

PILOT PROGRAM FOR CLIMATE RESILIENCE

Summary - Project/Program Concept Note for the Use of Additional PPCR Resources

1. Country/Region:	Saint Lucia	2. CIF Project ID#:	XPCRLC044A
3. SPCR endorsement date:	June 29, 2011		
4. Project/Program title:	<i>Saint Lucia Disaster Vulnerability Reduction Project (DVRP)</i>		
5. Type of PPCR investment	<i>Private:</i>	<i>Public: x</i>	<i>Mixed:</i>
6. Funding request (in USD million total) (including preparation grant):	<i>Grant: USD 5 million in grants (allocated to Saint Lucia in November 2012)</i>		<i>Loan:</i>
7. Financing will be used for:	a – adding to an approved PPCR project/program		<input type="checkbox"/>
	b – adding to a PPCR project/program in preparation for Sub-Committee approval		<input checked="" type="checkbox"/>
	c- a new PPCR project/program ¹		<input type="checkbox"/>
8. Implementing MDB:	<i>IBRD/IDA</i>		
9. National executing agency²:	<i>Ministry of Finance, Economic Affairs, Planning and Social Security</i>		
10. MDB PPCR focal point and project/program task team leader (TTL):	<i>Headquarters- Focal Point: Kanta K. Rigaud</i>		<i>TTL: Tiguist Fisseha</i>
11. Project/Program Description (including objectives and expected outcomes):			

¹ Same as above.

² Can be Government agency or private sector firm

The purpose of this proposal is to secure the US\$5 million in grant funding allocated by the PPCR which will be added onto the St. Lucia Disaster Vulnerability Reduction Project (DVRP) currently under preparation. 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 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 areas³ 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. It is estimated that the proposed additional funds will allow the project to directly impact more than 105,000 beneficiaries, representing roughly 58% of the population.

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-Raye, which has the highest levels of indigence⁴ 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. The CAFF aims to promote equity, as it targets/benefits a specific segment of households and businesses that are vulnerable to the impacts of climate change and that otherwise would not be able to afford or have access to funds to build their resilience. 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.

³ These areas include the districts of Dennery, Soufriere, Anse-la-Raye, Choiseul, Vieux Fort and greater Castries.

⁴ 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)⁵ 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.

⁵ SLDB’s eligibility as participating financial institution was determined based on comprehensive institutional assessment and

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 1978,⁶ 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.⁷

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

12. Activities to be financed from the additional resources (including breakdown of funding by component, as appropriate):

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.

⁶ 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.

⁷ 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.

The additional resources (US\$5 million) will be used to finance additional activities under Component 1 and Component 2. The additional resources will finance activities designed to improve the climate resilience of critical infrastructure for Saint Lucia’s most populous and vulnerable communities, and the deployment of climate mapping and monitoring networks to better inform development planning. Specifically, the following additional activities will be financed:

Under Component 1: Risk Reduction and Adaptation Measures

- Climate resilient rehabilitation of water supply infrastructure in Dennery, Castries, Louisy and Gros Islet and pilot rain water harvesting systems (US\$1.4 million);
- Climate Change Public Awareness, Education and Information Campaign (US\$700,000).

Under Component 2: Technical Assistance for Improved Assessment and Application of Disaster and Climate Risk Information in Decision-Making

- Sea Level Rise Modelling and Flood and Erosion Risk Mapping (US\$1.5 million);
- Design and deployment of a meteorological, hydrological, and sea level rise monitoring networks to provide high resolution hydrologic data (US\$1.4 million).

Refer to Annex 2 of the PAD for more details on the above additional activities.

13. Briefly summarize how the proposed project/program further advances the objectives of the endorsed SPCR:

The proposed financing will support the activities mentioned above under Components 1 and 2, which coincide with Component 1 (Adaptation Facilitation) and Component 2 (Adaptation Implementation) of the Saint Lucia SPCR. Since these activities are an integral part of the endorsed SPCR there is no deviation from the originally endorsed proposal. By allocating the additional grant funds to these components, the project would reach a larger number of direct beneficiaries, and assist communities and districts to integrate climate resilience into their local infrastructure and broader development planning.

14. Expected Key Results from the use of the new resources⁸

Result	Indicators (consistent with approved PPCR Results Framework)
<p>PDO Indicator One: 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 <i>PPCR Core Indicator 5: “Numbers of people supported by the PPCR to cope with effects of climate change.”</i></p>
<p>PDO Indicator Five: 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 This indicator aligns with <i>PPCR Core Indicator 2: “Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience.”</i></p>

⁸ For more details on the project’s results framework, please see Annex 1 of the PAD.

Component 1 Intermediate Indicator: Storm drains constructed under the project	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 of and extent to which climate responsive instruments/ investment models are developed and tested.</i> "	
Component 2 Intermediate Indicator: Increased capacity of Saint Lucian public sectors workers to identify and monitor climate and disaster risk and associated impacts. 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	Measurement of increased national capacity to understand, capture, and manage climate data as well as utilize hazard information for improved decision making. Measurement of strengthened government capacity will be demonstrated by the ability of public servants to properly include, reference and incorporate climate resilience-related outputs into official documents and policies. Such ability will inherently imply that climate resilience measures are mainstreamed. Aligns with PPCR Core Indicator 2: "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience." and PPCR Core Indicator 1: "Degree of integration of climate change in national, including sector planning."	
Component 2 Intermediate Indicator: Number of Government ministries/agencies connected to a spatial data sharing platform	Measurement of increased national capacity to capture and manage hazard and climate risk data This indicator aligns with PPCR Core Indicator 2: " <i>Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience.</i> "	
Component 2 Intermediate Indicator: Number of Government officials trained in spatial data management and data analysis under the Project.	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>	
Component 2 Intermediate Indicator: Meteorological, hydrological, and sea level rise monitoring networks installed and active.	Vulnerable districts and communities use improved tools, information and instruments to better understand and respond to climate change and variability. This indicator aligns with <i>PPCR Core Indicator 3: Quality of and extent to which climate responsive instruments/ investment models are developed and tested</i> " and <i>PPCR core indicator 2 "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i>	
Component 2 Intermediate Indicator: LiDAR mapping of the entire country completed.	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 of and extent to which climate responsive instruments/ investment models are developed and tested</i> " and <i>PPCR core indicator 2 "Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience."</i>	
15. Expected Co-Financing for the project or program⁹:		
	<i>Amount (USD million):</i>	<i>Type of contribution:</i>
• Government		
• MDB	41.0	IDA <u>Credits</u> Grant
• Private Sector (please specify)		
• Bilateral (please specify)		
Total	41.0	

⁹ This includes: in-kind contributions (monetary value), MDB loan or grant, parallel financing, etc.

16. Expected Project/Program Timeframe

Expected Sub-Committee approval date¹⁰: April 2014

Expected World Bank Board approval date: 30 April 2014

17. Other Information:

¹⁰ Only for new projects or projects in preparation for Sub-Committee approval