riverbank protection, and/or drainage (ICR, paragraph 16).
- 55 priority nonstructural measures were implemented (target of 20 nonstructural measures was introduced at the third (April 2019) restructuring, target exceeded). These were: (i)) workshops for municipal personnel addressing climate change, gender, DRM, waste management, vetiver grass planting, Indigenous Peoples plans, geographic information systems (GIS), watershed management and resettlement; (ii) films on DRM; (iii) workshops for journalists; (iv) training workshops for the CODELs and CODEMs on DRM and damage assessment; (v) watershed management plans (La Pita-Las Palamas and the Molombo Rivers); (vi) booklets and manuals (Informative Booklet on Climate Change with DRM and Gender Approach, Good practice environmental code for DRM, Operational Manual of the Honduran Builder with a DRM approach; (vii) guidelines (Methodological Guidelines of DRM for teachers, Guide for the Organization of CODELs and CODEMs); (viii) a radio soap opera on DRM; (ix) short DRM films; and (x) DRM video clips. 13 Indigenous Peoples and Afro-Honduran communities hazard atlases were developed and socialized to the Garifuna and Tolupanes communities (ICR, Annex 5, paragraph 47). At the national level, a standard methodology for municipal development and territorial planning was developed and disseminated as targeted.
- Three new output indicators were added during the third (April 2019) restructuring:

- COPECO-CENAOS issued 130 (target 40, target exceeded) national level annual climate and meteorological reports or bulletins.
- 18 (original target 16, target exceeded) municipalities with new and/or updated municipal plans or management tools with a risk management approach (municipal DRM plans or PMGRs, municipal land use plans or PMOTs, and municipal emergency plans PEMs). After the reorganization of SEPLAN, the land use plans (PMOTs) were now part of the municipal development plans.
- 12 (original target 12, target achieved) community early warning systems were strengthened or rehabilitated.
- 42 (original target 100 percent, revised to 42, target achieved) hazard (seismic and hydromet) monitoring stations were collecting and transmitting data.
- 225 (original target 60, revised target 100, target exceeded) functional CODEMs and CODELs were established. Women accounted for 42 percent (original target 35 percent, revised to 40 percent, target exceeded) who were in CODEMs and CODELs management positions.
- At least 96 percent (original target 70 percent, revised to 85 percent, target exceeded) of sampled technical staff from municipalities rate training Satisfactory.
- Database of risk and vulnerability analyses and municipal plans were now publicly available, as targeted.
- 34,448 persons participated in consultative activities during project implementation (no original target at appraisal, revised target of 14,094 persons, target exceeded) of which 14,692 were female participants (target 6,423, target exceeded) and 1,929 were Indigenous or Afro-Honduran people (target 1,000, target exceeded).
- The ICR (paragraph 60) adds that the project temporarily employed 4,571 people (no target) from the municipalities where the mitigation works were implemented.

OUTCOMES: Two original outcomes and a new outcome added at the April 2019 restructuring were achieved.

Outcome 1: National-level DRM capacities strengthened:

- 1,343,780 direct project beneficiaries (original target 850,000 revised to 1,285,000; target **exceeded**) 52 percent were female (target 51 percent, target achieved).
- At least 96 percent of a representative sample of direct beneficiaries, and 93 percent of sampled female beneficiaries, (original target 70 percent, revised to 85 percent, target exceeded for both direct and female beneficiaries) were satisfied with COPECO's DRM activities.
- At least 18 municipalities (original target 16, revised target 18, target achieved) adopted DRM (PMGRs) and emergency (PEMs) plans.
- 38 cities (original target 20, target exceeded) are reported to have improved livability, sustainability and/or management. The indicator was added during the implementation "to measure the cumulative number of cities or municipalities for which the direct interventions of the project have resulted in improvements in (a) living conditions for residents; (b) financial, economic, environmental, and/or social sustainability of the city; and/or (c) city planning, systems, and governance". The ICR (Annex 5, page 96), however, admits that the degree of improvement is difficult to determine from some indicators. For example, in terms of risk reduction, few measurable targets were set (e.g., reduction of annualized flood damage or people whose risk level was reduced).

• 100 percent (baseline 0, original target 85 percent, revised target 90 percent, target exceeded) of a representative sample of mitigation works was independently assessed as technically, economically, and environmentally satisfactory or above. The original indicator was initially intended to assess the works' economic, environmental, and technical "soundness", however it was revised to measure "satisfaction", which significantly lowered its effectiveness as an objective measure and criterion. The ICR (Annex 5, page 84) acknowledges that "the assessment of the design and construction from a technical, economic, and environmental point of view ... was not available"

Outcome 2: Municipal and community-level DRM capacities strengthened:

• 18 municipalities adopted PMGRs and PEMs based on a participatory methodology (original target, 16, revised target 18, target achieved) as evidence that municipal and community-level DRM capacities were strengthened. This is an output level indicator. Outcome would have been the impact from implementation of those plans.

Outcome 3: Mitigation measures implemented and functional:

- 38 cities had improved livability, sustainability, and/or management (target 20, target exceeded). Improved livability referred to (a) living conditions for residents; (b) financial, economic, environmental, and/or social sustainability of the city; and/or (c) city planning, systems, and governance. Improved livability, sustainability, and/or management was measured as part of the PMGRs and PEMS that the 38 cities adopted. In these participatory plans, residents and local authorities identified risks and mitigating measures, institutionalized local planning activities, increased the number of local land use plans and DRM regulations. Residents of the most vulnerable areas of El Negrito reported a better understanding of natural hazards, pointed to mitigating risk measures they needed to adopt, and acknowledged the roles of institutional actors who would support them during emergencies (ICR, paragraph 36 and footnote 20). As clarified by the ICR (Annex 5, paragraph 9), however, the degree of improvement was difficult to determine.
- Interviews with beneficiaries reported increased preparedness following Tropical Cyclones Eta and lota. Residents of historically flooded areas noted that their preparedness and the mitigation works implemented in their municipalities protected their lives and properties with no damages reported.

Overall, the efficacy of the project to achieve this objective - to continue strengthening DRM capacity - is rated substantial, but with some shortcomings. All, target outcome indicators were achieved or exceeded. However, the outcome indicators have limitations discussed above and the evidence largely relies on the perception of risk mitigation measures by the communities, without the assessment of the technical, economic, and environmental criteria or soundness as originally envisaged. The objective - to continue strengthening capacity - did not have sufficient indicators to address the outcome of the strengthening capacity interventions. Some outcomes were described particularly the outcome of the plans implemented, but without targets and not monitored, considering an 8.5- year project implementation period.

Rating Substantial

OBJECTIVE 2

Objective

To improve its capacity to respond promptly and effectively to an eligible emergency.

Rationale

Theory of Change: The logical causal relationship among the inputs leading to an effective response to an eligible emergency was embodied in the CERC Emergency Action Plan (EAP). Response to COVID-19 triggered the first CERC. In November 2020, the Eta and lota Tropical Cyclones destroyed 90 percent of the health centers making the scope of the first CERC obsolete and were cancelled. On May 3, 2021, the government triggered a new CERC to address the impact of the storms and updated the EAP. Inputs were to include an agreed upon emergency that would trigger CERC; a CERC specific Operation Manual to outline financial management, procurement, safeguard, and other implementation arrangements (PAD, paragraph 28). Once triggered, the Operation Manual would be updated, an Emergency Action Plan (EAP) was to be prepared. The government would request to disburse the remaining unallocated funds. For its part, the Bank would issue its No Objection and disburse CERC funds. Outputs were to include a government declaration of an emergency to trigger CERC, an updated Operation Manual, an Emergency Action Plan, and a request for CERC disbursement. Outputs also included the equipment and goods used for the COVID-19 health emergency response (June 2020) and a revised EAP in May 2021. Outcome was to be the release and use of CERC funds to supplement the government's response to an emergency (COVID-19 pandemic, and and Tropical Cyclones Eta and lota.

- The CERC Operations Manual was updated on March 15, 2020. The Bank issued its No Objection on March 25, 2020. The Ministry of Health (Secretaría de Salud or SESAL), COPECO and the Ministry of Finance (Secretaría de Finanzas or SEFIN) jointly prepared the Emergency Action Plan (EAP) on May 8, 2020. The government requested the release of US\$533,124 in uncommitted funds on May 14, 2020 to supplement the country's COVID-19 pandemic response. The Bank received this request on May 25, 2020 and disbursed CERC funds on June 2, 2020.
- When CERC was first triggered in June 2020, a new output indicator was added: "COPECO support to 12 OSIs and UAMs (target 8, target exceeded). Because the storms in November 2020 delayed and damaged the refurbishment works of the 12 selected UAMs and OSIs under the June 2020 CERC (ICR, paragraph 26). The scope of the EAP was cancelled. CERC was triggered a second time in May 2021 to address the impact of the storms. The EAP was revised. The Bank approved the activation of the CERC on May 11, 2021, to assign uncommitted funds to finance immediate recovery activities to address the compound impacts of tropical cyclones Eta and lota (US\$432,929) and redirect the COVID-19 pandemic response (US\$100,108).

The improved government's capacity to respond promptly and effectively to an eligible emergency was measured through a rapid availability of CERC funds- that were disbursed within three weeks (exceeding the targeted four weeks) to finance recovery needs. This is a process and not an outcome indicator. However, as most of the funds were re-allocated to other project activities, and the objective was related to capacity strengthening in disaster risk management, the results under PDO2 are interconnected with PDO1 above.

Rating Substantial

OVERALL EFFICACY

Rationale

The overall efficacy of the project to achieve its objectives is rated Substantial with minor shortcomings. All six outcome indicators were achieved. All 15 output indicators were achieved or exceeded. The efficacy of the project to achieve both the first and second objectives is rated Substantial with minor shortcomings. The values of the outcome indicators were supported by the 2020 Project Evaluation (see Section 9 M&E Implementation below). The study surveyed 1,000 beneficiary households and 260 members of CODEMs, CODELs and co-executing agencies in the project area (ICR, paragraph 78). The study was used to support the efficacy of the project to achieve its objectives and project efficiency. Annexes 4 and 5 detailed the results including short- and long-term effects of DRM measures.

The tropical storms Eta and lota in November 2020 measured in real terms the improvement in the country's disaster management capacities without specific indicators in the results framework to capture these, e.g., low number of fatalities (99 in Honduras). COPECO planning and support at the local level were reportedly an improved response during the 2020 hurricane season (but no data to compare timely response). The forty structural mitigation measures avoided significant losses (reported as qualitative only, ICR, paragraph 40). Some life-saving overall improvement in emergency preparedness and response could be reasonably attributed to the project interventions.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Efficiency: At appraisal, the following economic and financial analyses were conducted: (i) a cost benefit using a "with" and "without the project" scenarios; (ii) financial sustainability analysis; and (iii) fiscal impact analysis (PAD, Annex 8, paragraph 2). The analyses used costs and benefits associated only with the disaster risk mitigation measures such as measurable strengthened capacities at the national and municipal levels; and mitigation investments using a sample of 18 types of structural mitigation works. The financial analysis used the average municipal budget and the average costs of the new mitigation works. The fiscal analysis estimated the average maintenance costs of the mitigation works and its impact on average municipal budgets. Using a 10 percent opportunity cost of capital, the Net Present Value (NPV) was estimated at US\$1.89 million, benefits at US\$10.77 million and costs at US\$7.9 million. The Internal Rate of Return (IRR) was estimated at 12.89 percent.

At closing, the report used the same ex-ante methodology including (i) 10 percent opportunity cost of capital; and (ii) costs and benefits over a 25-year return period for the structural mitigation works. Using actual outputs, costs, and estimates of the likely impact of the forty (40) structural mitigation measures built, the NPV was estimated at US\$ 3.4 million with an IRR of 21 percent. Costs reached US\$8.5 million, benefits at US\$19.3 million, a benefit/cost ratio of 1.21. Sensitivity analysis used 2 scenarios of costs and benefits. The first

scenario reduced benefits by 20%; the second increased costs by 20%. Results showed sensitivity to decreases in benefit than increases in costs.

Administrative and operational Efficiency: The project underwent five restructurings, cancelled US\$4 Million from the CERC allocation, and extended the closing date three times for a total of 26 months. The extension allowed the achievement of the PDO outcome and output Indicators with reduced resources. Early implementation delays were attributed to government commitment. First, lack of Government budget allocation significantly limited disbursements in the first three years of implementation. Second, political turmoil and social unrest following the 2017 presidential elections affected the implementation of activities in the project area (see Section 10 Other Issues, (b) Fiduciary Compliance below).

The Credit originally allocated US\$10.0 million for CERC. During implementation, the CERC allocation was reduced to zero in two steps: first, by canceling US\$4.0 million in April 2014 and second, by reallocating the remaining amount to other project activities in the April 2019 restructuring. CERC was triggered twice - first in May 2020, to supplement the government response to the COVID-19 pandemic (the nationwide curfew caused several delays in the construction of the structural mitigation measures), and second, on May 3, 2021 to fund eligible response activities following the tropical cyclones. CERC was triggered in both cases, and funds released within three weeks (ICR, paragraph 45).

Although the project was implemented over a longer period than originally planned (26 months), the project achieved a higher internal rate of return than estimated at appraisal. The ERRs noted below refer to the structural mitigation works allocation - US\$13.05 million of US\$30 million at appraisal and US\$11.76 million of US\$23.72 million at closing.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	12.89	43.50 □ Not Applicable
ICR Estimate	✓	21.00	49.60 □ Not Applicable

^{*} Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The relevance of objectives is rated High. The efficacy of the project to achieve the first and second objective is rated Substantial with minor shortcomings. Operational inefficiencies did not detract from the economic

efficiency of the structural works implemented. The outcome of the project to achieve its objectives is rated Satisfactory.

a. Outcome Rating Satisfactory

7. Risk to Development Outcome

The ICR identified the following risks to the development outcomes (paragraphs 95-96). IEG added the impact of the war in Ukraine in the economic risk below:

- Government commitment: This is a low risk. The government has demonstrated its commitment to DRM evident in its country plans and development strategies (see Section 3 Relevance of Objectives above). The increased capacity at both the national and local levels and the close interinstitutional collaboration and coordination facilitated by this project would likely sustain the institutional outcomes of the project interventions.
- Municipal government ownership risk: This is a high risk. The completed structural mitigation works require budgetary commitments from municipalities for its continued operations and maintenance (O&M). There is no evidence that municipal budgets have taken the maintenance of completed structural mitigation measures on board. Issues remain about the long-term role of municipalities in DRM although the municipal institutions, CODEMs and CODELs linked to the implementation of structural mitigation works showed an impact on capacity to respond and community empowerment. In interviews, leaders of CODELs indicated that they maintained the structural mitigation measures in their communities because municipalities were not providing O&M support. Absent allocations for O&M of these work in municipal budgets and continuing support to CODEMs and CODELs jeopardizes the sustainability of the mitigation works.
- **Institutional Support.** This is a moderate risk. COPECO requires adequate government resources to continue to strengthen the integrated disaster risk management capacity at the municipal and national levels.

IEG added the following risk.

• **Economic Risk:** This is a high risk. The continuing COVID 19 pandemic and the war in Ukraine and its impact on increasing oil prices pose high risks to the outcome of this project. In March 2020, the COVID-19 pandemic weakened Honduras economic growth. Nationwide restrictions in movement caused construction delays. The war in Ukraine has global reach and its impact will be evident in the prices of commodities affected by rising prices of oil and gas.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project was a follow-on to the Bank-funded PMDN and benefited from the long-standing partnership between the country and the Bank on DRM. The government's commitment to DRM was embodied in its strategy for reducing vulnerabilities, promoting inclusive growth, and reducing poverty. The Bank's PMDN task team helped prepare this project. Design adopted the following lessons from PMDN (i) a participatory methodology to engage municipalities and the community in territorial planning and DRM; (ii) implementing small scale, structural measures with high impact in mitigating loss of lives and properties in at-risk municipalities; (iii) establishing clear lines of accountability and resource management; and (iv) the value of reliable monitoring and evaluation (M&E), sound economic analysis, and lessons to prioritize DRM on limited budgets and competing priorities (PAD, paragraph 31). Lessons from the Bank's DRM experience, good global practices, emerging DRM technological advances and innovations, and international standards on DRM and territorial planning also informed design.

The Bank selected the implementing agency, COPECO as meeting minimum fiduciary requirements after the agency implemented the PMDN and the Inter-American Development Bank (IDB)-financed Disaster Risk Prevention and Mitigation Project (MITIGAR) and signaled a readiness to implement. Design, implementation, and works supervision adopted the participatory approach throughout the project cycle. Activities were customized for specific groups such as women and Indigenous Peoples to gain legitimacy of interventions with this cohort. At entry, the team assessed substantial implementation risk and initial delays proved this assessment to be correct.

The ICR acknowledged that M&E lacked appropriate data collection methods, which led to underutilized M&E data for project management, and limited the ability for timely reporting (see Section 9 M&E design and implementation below). However, the MTR addressed this shortcoming.

Overall, the quality at entry is rated Satisfactory with minor shortcomings in the lack of sufficient indicators to be supported by data in M&E design to capture the impact of the project interventions in improved capacity to respond to emergencies (see Section 4 Efficacy above and Section 9 M&E design below).

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

The Bank team was led by four Task Team Leaders (TTLs) in the conduct of 50 supervision missions and 16 videoconferences over the <u>8.5-year</u> implementation period. Part of the Bank task team were in the country, coordinated with the Country Office, and worked closely with the implementing agency and coexecuting agencies. The presence in country also helped deliver technical and operational advice in a timely manner and closely follow up on issues as these emerge to reduce implementation challenges. There were specialized technical and operational support to the Project Implementation Unit to manage environmental and social, and fiduciary risks (see Section 10, Other Issues below). After the last in-country mission on January 2020, and during the COVID-19 pandemic, the Bank team conducted virtual meetings to support the country counterparts.

In May 2019, the Bank M&E specialists helped structure a methodology for measuring indicators to address the design shortcoming at entry (ICR, paragraph 80). The MTR was conducted as planned. After the MTR, issues affecting implementation were adequately handled. Communities were enjoined to use a gender lens in its participatory approach and consistency with the Indigenous Peoples and Afro Descendant communities' culture and priorities. Workshops were held to understand guidelines and processes for accessing CERC; with technical advice on measuring the economic, social, and environmental impacts of the project, address the challenges of gathering data for baseline, MTR, and final evaluation studies; and technical expertise to strengthen risk management capacities at the municipal and community levels. The team demonstrated a proactive approach to implementation challenges such as ensuring that the project had sufficient funds to close the project satisfactorily.

Overall, the quality of supervision is rated Satisfactory. There were operational inefficiencies encountered evident in the extension of the project but these were addressed in a timely manner.

Quality of Supervision Rating Satisfactory

Overall Bank Performance Rating Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The project's objectives were broadly defined "to continue strengthening" because of the follow-on nature of the project. According to the PAD, the implementing agency was to implement M&E through bi-annual progress reports on project performance, including physical and financial progress and provide periodic information on 11 intermediate results and progress toward 5 PDO level outcome indicators represented in the project's results framework (PAD, Annex 1). These indicators were largely adequate but had room for improvement. For example, POD1 outcome indicator of satisfaction with project activities did not sufficiently demonstrate the progress on strengthening capacity for integrated disaster risk management at the national level. Overall, the benchmark between the past performance and the improved capacity as a result of the project was not sufficiently established and clear. The revision of the PDO indicator on the technical, economical, and environmental "soundness" of mitigation measures to the perception of "satisfactory or above" weakened the indicator. Flood risk perceptions may reflect a false sense of security of the beneficiaries and need to be supplemented by technical assessments. Lastly, in the outcome for emergency response, the time taken to disburse funds was a process indicator and not an outcome level indicator. Perhaps how rapid release of funds addressed the speed of recovery would have better reflected the impact of the CERC.

Participating municipalities and other agencies were to provide supporting information. The credit was to finance baseline data to assess social, environmental and economic (including gender differentiated) impacts of key activities. Indicators and impacts were to be assessed independently at midterm and for the final evaluation of the project (PAD, paragraph 37). The ICR acknowledged a shortcoming in M&E design

in the lack of method for collecting data to monitor and evaluate the indicators of the Results Framework (ICR, paragraph 64). This was addressed at implementation (see below).

b. M&E Implementation

COPECO implemented the M&E system. Baseline data for project impact, mid-term evaluation, and final evaluation were completed as designed. The ICR reported no changes from the baselines at appraisal or during the April 2019 and June 2020 restructurings. Several analyses were carried out to assess the project results (ICR, Annex 5). At MTR and closing, consultants completed the following assessments: (i) technical, economic, and environmental evaluation of the structural mitigation measures; (ii) economic and financial analysis; (iii) social audits; (iv) emergency drills; (v) quantity evaluation and database; and (vi) consolidated evaluations (ICR, paragraph 78).

In May 2019, with Bank M&E specialists, the Project Implementation Unit prepared an Action Plan, an M&E Plan, and designed a methodology to measure each indicator and monitor progress quarterly using an Indicator Measurement Fact Sheet. In the June 2020 project restructuring, one intermediate indicator was added to the Results Framework to monitor the CERC. The PIU implemented this methodology from June 2019 until project closing (ICR, paragraph 72). In 2020, the final evaluation assessed the efficacy of the project to achieve its objectives with 1,100 project beneficiary households and 260 members of CODELs, CODEMs, and co-executing agencies participating in the survey. The study assessed the planning, decision-making, and implementation actions to address vulnerabilities in development processes and if these actions prevented or reduced the impact of a potentially destructive phenomenon from causing damage or severe disruptions to people's lives, livelihoods, and ecosystems territories (including counterfactuals). The studies included information about DRM's short and long-term effects on households' main assets (ICR, Annexes 4 and 5). M&E implementation and project evaluation focused on data integration using Microsoft Excel database.

A detailed assessment quantifying risks reduced from the mitigation works could not be carried out because of a lack of a detailed risk assessment using before/after scenarios.

c. M&E Utilization

Data generated by the M&E system eventually informed project progress, the MTR and the final evaluation. According to the ICR (paragraph 64), early reliance on the M&E data for project management proved inadequate and the limited ability to report in a timely fashion were noted. The project was approved in December 2012, however the M&E changes were made in 2019 (see above). After 2019, M&E data informed project management and decision-making. M&E reports informed agencies about DRM in the municipalities, communities, CODELS, and CODEMs. In the April 2019 restructuring, the target values were increased to reflect the scaled-up activities.

On balance the M&E quality is rated Substantial. Not all the indicators were rectified during implementation to better capture the progress on capacity strengthening for integrated disaster risk management, and some were simplified or weakened (i.e., the technical, economical, and environmental "soundness" of mitigation measures was replaced for "satisfactory or above'). However,

several reports and assessments were carried out to understand and measure the achievement of the project development objectives, with an adequate level of detail and analytical findings.

M&E Quality Rating Substantial

10. Other Issues

a. Safeguards

Environmental Safeguards: The project was categorized as "B" for environmental assessment purposes and triggered the following safeguards: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Physical Cultural Resources (OP 4.11), and Forests (OP 4.36). An Environmental and Social Management Framework (ESMF) was disclosed in the country's and the Bank's websites on October 17, 2012. The structural mitigation measures or works completed before 2019 complied with the applicable national legislation but the reports did not include performance of the reported activities or compliance with the ESMF (ICR p. 82). The ESMF was updated in 2019 to include environmental and occupational safety aspects not originally considered and was redisclosed in January 2020. Following the MTR, closer supervision of the contractors was carried out and compliance with the ESMF requirements were documented more efficiently. The Bank's Operations Portal noted that the project complied with all safeguards.

The ICR did not include any description of implementation of Natural Habitats (OP 4.04) and Forests (OP 4.36). The Bank team confirmed on June 8, 2022 that the project complied with these safeguards.

Social Safeguards: The exact locations of the project were to be determined during implementation. The project triggered social safeguards for Indigenous Peoples (OP/BP 4.10) and Involuntary Resettlement (OP/BP 4.12). A Resettlement Action Plan (RAP) was prepared. A Grievance Redress Mechanism was specified in component 1 of the project. According to the Bank's Operations Portal, in the last virtual implementation mission of February 2021, the GRM results were disaggregated by year and cumulative, by gender, municipality, type of grievance (complaint, query, or request), means of communication (Website, Phone calls, messages from the WhatsApp application and onsite visits); and status (received, attended, and resolved) from 2013 to 2021. Most cases were entered through the WhatsApp application. The average resolution time per case is 1.5 days. From 2013 to 2021, 151 cases were received (41% from men and 59%) from women), and all were resolved. After the MTR, COPECO implemented the social management system to improve community participation, ownership of mitigation works, and management of grievances by establishing dialogue with the national indigenous community's organization (CONPAH), conducting workshops with Indigenous Tolupan and Afro Descendant Garifuna communities to identify risks and systematize traditional practices and knowledge in risk prevention and response. The delays in implementing these activities between June 2017 and October 2018 rated compliance with the safeguards OP/BPs 4.10 and 4.12 as Moderately Satisfactory, leading to an overall safeguards rating of Moderately Satisfactory for that period. Evidence of progress upgraded this rating to Satisfactory until project closure (ICR, paragraph 85). The Resettlement Policy Framework was reviewed to ensure impacts, compensation, and documentation processes were in compliance. Training was provided to municipalities on international standards and tools for resettlement.

The CERC did not trigger additional safeguards. In both CERC cases, the preliminary environmental and social evaluation (FEASP) of the activities proposed in the Emergency Assistance Plans (EAPs) specified environmental control measures and safety standards for the activities in the EAP. However, there was no information of compliance with these measures (ICR, paragraph 86).

b. Fiduciary Compliance

Financial Management: Financial management (FM) system complied with overall FM arrangements (ICR, paragraph 87). The Project's bi-annual interim unaudited financial reports were submitted to the Bank with minor delays; were of acceptable quality and provided adequate financial monitoring. Audit reports were submitted in a timely fashion to the Bank, including unmodified (clean) opinions. However, as the project was closing, the government did not confirm that funds were available to cover costs of the project activities during the grace period. The Bank team sent the government three Management Letters (dated December 18, 2019, March 10, 2020, and October 30, 2020), and met with SEFIN and COPECO to ensure that the project had sufficient funds to deliver the final reports and cover the costs of the audits.

Procurement: The ICR notes (para 88) that procurement was rated Satisfactory throughout project Implementation, except in December 2020, it was downgraded to Moderately Satisfactory following a procurement post review that indicated noncompliance with the principles of the old procurement guidelines, which was eventually cleared . A close working relationship between the Bank and the PIU enhanced PIU procurement capacity. Each year, the Bank reviewed Annual Operations Plans (POA) and procurement plans prior to its implementation. The procurement plan was updated frequently. Information supporting changes to the procurement plan were updated in the Systematic Tracking of Exchanges in Procurement System (STEP).

c. Unintended impacts (Positive or Negative)

d. Other

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Satisfactory	Overall efficacy is rated substantial, due to minor shortcomings. With high relevance and substantial efficiency, the project outcome rating is Satisfactory.
Bank Performance	Satisfactory	Satisfactory	

Quality of M&E	Substantial	Substantial
Quality of ICR		Substantial

12. Lessons

The following lessons were mostly derived from the ICR with minor modifications by IEG (ICR, paragraphs 97-103):

- A successful operation benefits from a starting point of a strong institutional capacity, low project management staff turnover, responsiveness to self-identified needs, and transparency. In this project, the government committed to the participatory approach introduced by the preceding Bank-financed DRM project applying a participatory approach in the design of municipal level DRM plans (PMGRs) and emergency plans (PEMs). Residents from the municipalities and communities were enjoined to identify and implement structural and nonstructural DR mitigation measures. This approach, plus the steady presence of a qualified project implementation unit, contributed to the project's success. For future consideration, having permanent qualified staff at the municipal level may help ensure continuity and achieve more efficiency.
- Integrating DRM in territorial planning leads to risk-informed development plans and fosters a culture of prevention. In this project, a risk management approach formed part of the standardized methodology for territorial planning. The methodology helps other institutions frame their planning instruments. The PMGRs and PEMs planning instruments showed how these contributed to strengthening the local framework for resilience. However, territorial planning with DRM features require effective implementation. PMGRs and PEMs are "living" instruments, require periodic updating and would call for investments in human capital. Resources would be needed to keep the system operational, conduct continuous training, and compensation packages to attract and retain experts, e.g., meteorologists, hydrologists, and geologists.
- Engaging Indigenous Peoples and Afro-Honduran population facilitates inclusive DRM. In this project, the pilot participatory methodology enjoined indigenous and Afro-Honduran peoples to help analyze risks, vulnerabilities, and design PMGRs, and PEMs. The mitigation works, supervision, and maintenance activities in these plans empowered the self-determination of these communities. Citizen engagement was the foundation for inclusive DRM & Gender Equality (https://www.gfdrr.org/en/inclusivedrm). This consultative participatory approach gave COPECO a better understanding of the needs and risks faced by these vulnerable communities while building their preparedness and DRM capacity.
- CERC effectiveness may benefit from a flexible approach to the approval process. In
 this project, CERC was activated twice the first in June 2020 in response to COVID-19, and
 in May 2021 in response to the impact of the storms. The emergency procurement of limited
 goods in response to these emergencies amounted to about US\$0.5 million. In both cases,
 funds were made readily available. However, the documents to trigger CERC took around 3
 months for the first emergency and 5 months for the second one. The overall period from the

time the emergency was declared to implementation took 5-7 months and ran contrary to a rapid response. More features allowed under Bank policies need to be explored.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was well written, consistent, and complete. The report was internally consistent and integrated the various parts of the results. The results were mutually reinforcing highlighted by the expanded storylines offered by the annexes to support the narrative in the main report. The annexes (e.g., Annexes 4, 5, and 6) were useful in presenting details of the project interventions. The quality of the analysis is good with adequate focus on evidence linked to the findings. Outcomes were highlighted throughout the report sourced from various cited studies. Annex 4 supported the substantive efficiency from the structural mitigation works to overcome the administrative and operational inefficiencies of the operation. Annex 5 provided a much more nuanced and candid assessment of the project results and remaining issues than the main text. Lessons and recommendations were derived from the project experience, including the recommendation to have a zero allocation for CERC to avoid challenges posed by bureaucratic processes.

The link established between inputs, outputs, and outcomes, however, only served to highlight the design shortcoming in M&E and the lack of sufficient indicators to strengthen the achievement of the objectives. Also, the benchmarks or milestones between the prior capacity and improved capacity as a result of the project have not been sufficiently explained and analyzed. The ICR incorrectly refers to the assessments and reports carried out to consolidate the evidence in support of the PDO achievement as 'impact evaluation". Also, the main text is twice the number of the recommended pages.

a. Quality of ICR Rating Substantial