# INTEGRATED SAFEGUARDS DATA SHEET ADDITIONAL FINANCING

Report No.: ISDSA1142

**Date ISDS Prepared/Updated:** 04-Feb-2015

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### I. BASIC INFORMATION

### 1. Basic Project Data

Country:	Grena	da	<b>Project ID:</b>	P149259		
			Parent Project ID:	P117871		
Project Name:	Regio (P149	nal Disaster Vulnerability 259)	Reduction Proj	ect (Additi	onal Finance)	
Parent Project Name:		nal Disaster Vulnerability renadines (P117871)	y Reduction API	L1 - Grenac	la and St. Vincent and	
Task Team Leader(s):	Gaeta	no Vivo				
Estimated Appraisal Date:		b-2015	Estimated Board Date:	30-Apr-2015		
Managing Unit:	GSUF	RR	Lending Instrument:	Investme	nt Project Financing	
Sector(s):	Forest	try (40%), Flood protection	on (40%), Urban	Transport	(20%)	
Theme(s):	1	ate change (60%), Natural opment (15%), Land adm		,	<i>2</i> -	
		ed under OP 8.50 (En to Crises and Emerge	•	very) or (	OP No	
Financing (In U	SD Mi	illion)			•	
Total Project Cos	st:	8.80	Total Bank Fir	nancing:	0.00	
Financing Gap:		0.00				
Financing Sou	rce				Amount	
BORROWER/F	RECIP	IENT		0.00		
International Development Association (IDA)					0.00	
Strategic Climate Fund Credit					3.80	
Strategic Climate Fund Grant					5.00	
Total					8.80	
Environmental Category:	B - Pa	artial Assessment				

Is this a	No
Repeater	
project?	

### 2. Project Development Objective(s)

#### A. Original Project Development Objectives - Parent

The Program aims at measurably reducing vulnerability to natural hazards and climate change impacts in the Eastern Caribbean Sub-region. The objective of the Project in Grenada is to measurably reduce vulnerability to natural hazards and climate change impacts in Grenada and in the Eastern Caribbean Sub-region. The objective of the Project in Saint Vincent and the Grenadines is to measurably reduce vulnerability to natural hazards and climate change impacts in Saint Vincent and the Grenadines and in the Eastern Caribbean Sub-region. The achievement of the Program Development Objectives of the Regional Disaster Vulnerability Reduction Program (RDVRP) would be measured using the following key indicators: (a) Reduced risk of OECS population to failure of public buildings and infrastructure due to natural hazards or climate change impacts; and (b) Increased capacity of OECS Governments to identify and monitor climate risk and impacts.

#### B. Current Project Development Objectives - Parent

#### C. Proposed Project Development Objectives – Additional Financing (AF)

#### 3. Project Description

The proposed AF would scale up activities initiated under the RDVRP and contribute to institutional capacity improvements that will be fundamental for transformative change in Grenada's long-term climate resilience agenda, as endorsed by the PPCR Sub-Committee. Specifically, the AF would: (i) ensure climate risk reduction outcomes for an important part of Grenada's population and economy, through improved drainage and flood prevention infrastructure in selected urban areas; (ii) contribute critical building blocks to the technical and institutional capacity to manage climate resilience of forestry and water resource management departments.

The additional finance will also be used by the GoG to fill a financing in the parent project. During the first three years of the project implementation additional technical studies were carried out to ensure construction standards would be more resilient. These studies, pre-engineering assessments, and some final designs, indicate that that the cost of building more resilient infrastructure in Grenada is almost 20% more expensive than the original budget estimates that were largely based on existing building practices at the time. The Government chose to continue with most of the projects planned investments at the higher cost to improve its resilience, and to postpone St Johns River defense construction since the budgeted cost of St Johns River flood mitigation works were \$4.5 million, similar to the approximate value of the total project financing gap. As a result, the St Johns River sub-project will be re-appraised and advanced under this AF.

Component 1: Prevention and Adaptation Investments (Increase by US\$5,200,000). The proposed AF would permit the completion of priority investments for flood protection and improved drainage in urban areas. These investments include: (a) pre-engineering studies and design for a flood mitigation system in Morne Rouge area; (b) river training works for the St. Johns River flood

mitigation sub-project; (c) investments in fiber optic upgrades to assist agencies with participating in a national data sharing platform (i.e. GeoNode, National hydromet network).

Component 2: Regional Platforms for Hazard and Risk Evaluation, and Applications for Improved decision making (Increase by US\$3,200,000). This component finances critical building blocks to Grenada's technical and institutional capacity to manage climate resilience in forest and water resource management departments, with additional applications for Ministry of Works, the National Disaster Management Agency (NADMA) and the National Planning Office, which could contribute to a transformative impact on Grenada's capacity to build climate resilience. Activities to be financed include: high resolution topography and bathymetry models, high resolution forest cover mapping, high resolution soils mapping, modernization of the national hydromet network, capacity building for watershed analysis and modeling, and institutional strengthening and capacity building in forest resources management. Developing/consolidating data resources and improving the analytical capability of select institutions will provide a platform for informed risk reduction decisions in the sectors prioritized under the SPCR, including water resource management, disaster prevention and emergency planning, and forestry.

Component 4: Project Management and Implementation Support (Increase by US\$400,000). The AF would support strengthening the institutional capacity for project management and coordination of SPCR implementation. This will be accomplished through the provision of technical advisory services, training, operating costs and acquisition of goods. In particular, this Component will support: (i) strengthening capacity of the PCU and relevant government agencies in project management, implementation support, and coordination with other climate resilience investments in Grenada; (ii) strengthening capacity of the PCU and relevant government agencies to monitor the delivery of the SPCR (including climate resilience activities supported by other development partners), monitor and report on the PPCR core indicators, and generate knowledge for the other participating countries.

## 4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Project works are expected at Grand Etang Nursery, on the St. Johns River, and at various hydrometerological stations on the island. The Nursery at Grand Etang is within a protected area, so works will be restricted to the existing nursery facility where upgrades are planned. St. Johns River is an urbanized watershed, and most hydrometeorological stations will use existing footprints; however, screening mechanisms are included in the EMF in the event that sensitive areas or complex conditions are present, to require additional study, assessment, and mitigation measure development as necessary and appropriate. Land acquisition will be required for the St. John's subproject and possibly for the Mourne Rouge drainage and hydro-meteorological infrastructure projects, depending on final designs and project locations respectively.

#### 5. Environmental and Social Safeguards Specialists

M. Yaa Pokua Afriyie Oppong (GSURR) Michael J. Darr (GENDR)

6. Safeguard Policies Triggered		Explanation (Optional)		
Environmental Assessment OP/BP 4.01	Yes	An Environmental Management Framework (EMF) has been prepared based on the updated project portfolio for Grenada. The EMF has updated and		

		expanded the previously prepared Environmental Assessment (EA) by providing screening methods and procedures for the application of Bank safeguards, including guidance on the scope of studies necessary to complete for each subproject, criteria for triggering additional studies in the case of complex or significant activities, and a generic Environmental Management Plan (EMP) for use in simple situations where activities need no additional assessment. The studies and management plans related to each subproject should be completed prior to the start of any works on a particular subproject. It is likely that the majority of works will be relatively minor in nature and involve simple civil works where the environmental impacts are limited to the construction phase, requiring only the application of a standardized generic EMP. However, any exceptions will be identified during screening in the EMF, and subject to additional assessment work.
Natural Habitats OP/BP 4.04	Yes	During project preparation potentially sensitive areas were identified in areas near the Grand Etang Nursery (a protected area), where facility upgrades are planned; and, at Morne Rouge (a sensitive coastal area) where coastal and marine studies are planned. This safeguard has also been triggered as a precaution due to potential project activities which may occur in forest areas, river valleys, coastline and/or marine areas. In the case of future undefined works, this policy along with all other Bank safeguards will be included in the screening procedures provided under the project EMF.
Forests OP/BP 4.36	No	This policy has not been triggered because funded actions would not directly address change in harvesting or management of forest resources, but instead are focused on technical assistance works (e. g. forest cover classification and inventory for watershed management support). Measures to address incidental tree harvesting are covered in the EMF.
Pest Management OP 4.09	Yes	There are no projects to directly fund purchase of pesticides, however, the Additional Financing includes an upgrade to a nursery facility, where provisions for storage of fertilizers and other chemicals (pesticides, fungicides, herbicides) will be built into the design as good practice. The policy is therefore triggered as a precaution, and guidelines for

Physical Cultural Resources OP/BP 4.11	Yes	a Pest Management Plan are included in the EMF in the event they are needed if or when such materials are actually purchased. Other, incidental pesticide use from building treatments or vector control will be managed by including appropriate procedures in the generic standardized EMP for inclusion into contracts.  While no works have been identifies in sensitive areas, this safeguard is triggered as there is the small likelihood for encountering sites of cultural historical significance, particularly in the case of new construction. In the case of small works procedures for chance find will be provided together with appropriate small works contract clauses.
		Community input into final design of historically valuable works will be required in the EMF.
Indigenous Peoples OP/BP 4.10	No	The Indigenous Peoples Policy (OP 4.10) is not triggered by this project. Indigenous Peoples are not present in and nor do they have collective attachment to the project areas.
Involuntary Resettlement OP/BP 4.12	Yes	A small amount of land acquisition will be necessary along the St. John's River involving state land, currently occupied by individuals and small informal businesses, as well as the private property of a commercial enterprise. Additional land may also be required for the Mourne Rouge drainage and Hydrometeorological infrastructure projects, depending on final designs and project locations respectively. Land acquisition is equired under the additional financing, specifically for Saint John's River. Additional land may be required for the Mourne Rouge drainage and Hydro-meteorological infrastructure projects depending on final designs and project locations respectively. The Involuntary Resettlement Safeguard (OP 4.12) was triggered by the parent project and a Resettlement Policy Framework (RPF) developed and disclosed at appraisal. The RPF remains valid and will has been updated, to reflect AF subprojects, and disclosed in draft prior to AF appraisal.
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

### II. Key Safeguard Policy Issues and Their Management

#### A. Summary of Key Safeguard Issues

## 1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Social Safeguards. Land acquisition will be required for the project, specifically the Saint John's River subproject and potentially for Mourne Rouge (depending on design) and the Hydro-Meterological infrastructure (depending on location). The impacts expected will be largely positive for the affected communities and negative impacts associated with asset loss will be mitigated and monitored. No large scale social safeguard impacts are anticipated.

Environmental Safeguards. The main safeguards issues relate to potential impact on natural habitat from works at the Grand Etang Nursery, which lies within a protected area. Potential impacts on natural habitat will be minimized through measures included in the EMF, and will be minimal because works will be restricted to the existing facility. Pest Management will be addressed through good building design and through guidelines in the EMF for a Pest Management Plan should it be necessary. For works at St. Johns River a management plan has already been prepared and has been updated and included in the EMF which has been prepared for the project.

# 2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The benefits of the project over the long term will include improved reforestation capacity, due to the improvements at the Nursery facility; decreased flooding on the St. John's River corridor; and improved environmental conditions at the Grande Anse area due to more informed coastal management. The indirect and long term effects of the project will be largely positive.

## 3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The project will include alternative evaluation in the terms of reference for the Morne Rouge studies, as part of the engineering and design efforts, to avoid or minimize potential adverse impacts. For the St. John's river sub-project consultations with local residents on design led to slight design alternations and a minimization of adverse impacts.

## 4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Social Safeguards. The Borrower's capacity to address impacts under OP 4.12 (Involuntary Resettlement) has been built throughimplementing the policy under the parent project. In addition, a regional capacity building safeguards workshop organized in May 2014 includedrepresentatives directly responsible for land acquisition in Grenada.

Environmental Safeguards. An Environmental Assessment (EA) conducted in 2010 had guided the parent project, familiarizing the PCU with safeguards instruments. A draft EMF was prepared for the Additional Financing works by updating the EA with the new project activities and by including robust screening mechanisms for the PCU to follow throughout implementation. The PCU will require the assistance of a Consultant to assist with EMF implementation and other tasks as required, for which Terms of Reference have been developed. Currently the PCU has staff with relevant experience in engineering and construction oversight, who can adequately supervise safeguards issues until the Consultant is brought on board.

# 5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Direct project beneficiaries will be approximately 200 people who currently live in housing with significant flood risk with many more people in the local community suffering secondary effects of flooding. An estimated 40-50 residential buildings, shops and commercial properties line the River Road along the Project site, all of which are impacted by water during a flood event. Three (3) school facilities where more than 900 school children are enrolled are located on the active floodplain with no formal warning of flood events. During more major events floodwaters pose a flood risk to the Power Station and GRENLEC which produces electricity for Grenada. Due to the predicated effects of climate change and increasing flood risk from sea level rise and more significant river flooding, more than 200 properties could be at risk and both direct (property) and indirect damages will be greater due to property and infrastructure flooding as well as major disruption to the local community, businesses and traffic.

Consultations. Regular consultations have been organized, by the PCU Social Development Specialist with the community impacted by the Saint John's river sub-project. Consultations will continue during implementation and have involved local elected officials and included the project engineer to explain proposed designs and address community concerns. The project level RPF for the AF will be updated and re-disclosed prior to appraisal along with the EMF.

#### **B.** Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other			
Date of receipt by the Bank	29-Jan-2015		
Date of submission to InfoShop	02-Feb-2015		
For category A projects, date of distributing the Executive			
"In country" Disclosure			
Grenada	02-Feb-2015		
Comments: http://www.gov.gd/egov/docs/publications/daft-reframework.pdf	evised-environmental-management-		
Resettlement Action Plan/Framework/Policy Process			
Date of receipt by the Bank	29-Jan-2015		
Date of submission to InfoShop	02-Feb-2015		
"In country" Disclosure	·		
Grenada 02-Feb-2015			
Comments: http://www.gov.gd/egov/docs/publications/Draft-	resettlement-policy-framework.pdf		
Pest Management Plan			
Was the document disclosed prior to appraisal?	Yes		
Date of receipt by the Bank	29-Jan-2015		
Date of submission to InfoShop	02-Feb-2015		
"In country" Disclosure			
Grenada 02-Feb-2015			
Comments: http://www.gov.gd/egov/docs/publications/daft-revised-environmental-management-framework.pdf			
If the project triggers the Pest Management and/or Physical	Cultural Resources policies, the		

## respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.

### If in-country disclosure of any of the above documents is not expected, please explain why:

The guidelines to create a Pest Management Plan, if required, are included in the EMF

### C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [×]	No [ ]	NA[]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ ]	No [ ]	NA[X]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [X]	No [ ]	NA[]
OP/BP 4.04 - Natural Habitats			
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [ ]	No [ X ]	NA[]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [ ]	No [ ]	NA[X]
OP 4.09 - Pest Management	'		
Does the EA adequately address the pest management issues?	Yes [X]	No [ ]	NA[]
Is a separate PMP required?	Yes [ ]	No [X]	NA[]
If yes, has the PMP been reviewed and approved by a safeguards specialist or PM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist?	Yes [ ]	No [ ]	NA[X]
OP/BP 4.11 - Physical Cultural Resources			
Does the EA include adequate measures related to cultural property?	Yes [×]	No [ ]	NA [ ]
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?	Yes [ ]	No [ ]	NA[X]
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/ process framework (as appropriate) been prepared?	Yes [×]	No [ ]	NA[]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [X]	No [ ]	NA[]
The World Bank Policy on Disclosure of Information			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [X]	No [ ]	NA[]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [X]	No [ ]	NA[]
All Safeguard Policies			

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [X]	No [	]	NA [	]
Have costs related to safeguard policy measures been included in the project cost?	Yes [X]	No [	]	NA [	]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [X]	No [	]	NA [	]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [X]	No [	]	NA [	]

### III. APPROVALS

Task Team Leader(s):	Name: Gaetano Vivo			
Approved By				
Practice Manager/	Name: Anna Wellenstein (PMGR)	Date: 06-Feb-2015		
Manager:				