

PILOT PROGRAM FOR CLIMATE RESILIENCE			
Summary - Project/Program Concept Note for the Use of Additional PPCR Resources			
1. Country/Region:	Saint Vincent and the Grenadines	2. CIF Project ID#:	(Trustee will assign ID)
3. SPCR endorsement date:	April 19, 2011		
4. Project/Program title:	<i>Regional Disaster Vulnerability Reduction Program (RDVRP) – Additional Financing</i>		
5. Type of PPCR investment	Private:	Public: X	Mixed:
6. Funding request (in USD million total) (including preparation grant):	Grant: USD 5 million	Loan:	
7. Financing will be used for:	a - topping up an approved PPCR project/program		<input checked="" type="checkbox"/>
	b - topping up a PPCR project/program in preparation for Sub-Committee approval		<input type="checkbox"/>
	c- a new PPCR project/program		<input type="checkbox"/>
8. Implementing MDB:	World Bank (IBRD/IDA)		
9. National executing agency:	Central Planning Division's Public Sector Investment Program Management Unit (PSIPMU) housed within the Ministry of Finance and Economic Planning (MoFEP)		
10. MDB PPCR focal point and project/program task team leader (TTL):	Headquarters-PPCR Focal Point: Kanta Kumari Rigaud (krigaud@worldbank.org)	TTL: Justin Locke (jlocke@worldbank.org)	
11. Project/Program Description (including objectives and expected outcomes):			
I. Introduction			
<p>1. This is a request for US\$ 5 million in grants, which will be processed as Additional Financing to the ongoing RDVRP, which was approved in May 2011 and has been effective since November 2011. Implementation has been satisfactory and 24% of project funds are expected to be disbursed or committed by the end of the 4th quarter 2013¹. In addition to the PPCR funds, SVG will request US\$16.6 million from its IDA-16 envelope to enhance the impact of a well-performing project. The extra funding will help to further advance the objectives identified in the SPCR for SVG and could potentially support the growth of SVG's economy through providing emergency equipment to the new airport, taking into account climate change factors.</p>			

¹ Current disbursement trends can be attributed to the sequence and nature of activities that must be executed and procured before construction activities, which comprise a majority of allocated funds, can commence. These activities include feasibility studies, technical studies and consultancy services related to the design of proposed civil works.

II. Context

2. SVG is exposed to high levels of risk to meteorological and geophysical hazards², which have significant negative impacts its economic and fiscal stability. (For example: about 42% of the population and GDP are at risk from 2 or more natural hazards³.) These natural hazards are being exacerbated by the adverse impacts of climate change - intensifying hazard patterns and putting increased stress on water availability, coastal investments and livelihoods. Moreover, it is expected that if current trends continue, extreme events will become more frequent⁴, and an estimated US\$350-870 million could be lost annually in the Eastern Caribbean sub-region in the period 2015-2050 through declining fish catches, reduced tourism, and loss of shoreline protection associated with sea level rise, storm surge, and coral reef degradation.⁵ In the past few decades, the high costs of recovery and reconstruction have resulted in increased debt, unsustainable budgetary deficits and unreliable funding streams- from unpredictable donor funding and indirect disaster impacts on government revenue- in countries that are already highly indebted. (SVG, for example, had a Debt-to-GDP ratio of 68% in 2011⁶.) The aggregation of these factors can inhibit sound macro-economic growth.
3. Moreover, SVG is a coastal island community of a little over 100,000 persons and the proposed effects of climate change will have severe social ramifications on the population. Connections to the sea are, and have always been, a central element in the culture and history of Vincentians. Living on or near the coast is both a choice and a necessity, therefore the projected increase in severity of tropical storms and the concurrent wave surge provide some of the most significant threats to coastal communities. Sea level rise (SLR) poses a particular threat to SVG as there are heavy concentrations of population and economic activity in coastal regions. Continued growth of greenhouse gas emissions and associated global warming could well promote SLR of 0.4m – 0.8m⁷ in this century. Through the SPCR and RDVRP, SVG has started seriously considering the implications of SLR for population location and infrastructure planning.
4. It is therefore of critical importance for SVG, and all of the Eastern Caribbean, to find ways to achieve economic and social development that are more climate resilient. Through the RDVRP and existing PPCR activities, SVG, with the support of the World Bank, is working to increase climate resilience and decrease vulnerability to natural disasters. The allocation of the additional US\$ 5 million to SVG is timely and will support the scale-up of activities to further the objectives already identified in the SPCR.

III. Program Description

5. ***Project Development Objective (PDO)***. The development objective of the ongoing RDVRP, which is closely aligned to the World Bank's Country Assistance Strategy, is to measurably reduce vulnerability to natural hazards and climate change impacts in SVG and in the Eastern Caribbean sub-region. The achievement of the PDO will be measured using the following key indicators:
 - i. Reduced risk of OECS population to failure of public buildings and infrastructure due to natural hazards or climate change impacts; and
 - ii. Increased capacity of OECS governments to identify and monitor climate risk and impacts.The proposed additional financing will contribute to the achievement of this objective.

² Meteorological: High wind/excess rainfall/hurricanes and drought. Geophysical: Seismic/volcanic/tsunami.

³ Dilley et al, 2005.

⁴ Tompkins, Emma L and W. Neil Adger, "Does adaptive Management of Natural Disasters Enhance Resilience to Climate Change?", *Ecology and society* (2): 10, 2004. <http://www.ecologyandsociety.org/vol9/iss2/art10>

⁵ IBRD, IDA & IFC Regional Partnership Strategy for the OECS, 2010-2014, May 3, 2010; p. 17.

⁶ Debt Statistics from the IMF, World Economic Outlook report, October 2012.

⁷ World Bank, "Turn Down the Heat: Why a 4°C Warmer World Must be Avoided", November 2012; Table 2 p. 31.

6. **Major Outcomes Expected from the Project.** The RDVRP is financed by both IDA and the PPCR and focuses on disaster risk management and climate change adaptation; to this end expected outcomes include: i) capacity built to identify and monitor climate risk at the national level; ii) reduced vulnerability of public infrastructure and emergency communications; iii) strengthened emergency management capacity and improved effectiveness of risk reduction investments; and iv) established disaster risk financing mechanism. In order to address the institutional and technological challenges of generating a fact-based ability to improve decision making for reducing climate change vulnerability, the RDVRP is supporting the creation of a regional backbone technology infrastructure and collaboration mechanisms that allows SVG and other countries in the region to collaborate on risk evaluations, which informs planning and design decisions. Furthermore, the project will place SVG on the path to long-term climate adaptation and resilience.

IV. Program Components (of the approved RDVRP currently under implementation (IDA amount: US\$10.92 million; PPCR amount: US\$10 million)

7. **Component 1 - Prevention and Adaptation Investments.** (US\$ 7,050,075, 68%). SVG is implementing and testing a broad spectrum of interventions aimed at reducing vulnerability in public buildings and infrastructure. Subprojects under this component would support: i) developing infrastructure and carrying out related supporting studies, including: carrying out the rehabilitation and construction of bridges and risk reduction of public space, and improving resilience to climate risks in the water supply system, all through the provision of works, technical advisory services, operating costs, and acquisition of goods; and ii) retrofitting and design of public buildings to improve disaster resilience and supporting studies.
- i. **Project achievements under Component 1:** The pre-requisite technical studies required for the design and construction of infrastructure sub-projects are at final contract stage. These studies will inform the final designs for key vulnerability reduction sub-projects, including: river defense works, coastal defense works and a health services system analysis required as a key input into the design of the new national hospital.
8. **Component 2 - Regional Platforms for Hazard and Risk Evaluation, and Applications for Improved Decision Making.** (US\$ 1,096,997, 11%). The RDVRP would support building the regional capacity for assessment of natural risks and integration of such assessment into policy and decision making process for the development of investments, disaster risk mitigation, and disaster response across sectors, through the provision of technical advisory services, training, and acquisition of goods by: i) facilitating regional collaboration, including knowledge sharing and learning process; and ii) reducing the risk for regional interconnectivity and carrying out related supporting studies, including improving the international airport to maintain an adequate emergency response capability and to comply with the international operational standards, through the provision of works, technical advisory services, training, and acquisition of goods.
- ii. **Project achievements under Component 2:** The project has supported the development of Caribbean Open Data Management Community with over 150 members across the region. Membership includes GIS practitioners and IT professionals, who discuss national and regional data sharing and management practices, including geospatial data, metadata policies, education and training. These data management efforts aim to support key decision-making processes related to disaster risk management and climate adaptation. As a result of these efforts, the GeoNode platform has been launched in many countries as a tool to help store, manage, and share spatial data across national ministries and regional agencies. In addition, a regional training/workshop designed to improve the management, use and sharing of geospatial data required to perform climate and risk analysis was held in Trinidad in February 2013. The training/workshop was attended by over 50 participants from 10 Caribbean countries.

9. **Component 3 - Natural Disaster Response Investments.** (US\$ 1,339,750, 13%). This component would finance emergency recovery and reconstruction subprojects under an agreed Action Plan of Activities designed as a mechanism to implement the Recipient's rapid response to an emergency. This component represents a new and innovative tool at the Bank being pioneered in the Eastern Caribbean.
- iii. **Project achievements under Component 3:** SVG has published the updated Operations Manual and the Action Plan of Activities as well as completed the pre-requisite steps to enable rapid disbursement of funds in the case of a national emergency.
10. **Component 4 - Project Management and Implementation Support.** (USD 925,750, 9%). Activities under this component would support strengthening and developing the institutional capacity for project management, including, capacity building for accreditation to the United National Framework Convention on Climate Change (UNFCCC) Climate Adaptation Fund.
- iv. **Project achievements under Component 4:** Project management capacity, particularly procurement and FM, in the Central Planning Division, the implementation agency in SVG, has increased.

12. Activities to be financed from the additional resources:

11. The activities to be financed with the additional resources will be in compliance with the RDVRP objectives and the SPCR goals and will support *Component 1: Prevention and Adaptation Investments* and *Component 4: Project Management and Implementation Support* of the RDVRP. They potentially include:⁸

Under Component 1: Prevention and Adaptation Investments:

- i. Although the total annual rainfall for SVG has shown little change over the last twenty-five years, the pattern has changed significantly. Instead of six months of almost evenly distributed rainfall, the country now experiences short periods of torrential downpours followed by seven to nine months of little or no precipitation. The resulting heavy run-off causes much erosion and landslides occur throughout the mainland due to the mountainous topography and the instability of slopes. When landslides occur, use of the road networks decreases and economic activity, such as the movement of agricultural goods, halts. Consequently, the additional finance will be utilized to undertake following activities aimed at reducing the community's vulnerability to the increased flooding. These activities were identified in the endorsed SPCR, but were beyond the funding capacity available at the time:
 - a. Slope stabilizations potentially in Paget Farm, Mt Pleasant/Peruvian Vale, Chester Cottage, Mt. Grennan, Fancy and Spring;
 - b. Satellite warehouses for communities potentially in Bequia, Mesopotamia, Peter's Hope, Mayreau, Union Island, Canouan, Colonaire, and Georgetown; and
 - c. River defenses in Buccament and Carriere.
- ii. Scaling up funding short falls for current RDVRP sub-projects where the costs were underestimated:
 - a. Milton Cato Memorial Hospital sub-project;
 - b. Slope mitigation sub-project on North Leeward coast; and
 - c. Coastal Protection in Georgetown.
- iii. Due to its size, geography, economy and location, SVG is highly vulnerable to natural hazards and the impacts of climate change. Accordingly, the GoSVG, in collaboration with international and regional partners, has been implementing interventions aimed at reducing this vulnerability.

⁸ Specific activities will be identified during the detailed project preparation process.

Given the role of airports, both for post disaster recovery and especially for long term economic recovery, the GoSVG has upgraded the airports on several Grenadine islands and is currently undertaking the construction of an international airport on St. Vincent. These airports are critical for the sustainability of the country's main economic and most climate sensitive sectors: Tourism and Agriculture. In keeping with the Governments' thrust, the additional financing will support the development of the new airport, which will support long-term resiliency and economic growth.

Under Component 4: Project Management and Implementation:

- iv. Building capacity for monitoring and evaluation (M&E) by
 - a. Hiring an M&E specialist to support the PPCR report and to train the government officials on M&E best practices; and
 - b. Financing participation in regional M&E trainings.

12. Currently, the PPCR funds are allotted to Project components in the following way:

- Component 1 – US\$ 7,050,075, 68%
- Component 2 – US\$ 1,096,997, 11%
- Component 3 – US\$ 1,339,750, 13%
- Component 4 – US\$ 925,750, 9%
- **Total** – **US\$ 10,412,572**

13. With the additional financing, USD 4.5 million will be added to Component 1 and USD 0.5 million will be added to Component 4 for a new breakdown of:

- Component 1 – US\$ 11,500,075, 75%
- Component 2 – US\$ 1,096,997, 7%
- Component 3 – US\$ 1,339,750, 9%
- Component 4 – US\$ 1,425,750, 9%
- **Total** – **US\$ 15,412,572**

*amounts include project management and contingency.

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

14. The additional finance will support *Component 1: Climate Vulnerability, Risk Assessments and Risk Reduction* and *Component 4: Design and Implementation of a Public Education and Capacity Building Programme* of the endorsed SPCR. Two of the key objectives of the SPCR are to create safer coastal areas and to reduce vulnerability in communities. The additional finance directly advances these objectives through slope stabilizations, rehabilitation of police stations and clinics, improving river defenses and creating emergency satellite warehouses for communities. Many of these activities were identified as important in the endorsed SPCR, but were unable to be funded as the SPCR went beyond the available project funding. With the additional grant funds, the project will be able to fill these gaps and better fulfill the SPCR strategy by reaching out to larger number of direct beneficiaries, and assist communities in becoming more climate resilient. Moreover, the funds will support the development of M&E capacity, which is crucial to quantifying the impacts of the climate change projects.

15. Lessons learned from the early implementation of the RDVRP have contributed to the design of the Additional Finance. In particular:

- i. It is important to determine the pre-engineering studies required to produce the final designs and cost these studies as part of the overall sub-project cost estimates.
- ii. It is important to have the staff infrastructure in place in order to successfully implement the project. Initial delays in the RDVRP were due to lack of staff capacity; however this will be

mitigated in the Additional Finance as the implementation unit is well-staffed. Additionally, current staff capacity will be assessed during project preparation and more staff will be hired if necessary.

16. The RDVRP and the SPCR work together to strengthen the climate resilience and long-term adaptation in SVG and the activities proposed in the Additional Finance promote and support these goals.

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

17. The indicators and expected results will be discussed during project preparation. As the RDVRP was approved before the simplified PPCR results framework came into effect, the PPCR indicators will be integrated as part of the Additional Finance to the extent possible.

Result	Indicators (consistent with approved PPCR Results Framework)
(a) Coastal and inland communities better able to cope with the impacts of changing weather systems.	<p>Number of people supported by the PPCR to cope with climate change and climate variability</p> <p>Extent to which vulnerable households, communities, businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to CV &CC</p>
(b) Reduced risk of population to flooding in areas with flood mitigation works financed by the project.	<p>Number of people supported by the PPCR to cope with climate change and climate variability</p> <p>Extent to which vulnerable households, communities, businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to CV &CC</p>
(c) Reduced risk of population to failure of roads and bridges due to natural hazards or climate change impacts.	<p>Number of people supported by the PPCR to cope with climate change and climate variability</p> <p>Extent to which vulnerable households, communities, businesses and public sector services use improved PPCR supported tools, instruments, strategies, activities to respond to CV &CC</p>
(d) Increased national capacity on climate resilience related monitoring and evaluation.	<p>Evidence of strengthened government capacity and coordination mechanism to mainstream climate resilience</p>

15. Expected Co-Financing for the project or program⁹:		
	Amount (USD million):	Type of contribution:
• Government (in-kind)	1.0	Parallel financing
• MDB	16.6	IDA credit ¹⁰
• Private Sector (please specify)		
• Bilateral (please specify)		
• Others (please specify)		
Total	16.6	
16. Expected Project/Program Timeframe:		
Key Project Milestones:		
Project Preparation – September – December 2013		
Appraisal – February 2014,		
Negotiation – March 2014 and		
Board Approval – May 2014		
Expected Sub-Committee approval date ¹¹ : The project appraisal document is expected to be submitted to the PPCR Sub-Committee for consideration on or about February 2014.		
17. Other Information:		
i. Communication of the RDVRP through the internet:		
a) RDVRP on the SVG website:		
http://gov.vc/index.php?option=com_content&view=article&id=325&Itemid=219		
b) RDVRP on the WB website: http://www.worldbank.org/projects/P117871/oecs-disaster-vulnerability-reduction-project?lang=en&tab=overview		
c) Most recent Implementation Status Report (ISR), June 2013: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/LCR/2013/06/12/090224b081c5b595/1_0/Rendered/PDF/OECS0Countries0Report000Sequence004.pdf		
ii. Consultation on the Additional Finance in SVG. During the RDVRP Mission in April and June 2013, the World Bank team met with the Prime Minister, the Director of Planning, the Central Planning Division and the Chief Engineer of the Ministry of Works and Transport at different times to discuss potential sub-projects for the additional finance.		

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

¹⁰ In addition to the IDA financing as part of the ongoing RDVRP.

¹¹ Only for new projects or projects in preparation for Sub-Committee approval