

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA2886

Project Name	Climate Resilient Infrastructure (P127338)
Region	LATIN AMERICA AND CARIBBEAN
Country	Belize
Sector(s)	Flood protection (30%), Urban Transport (30%), Central government administration (20%), Irrigation and drainage (20%)
Theme(s)	Climate change (50%), Natural disaster management (25%), Land administration and management (25%)
Lending Instrument	Investment Project Financing
Project ID	P127338
Borrower(s)	Ministry of Finance
Implementing Agency	Ministry of Finance
Environmental Category	B-Partial Assessment
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Estimated Date of Board Approval	05-Aug-2014
Decision	

I. Project Context

Country Context

Belize is a small, middle income country with an estimated population of 330,000 and a GDP per capita of US\$4,247 (2012) . The country is endowed with the largest barrier reef in the Americas and pristine tropical forests. Although the economy has traditionally been oriented towards agriculture, it has undergone a significant transformation over the last decade resulting from the first commercial oil discovery in 2005 and emergence of the tourism industry . The service sector has become the largest contributor to GDP accounting for 54 percent, while the agricultural sector accounts for 13 percent of GDP with exports primarily dominated by the sugar and citrus industries .

Since gaining independence in 1981, Belize has experienced peaceful and democratic transitions. The governing party, United Democratic Party (UDP), came to power in 2008 and was re-elected in 2012 for a subsequent five-year term, which ensured political stability and continuity for policy priorities. The Government has worked to establish a transparent and accountable government and has taken concrete steps to address governance issues including the passage of the Freedom of Information Act, term limits for elected officials (including the Prime Minister), and empowering

the Senate's oversight abilities. After suspending its program for several years due to deteriorating fiscal conditions and fiduciary concerns, the World Bank re-engaged with the government in 2009 through the Belize Municipal Development Project (BMDP), approved by the Board on September 16, 2010. Since the approval of the BMDP, the relationship between the Bank and the Government of Belize (GoB) has improved and there is a clear commitment by the GoB to the Bank's lending and technical assistance programs outlined in the World Bank Group's Country Partnership Strategy (CPS) 2012-2015.

Fiscal space remains limited in Belize and the public debt trajectory vulnerable to various shocks. In March 2013, the GoB completed the restructuring of the US\$ 550 million 'Super-Bond', which was issued in the international market in 2007. While the medium-term debt trajectory improved as a result of the bond restructuring, this is likely to be reversed, should contingent liabilities (compensation of the former owners of two nationalized utilities companies) materialize. In this context, the total public debt stock (which includes programmed borrowings from the multilaterals) could increase by an estimated 18 percentage points to 96 percent of GDP by 2015 with additional downside risks given the susceptibility of the economy to macro-economic shocks including exchange and interest rates shocks. Going forward, debt reduction is projected to be slow - particularly in the context of a relatively weak fiscal effort - with the country expected to run a primary surplus of about 1 percent of GDP in the medium-term. This suggests that ability of the authorities to increase and to honor its obligations could be constrained unless additional fiscal consolidation is undertaken.

Poverty in Belize substantially increased in recent years, in part due to the stagnating economic situation and impact of natural disasters. After a gradual decline in unemployment levels during the past decade, these figures increased from 9 percent to 13 percent between 2007 and 2009. Furthermore, damages from the 2007-2008 floods, which hit several areas of the country, disrupted the livelihoods of Belizeans who largely depend on the natural resource base of the country for their income. During the 2002-2009 period, the overall poverty rate increased from 34 percent to 41 percent, and extreme poverty increased from 11 percent to 16 percent. Rising poverty has affected all districts. In particular, these figures more than doubled in the Corozal District, from 26 percent to 56 percent, and extreme poverty tripled from 6 to 21 percent. Corozal was also repeatedly impacted by hurricane and flooding, underscoring the population's vulnerability to disasters. As of 2009, income inequality also remains high with a Gini coefficient of 0.42, and the highest rate of economic inequality is concentrated among indigenous Mayan communities.

Sectoral and institutional Context

The history of Belize has, in large part, been shaped by its vulnerability to natural disasters. Belize has experienced frequent natural disasters of catastrophic proportions over the last half century. Hurricane Hattie destroyed half of Belize City in 1961, killing 400 people and submerging Turneffe Island and Caulker Caye in 13-foot storm surges. The economic damages estimated at over 600 percent of GDP prompted the GoB to build a new administrative capital 50 miles inland in Belmopan. In 2000, Hurricane Keith caused damage exceeding 45 percent of GDP, and one year later Hurricane Iris submerged Belize City in 14-foot storm surges and destroyed about 4,000 homes. Tropical Storm Arthur in May 2008 caused extensive damages to critical infrastructure and the agriculture sector. The fiscal impacts of disasters required significant capital expenditures to repair and reconstruct damaged infrastructure, resulting in frequent budgetary deficits.

Belize's vulnerability to natural disasters is exacerbated by the effects of climate change, as natural hazards are expected to intensify both in terms of frequency and severity. The United Nations Framework Convention on Climate Change (UNFCCC) identified Belize as one of the countries that is most vulnerable to the adverse impacts of climate change. It is prone to natural hazards, particularly hurricanes and heavy rains leading to storm surges. It also has a long low lying coastline, most of which is at or near sea-level and more than 50 percent of the country's population and most of the business centers are on or near the coast. Projections suggest that Belize will undergo a warming and drying trend. More frequent heat waves and droughts are expected, including rainfalls with increased intensity, and rising sea levels, which would lead to increasing storm surges and riverine flooding. The Belizean economy is highly sensitive to climate variability due to its dependence on natural resources. Due to climatic events in 2008 the country suffered considerable damage: massive flooding across Belize paralyzed economic activity in large parts of the country for weeks and resulted in the loss of lives and property. The overall direct and economic losses were estimated at about US\$66 million (4.8 percent of GDP). The floods affected 50,000 people, roughly one sixth of Belize's population in over 100 communities in the Eastern Cayo, Belize, Orange Walk, and Corozal Districts. These impacts are expected to increase as a result of climate change.

Belize has also recently experienced rapid urbanization, which underscores the importance of managing urban resilience and proactively planning for future urban growth. According to United Nations estimates, Belize has the third highest urban population growth rate in Central America at 3.1 percent per annum between 2005 and 2010. Urban population growth is not evenly distributed and inland cities are growing faster than the other cities. The experiences from the BMDP demonstrate that much of the urbanization process in Belize has taken place in the absence of proper land use planning for urban growth and adequate infrastructure provisions, often resulting in urban settlements in high risk areas with insufficient infrastructure. In addition, the current land use plan does not incorporate disaster risks or climate resilience considerations. The GoB prepared and endorsed a national land use policy and integrated planning framework in 2013. The framework needs to be made operational and better integrate climate resilience considerations.

Underdeveloped and dilapidated infrastructure, particularly in the transport sector, is a key constraint to reduce vulnerability to disasters. Throughout Belize, critical infrastructure, such as public building and roads, are in need of rehabilitation or reconstruction. The road network is particularly vulnerable due to the lack of redundancy in mobility. The flow of economic and social movement can be severely disrupted during flooding events. Furthermore, roads have not adequately incorporated hazard and risk into detailed road designs and this coupled with inadequate preventive maintenance and rehabilitation results in unsafe road conditions during flooding events. With 70 percent of the population living near primary and secondary road networks, flooding of one section of roadway can cut access for a significant portion of the population. The GoB has therefore prioritized the transport sector in their medium-term investment planning, considering the vulnerability of the road network to increasing impacts of natural disaster events as well as the socio-economic importance of transport sector.

Another challenge is the absence of sustainable infrastructure maintenance mechanism, mostly due to fiscal constraints and institutional resistance to adopting alternative approaches, such as greater private sector participation. However, the recently adopted Road Maintenance Strategy (RMS) offers a good opportunity to introduce more sustainable and workable measures. The GoB expressed commitment to undertake institutional reforms, in view of the chronic insufficiency of

budgetary resources for road maintenance, and developed the RMS with the support of the European Union (EU) program under the Global Climate Resilient Alliance grant. According to the RMS, US\$17 million is required to maintain the roads in Belize, but on average only US\$8 million has been allocated. One of the key recommendations from the RMS is to establish a road maintenance fund to be funded by different types of fee such as levies on consumables, tolls on specific roads, fees for heavy vehicles, fines for overloaded vehicles, and international transit fees. The RMS was adopted by the national cabinet and now requires the implementation of specific measures, including the road maintenance fund. In addition, the RMS recommended the creation of a Road Maintenance Unit equipped with adequate budget and technical staff. To this end, the MoWT is in the process of establishing the Road Maintenance Unit and is in need of technical support to fully operationalize it.

Against this backdrop, the GoB developed the National Climate Resilient Investment Plan (NCRIP) to address the impacts of climate change on social and economic development. This plan was elaborated with support from the Bank and financial support from the Africa Caribbean Pacific (ACP) European Union (EU) Natural Disaster Risk Reduction Program, received through the Global Facility for Disaster Recovery and Reconstruction (GFDRR). Adopted on October 2013, this multi-sectoral plan lays out priority investments by sector, integrating physical interventions with capacity building activities and policy actions, to quantifiably reduce vulnerability and build climate resilience in the country. In the past, Belize's legislation and policy measures to mainstream disaster risk management (DRM) were fragmented and lacked ownership and participation of ministries. To address this disconnect, the NCRIP engaged all relevant stakeholders from the beginning to devise holistic and participatory approaches to address climate resilience. Through the NCRIP, the GoB has articulated a medium-term plan that seeks to fully integrate climate change adaptation, climate variability, and comprehensive disaster management into national development planning processes and actions. The NCRIP identified approximately US\$430 million in physical investment needs, of which there is a US\$125 million financing gap.

Through the NCRIP, the GoB made great strides to prioritize road infrastructure investments for enhanced climate resilience based on two considerations: (a) socio-economic criticality of the road network; and (b) flood susceptibility of the primary and secondary road networks. Criticality of the roads was assessed through a participatory multi-criteria evaluation (MCE) process with government and key stakeholders such as NGO representatives and private sector, while the flood susceptibility was carried out using a data-driven analysis. The results from the MCE process and the flood susceptibility evaluation were used to identify priority areas for investments. This investment prioritization serves as a basis to inform sub-project selection and components of the proposed Belize Climate Resilient Infrastructure Project (BCRIP).

The NCRIP road prioritization analysis identified four main geographical areas for potential BCRIP investments that represent both socio-economic importance and high susceptibility to disaster risk: Greater Belize City area, west of Belmopan, northern area around Corozal, and southern area around Independence. Poverty levels in the last three areas reach above 40 percent, with 50 percent of the population living in extreme poverty in the southern area around Independencia.

II. Proposed Development Objectives

The development objective of the Project is to enhance the resilience of critical road infrastructure against flood risk and impacts of climate change and to improve the Borrower's capacity to respond promptly and effectively in an Eligible Crisis or Emergency, as required.

III. Project Description

Component Name

Climate Resilient Infrastructure

Comments (optional)

This component will reduce physical vulnerability of critical infrastructure through the retrofitting and rehabilitation of existing infrastructure within the primary and secondary road network including associated drainage and flood mitigation systems in order to strengthen their resilience to natural hazards and the anticipated impacts of climate variability. Activities will be comprehensive in nature and include key risk reduction investments such as river bank strengthening and small scale flood mitigation improvements, rehabilitation and replacement of critical small-scale bridges, and road improvements . May also include the reinforcement of embankments and slopes. It will also finance studies required to support engineering design options and final detailed designs solutions.

Component Name

Technical Assistance for Improved Climate Resilience Management

Comments (optional)

This component aims to strengthen the capacity of relevant technical line ministries, MoWT and Ministry of Natural Resources and Agriculture (MNRA), to mainstream climate resilience considerations into core physical and investment planning. The component will aim to strengthen the human resource capacity available to the MNRA and MoWT through targeted training, and equipment and knowledge acquisition.

Component Name

Project Management and Implementation Support

Comments (optional)

This component will finance activities that relate to institutional support and capacity development for project management and execution to ensure compliance with fiduciary controls, supervision, monitoring and reporting, and compliance with social and environmental safeguards. The component will fund the provision of technical advisory services, training, operating costs, and acquisition of goods. Activities will include training, staffing and development activities associated with project execution such as coordination, evaluation, supervision and implementation. The component will also support the strengthening of BSIF's fiduciary capacity. In particular, mainstreaming sustainable public procurement functions and setting up a department with adequate staff.

Component Name

Contingent Emergency Response

Comments (optional)

This component will enable the rapid disbursement of funds and allow the GoB to request a reallocation of project funds to partially cover emergency response and recovery costs , following an adverse natural or man-made event that causes a major disaster. This component was included in the proposed Project since a CAT-DDO is not feasible at the moment for the country given its limited fiscal space. This component will be triggered if the following conditions are met: (i) major disaster occurs; (ii) state of emergency is declared; (iii) causal relationship is established between an adverse event and the need to use CERC; and (iv) submission and approval of an updated Operations Manual (OM) that includes an agreed upon action plan of activities.

IV. Financing (in USD Million)

Total Project Cost:	30.00	Total Bank Financing:	30.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			0.00
International Bank for Reconstruction and Development			30.00
Total			30.00

V. Implementation

The implementation arrangements will include the participation of institutions at four levels; (i) the Ministry of Finance and Economic Development (MoFED) will be the main GoB counterpart, and the overarching institution in charge of executing the project, (ii) a Project Steering Committee (PSC), under the chairmanship of MoFED, will provide project oversight, (iii) the Belize Social Investment Fund (BSIF) will be the project management agency responsible for overall coordination of the BCRIP, a Project Management Unit (PMU) was created within BSIF, and (iv) technical line ministries, MoWT and MNRA, will be the implementing agencies for specific components of the project. In addition several institutions will be involved through an advisory or supplementary capacity, such as National Emergency Management Organization (NEMO), and the Ministry of Forestry, Fisheries and Sustainable Development (MFFSD). All of these institutions are represented in the Project Steering Committee (PSC) which has been in place since November 2013.

VI. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04	x	
Forests OP/BP 4.36		x
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11	x	
Indigenous Peoples OP/BP 4.10	x	
Involuntary Resettlement OP/BP 4.12	x	
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60	x	

Comments (optional)

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