

Cover Page for Project/Program Approval Request			
1. Country/Region:	Saint Lucia	2. CIF Project ID#:	XPCRLC044A
3. Source of Funding:	<input type="checkbox"/> FIP	<input checked="" type="checkbox"/> PPCR	<input type="checkbox"/> SREP
4. Project/Program Title:	<i>Saint Lucia Disaster Vulnerability Reduction Project</i>		
5. Type of CIF Investment:	<input checked="" type="checkbox"/> Public	<input type="checkbox"/> Private	<input type="checkbox"/> Mixed
6. Funding Request in million USD equivalent:	<i>Grant: 12.0 (including the additional USD 5 million in grants allocated to Saint Lucia in November 2012)</i>	<i>Non-Grant: 15.0</i>	
7. Implementing MDB(s):	<i>IBRD/IDA</i>		
8. National Implementing Agency:	<i>Ministry of Finance, Economic Affairs, Planning and Social Security</i>		
9. MDB Focal Point and Project/Program Task Team Leader (TTL):	<i>Headquarters- Focal Point: Kanta K. Rigaud</i>	<i>TTL: Tiguist Fisseha</i>	
10. Project/Program Description (including objectives and expected outcomes):			

The proposed Project Development Objective (PDO) is to reduce vulnerability to natural hazards and climate change impacts in Saint Lucia.

Project beneficiaries:

The proposed Project would benefit the country's 169,000 inhabitants, including women and other vulnerable groups, by reducing the risk of key infrastructure failure, by improving overall national understanding of risk for informed decision-making, and by increasing the country's capacity to quickly rehabilitate damaged public infrastructure following an adverse natural event.

Direct Beneficiaries: The Project's direct beneficiaries include those living in the areas¹ of project interventions or using public infrastructure that would have a reduced risk of failure from natural catastrophe. Specifically, these include users of the rehabilitated roads as well as communities benefiting from riverbank protection, slope stabilization works and structurally-sound health and education facilities doubling as emergency shelters.

The bulk of the proposed risk reduction, adaptation and reconstruction investments are targeted in areas where the highest vulnerability to disaster exists, which are also the districts where poverty rates are the highest; including Anse-la-Rayé, which has the highest levels of indigence² in the country, at 5.3 percent, Soufriere, which has a poverty rate of 42.4 percent, as compared to the national average of 28.8 percent and Vieux Fort, which retains one of the highest levels of extreme poverty (4.8 percent), compared to the national average of 1.6% (CPA, 2005/6).

The Project would also have specific benefits for households and businesses accessing concessional loans through the Climate Adaptation Financing Facility (CAFF) for building climate resilience of their assets, and/or diversification of their livelihoods in the face of climate change. Particular attention would be paid to ensuring that CAFF finance be used to promote greater resilience across socio-economic and gendered lines, to reach out to vulnerable groups and women.

Indirect Beneficiaries: Other countries in the Eastern Caribbean sub-region, that are part of the Caribbean regional PPCR, would also benefit from the Project. By advancing national open data infrastructure, the proposed Project would facilitate increased regional collaboration on understanding risk and developing risk reduction solutions. Saint Lucia would continue to participate in ongoing regional collaboration efforts under the Regional Disaster Vulnerability Reduction Project (RDVRP - P117871) and the regional Caribbean PPCR, enabling public entities and civil servants to better serve their respective constituencies through investments that take climate risk and vulnerability reduction into account and through better informed physical planning.

¹ These areas include the districts of Dennery, Soufriere, Anse-la-Rayé, Choiseul, Vieux Fort and greater Castries.

² The very poor or indigent in Saint Lucia are "persons whose daily average consumption is too low to guarantee adequate nutrition to maintain good bodily health" (St Lucia CPA, 2005-2006, p. xvi). The very poor are determined by an Indigence line which measures the "... minimum consumption, in monetary terms, that would be required for an adult to maintain good bodily health..."

Project Components:

Component 1– Risk Reduction and Adaptation Measures (US\$50.4 million: US\$22.1 million IDA; US\$5.1 million SCF Grant; US\$10.0 million SCF Credit; US\$13.2 million IDA Crisis Response Window). This component would support structural and non-structural flood and landslide risk reduction interventions and climate adaptation measures to improve Saint Lucia's resilience against current and future climatic shocks. Additionally, the component would finance the reconstruction of critical infrastructure damaged during the December 2013 flooding, using the 'build back better' approach. Activities under this component will also account for other potential risks (e.g. seismic) to ensure financed works are generally disaster resilient. Sub-projects include the following: (i) reinforcement of flood control infrastructure, including at the international airport; (ii) climate resilient rehabilitation of road sections along the national highway through drainage improvements, slope stabilization works and retrofit of select bridges; (iii) retrofits and climate resilient rehabilitation of priority emergency shelters; (iv) climate-resilient rehabilitation of deteriorating water supply infrastructure; and (v) retrofit and rehabilitation of existing schools and health centers. Additionally, relevant national plans, policies and strategies to support risk reduction and climate resilience efforts would be developed, including, *inter alia*: a national watershed management framework, a rainwater harvesting pilot program, and a climate change public awareness and education strategy.

Importantly, technical assistance and capacity building are embedded within sub-activities and include: (i) development of operation and maintenance plans, including a bridge maintenance plan, and (ii) risk assessments to support engineering design options and final detailed design solutions. Integrated hazard/climate analysis will inform engineering designs with respect to future service demands and infrastructure design life and will be built into the pre-engineering phase of each subproject.

Component 2– Technical Assistance for Improved Assessment and Application of Disaster and Climate Risk Information in Decision-Making (US\$8.6 million: US\$0.9 million IDA; US\$5.5 million SCF Grant; US\$2.2 million CRW). This component would support capacity building for open systems and platforms to create, share, analyze and use disaster risk and climate change data and information for improved decision making and engineering design for risk reduction and climate change adaptation. Specifically, the component would finance, *inter alia*: (i) the creation of a high resolution digital topographic and bathymetric model for Saint Lucia, (ii) sea level rise modelling and coastal flood and erosion risk mapping; (iii) design and deployment of meteorological, hydrological, and sea level rise monitoring networks to provide high resolution hydrologic data; and (vi) deployment of an environmental health surveillance system.

Data collected under this component would be used to inform investments under Component 1 (when suitable) as well as to identify and prioritize future risk reduction and adaptation investments. Data outputs would also inform the development of appropriate land use plans and provide a basis for more future flood and landslide risk management schemes.

Component 3– Climate Adaptation Financing Facility (US\$5.0 million SCF Credit) This component is designed to pilot a financing mechanism meant to incentivize pre-emptive climate adaptation amongst Saint Lucian households and businesses. Loans would be offered to finance works and activities which build the resilience of assets and livelihoods to adverse hydro-meteorological events. Saint Lucia Development Bank (SLDB)³ would serve as retail bank and would on-lend to final beneficiaries – with a concerted aim of building an affordable and self-sustaining loan portfolio in climate adaptation. Based upon the initial success of the component and local demand for climate adaptation loans, consideration will be given to include other commercial banks as participating retail banks.

³ SLDB's eligibility as participating financial institution was determined based on comprehensive institutional

SLDB would receive technical assistance to address identified gaps in its current operation and risk management structure and practices. A standalone OM would be generated for the CAFF, while SLDB would receive systematic support in implementing an institutional development plan to overcome existing gaps, and would monitor progress to this end.

Component 4–Contingent Emergency Response (US\$1.0 million IDA) This provisional component would allow rapid re-categorization and reallocation of project financing from other project components to partially cover emergency response and recovery costs associated with a natural catastrophe. The component would only be triggered upon formal declaration of an emergency by GoSL, in accordance with the Saint Lucia Constitution Order 1978,⁴ following the occurrence of a disaster. This component could also be used to channel additional disaster response funds, should they become available. A specific OM would apply to this component, detailing financial management, procurement, safeguards and any other necessary implementation arrangements.

Component 5–Project Management and Implementation Support (US\$3.0 million: US\$1.4 million SCF Grant; US\$1.6 million CRW). This component would finance activities required for efficient project management and implementation through the provision of technical advisory services, staffing, training, operating costs, and acquisition of goods. It would cover incremental operating costs, including those related to operating the Project Coordination Unit (PCU) under the Ministry of Finance, Economic Affairs, Planning and Social Security (MoF) and the Sustainable Development and Environment Division (SDED) of the Ministry of Public Service, Sustainable Development, Energy, Science and Technology (MoSDEST). It would also cover incremental operating costs incurred by implementing agencies and those required for outside consultancies to prepare and supervise specific activities, as well as technical audits, and monitoring and evaluation.⁵

A detailed description of components can be found in Section III.A and Annex 2 of the Project Appraisal Document.

assessment and due diligence that was conducted during preparation. While the participation of private commercial banks was also considered, at the time of the assessment, there was either no commercial interest for providing loans to conduct risk mitigation measures or banks were not financially fit to carry out this business.

⁴ Section 17 (1) of the Constitution provides that the Governor General may, by proclamation published in the Official Gazette, declare that a state of emergency exists. Further, Section 17 sets out the procedures for revocation, extension and lapse of such a declaration.

⁵ Given the large size of this Project, adequate allocation of resources would be required to increase PCU staffing and provide support for effective management of the Project.

Project costs and financing per component are as follows:

Table 1: Project Cost and Financing (in US\$ million)

Project Components	Project cost	IDA Financing	CIF Financing Grant	CIF Financing Credit	CRW Financing
Component 1: Risk Reduction and Adaptation Measures	50.4	22.1	5.1	10.0	13.2
Component 2: Technical Assistance for Improved Assessment and Application of Disaster and Climate Risk Information in Decision-Making	8.6	0.9	5.5	0.0	2.2
Component 3: Climate Adaptation Financing Facility	5.0	0.0	0.0	5.0	0.0
Component 4: Contingent Emergency Response	1.0	1.0	0.0	0.0	0.0
Component 5: Project Management and Implementation Support	3.0	0.0	1.4	0.0	1.6
Total	68.0	24.0	12.0	15.0	17.0

A detailed description of components can be found in Section III.A and Annex 2 of the Project Appraisal Document.

11. Consistency with Investment Criteria⁶:

PPCR funded activities within the proposed Project will focus on hard investments on infrastructure climate proofing and also address soft investments like climate information/data generation and processing, knowledge management, and capacity development at the institutional level, as well as development of plans/strategies that would contribute to building the island's climate resilience. These activities are directly aligned with the objectives outlined in the SPCR for Saint Lucia endorsed in July 29, 2011, providing incentives for scaled-up action and achieving transformative impact by improving national resilience to adverse natural events and longer-term impacts resulting from climate change.

Saint Lucia's national SPCR focuses on the following priority areas: (i) human welfare and livelihood protection; (ii) integrated natural resource protection, conservation, and management to promote sustainable development; (iii) building resilience through business development, innovation, and productivity enhancement; (iv) capacity building and institutional strengthening; as well as (v) reduction of risk to climate-related disasters.

The Disaster Vulnerability Reduction Project responds directly to the SPCR priority areas, aiming to reduce immediate-term disaster vulnerability and increase long-term climate resilience by addressing the multi-faceted risks associated with hydro-meteorological events. More specifically, the Project would provide critical support in the following areas: (i) invest in disaster risk reduction works required to ensure the short- and medium-term integrity of flood control infrastructure, transport networks, water supply systems and critical education and health facilities at risk to floods and landslides, as identified and prioritized by the GoSL; (ii) strengthen institutional understanding of climate-related risks (specifically, flood and landslide hazard) through risk and hazard information collection, deployment of spatial data management and sharing platforms as well as technical trainings on accounting for DRM and climate resilience in investment decision making and planning processes; (iii) leverage private capital towards climate resilience of individual businesses and households through provision of highly concessional climate adaptation loans; and (iv) provide GoSL with immediate liquidity in the event of a national catastrophe through a provisional contingent component.

The combination of the above-referenced activities is meant to promote the general resilience of Saint Lucia – and its citizens – to both natural catastrophes and climate change, the effects of which are becoming increasingly apparent on productive sectors in Saint Lucia. IDA credits will be leveraged toward reducing urgent disaster vulnerability reduction needs, while CIF/PPCR finance offers funds towards effecting transformational change meant to establish long-term climate resilience. New and innovative approaches, such as the CAFF, will be piloted to realize such change and draw lessons learned for future scaling up and replicability within Saint Lucia and internationally.

⁶ Please provide the information in the cover page or indicate page numbers in the accompanying project/program document where such information can be found.

12. Stakeholder engagement⁷:

Stakeholder Engagement through Consultations.

The Government of Saint Lucia has requested IDA, CRW and CIF/PPCR assistance from the World Bank to respond to their disaster vulnerability reduction and climate change adaptation needs. The GoSL led the preparation of their national SPCR, and various government agencies, civil society, and NGO stakeholders that are critical to the success of the proposed Project have been engaged since inception. During Phase 1, multiple extensive consultation workshops were held to determine national and local priorities and ensure adequate engagement and ownership of beneficiaries.

In addition, the inception of the proposed CAFF component is the result of stakeholder consultations conducted during the preparatory phase of the PPCR with private sector and civil society, which highlighted the need/demand for financing options for private businesses, community groups and individuals to build resilience to climate change. A comprehensive nationwide survey of 1500 households and a business survey are further scheduled to be launched in FY14. This survey is designed to generate much needed data related to the physical, socio-economic and gendered vulnerabilities to disaster at the household level. A business assessment will be carried out in parallel, to understand potential demand of small, medium and large businesses to take on climate adaptation loans. Quantitative and qualitative data generated from the surveys and assessment will help ensure climate adaptation loans are designed to account for on-the-ground realities related to access to credit and the local financial landscape. Gender is a critical theme which is tied into these analyses and gender-related findings will serve as a cornerstone of loan design, while also contributing towards the physical resilience of individuals, households and businesses to disasters and climate change.

Furthermore, the Social and Environmental Assessments for the Proposed Project, conducted during preparation, included stakeholder consultation to gain beneficiary perspective on project design, and determine potential impacts of proposed activities.

Stakeholder Engagement through Implementation Role:

The proposed Project has a multi sectoral focus at national, municipal and local levels, hence a wide range of actors and partners would play various active roles, including implementation, coordination, facilitation, and technical inputs. Project implementation will be led by the GoSL, but will continue to involve stakeholder consultation throughout the project lifetime. The Ministry of Finance would serve as implementing agency, and would convene a Project Coordination Committee (PCC) to foster communication and coordination between concerned agencies, chaired by its Permanent Secretary, or a designate.

The PCC would include membership of National Development Unit, Economic Affairs Unit, Project Coordination Unit (PCU), and Sustainable Development and Environment Division (SDED) under the Ministry of Public Service, Sustainable Development, Energy, Science and Technology (MoSDEST). SDED, which spearheaded PPCR Phase 1, would serve as the agency responsible for ensuring that project activities remain aligned with the SPCR goals. As the country's focal point on climate change issues, SDED would also be responsible for reporting on PPCR activities within the Project and on the overall Program, in addition to executing the Climate Change Public and Education Awareness campaign, designed to continue regular stakeholder engagement and information dissemination.

⁷ Ibid.

Relevant technical line ministries would serve as implementing agencies responsible for overall design and implementation of their respective activities. These technical implementing agencies include: Ministry of Infrastructure, Port Services, and Transport; Ministry of Education, Human Resource Development and Labour; Ministry of Health, Wellness, Human Services and Gender Relations; Caribbean Public Health Authority; Ministry of Physical Planning, Housing and Urban Renewal; Saint Lucia Air and Sea Ports Authority; Ministry of Social Transformation; Department of Fisheries and Department of Forestry, both within the Ministry of Agriculture, Food Production, Fisheries and Rural Development; Water Resources Management Agency; Water and Sewerage Company; National Emergency Management Organization; and Ministry of Public Service, Sustainable Development, Energy, Science and Technology, including the Sustainable Development and Environment Division.

Finally, the proposed Project would also engage relevant regional agencies, such as the University of the West Indies (UWI) and the Caribbean Community Climate Change Center (CCCCC), for regional capacity-building and knowledge sharing activities.

13. Gender considerations⁸:

Social development and gender. The Project's Social Assessment analyzed the potential social impacts of the project and developed associated social indicators for monitoring and evaluating these impacts. It also solicited stakeholder/beneficiary perspectives on project design and impact, paying particular attention to gender, and assist in the identification of poor and vulnerable populations to ensure that project objectives are acceptable to the intended beneficiaries. In addition to the baseline data collection aspect of the social assessment, which includes a gender perspective, a specific aspect of the Project would further include a gender dimension.

Gender-Inclusive Climate Adaptation Finance. As part of the demand analysis that would be carried out for the Climate Adaptation Financing Facility (Component 3), gender-related barriers and bottlenecks to accessing credit would be identified and accounted for in the facility's design and lending strategy. This is being financed through an additional Gender Trust Fund. Appropriate gender indicators would also be identified and closely followed during the Project lifespan. Anticipated project outcomes include *increased ability to account for gender concerns in measurements of disaster vulnerability and financial vulnerability* as well as *increased knowledge on how to promote gender equity through climate adaptation finance*.

The project also includes a gender disaggregated indicator at the PDO level.

⁸ Ibid.

14. Indicators and Targets (consistent with results framework): ⁹	
Core Indicator	Target
<i>Project Development Objective Level Indicator(s):</i>	
<p>1. <i>PDO level indicator.</i> Number of direct project beneficiaries (male/female)</p> <p>Measurement of reduced risk of Saint Lucia population to negative consequences from failure of public buildings and infrastructure due to natural hazards or climate change impacts. This measure would aggregate all individuals benefitting from safe and continued use of public infrastructure and facilities associated with reconstruction and rehabilitation activities financed under Component 1. This PDO level indicator aligns with the <i>PPCR Core Indicator: "Numbers of people supported by the PPCR to cope with effects of climate change."</i></p>	<p>50% TBD by Project Negotiations</p>
<p>2. <i>PDO Indicator:</i> Number of days of interrupted traffic due to landslips, flooding and other climate-related events in project areas</p> <p>Measure of decrease in road vulnerability due to climate hazards, landslips, flooding and other natural disaster events.</p>	<p>TBD by Project Negotiations</p>
<p>3. <i>PDO Indicator:</i> Percentage of schools/emergency shelters with reduced vulnerability to landslips, flooding and other climate-related events</p> <p>Measure of decrease in vulnerability of school facilities and shelters due to climate hazards, landslips, flooding and other natural disaster events. Confirmation upon independent external technical audit by a licensed engineer.</p>	<p>TBD by Project Negotiations</p>
<p>4. <i>PDO level indicator.</i> Climate risk analysis reflected in transport and drainage infrastructure design</p> <p>Measurements of increased Government/agency capacity to understand, capture, and manage climate data as well as utilize hazard information for improved decision making and engineering analysis. Agencies will include MIPS&T, NEMO, MoPP, WRMA.</p> <p>This indicator aligns with PPCR Core Indicator #2: <i>"Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i></p>	<p>TBD by Project Negotiations</p>
<i>Key Intermediate Results Indicator(s) and/or with a relation with PPCR Core indicator:</i>	

⁹ Full result framework for the proposed Project can be found in Annex 1 of the Project Appraisal Document.

<p><i>Component 1 result indicator.</i> Storm drains constructed under the project</p> <p>Measurement of the length of drains constructed with improved design standards in the island's most vulnerable areas. This indicator aligns with <i>PPCR Core Indicator 3: Quality and extent to which climate responsive instruments/ investment models are developed and tested.</i></p>	TBD by Project Negotiations
<p><i>Component 2 result indicator.</i> Increased capacity of Saint Lucian public sectors workers to identify and monitor climate and disaster risk and associated impacts.</p> <p>[4(a)] Total number of official policies produced by public sector workers which reference climate change-related DRM studies, technical assessments, standards and guidelines generated from the Project</p> <p>Measurement of increased national capacity to understand, capture, and manage climate data as well as utilize hazard information for improved decision making. This indicator aligns with <i>PPCR Core Indicator 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i> 2(c) in particular, aligns with <i>PPCR Core Indicator 1: "Degree of integration of climate change in national, including sector planning."</i></p>	Three official policies produced.
<p><i>Component 2 result indicator.</i> Number of Government ministries/agencies connected to a spatial data sharing platform</p> <p>Measurement of increased national capacity to capture and manage hazard and climate risk data This indicator aligns with <i>PPCR Core Indicator 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i></p>	Eight Government ministries/agencies connected to a spatial data sharing platform.
<p><i>Component 2 result indicator.</i> Number of Government officials trained in spatial data management and data analysis under the Project.</p> <p>Measurement of increased national capacity to capture, manage and analyze hazard and climate risk data. This indicator aligns with <i>PPCR Core Indicators 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i></p>	50 Government officials trained in spatial data management and data analysis under the Project.

<p><i>Component 2 result indicator.</i> Meteorological, hydrological, and sea level rise monitoring networks installed and active.</p> <p>This indicator aligns with <i>PPCR Core Indicator 3: “Quality and extent to which climate responsive instruments/ investment models are developed and tested.”</i></p>	All meteorological, hydrological, and sea level rise monitoring networks are installed and active. (Yes/No).	
<p><i>Component 2 result indicator.</i> LiDAR mapping of the entire country completed.</p> <p>Measure of the successful completion of a high resolution topographic and bathymetric LiDAR model to support data management and analysis systems under the project. This indicator aligns with <i>PPCR Core Indicator 3: “Quality and extent to which climate responsive instruments/ investment models are developed and tested.”</i></p>	LiDAR mapping complete. (Yes/No).	
15. Co-Financing:		
	<i>Amount (in USD million):</i>	<i>Type of contribution:</i>
• Government		
• MDB	41.0	IDA Credits
• Private Sector (please specify)		
• Bilateral (please specify)		
• Others (please specify)		
Co-Financing Total:	41.0	
16. Expected Board/MDB Management ¹⁰ approval date:		
May 15, 2014		

¹⁰ In some cases activities will not require MDB Board approval.