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Report No: PAD4578

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF US\$40 MILLION

AND A TRUST FUND GRANT FROM THE EUROPEAN UNION CARIBBEAN REGIONAL RESILIENCE
BUILDING FACILITY MANAGED BY THE GLOBAL FACILITY FOR DISASTER REDUCTION AND
RECOVERY

IN THE AMOUNT OF US\$2 MILLION

TO

SAINT VINCENT AND THE GRENADINES

FOR A

VOLCANIC ERUPTION EMERGENCY PROJECT

November 14, 2021

Urban, Resilience and Land Global Practice
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective September 30, 2021)

Currency Unit = East Caribbean Dollar (EC\$)

US\$1.00 = EC\$2.71

FISCAL YEAR

January 1 – December 31

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ABBREVIATIONS AND ACRONYMS

BRAGSA	Roads, Buildings, and General Services Authority
BOSVG	Bank of Saint Vincent and the Grenadines
CCA	Climate Change Adaptation
CDEMA	Caribbean Disaster Emergency Management Agency
CDRP	Country Disaster Risk Profile
CPA	Country Poverty Assessment
CWSA	Central Water and Sewerage Authority
DDSA	Detailed Damage Sectoral Analysis
DFIL	Disbursement and Financial Information Letter
DPRCA	Disaster Preparedness and Response Capacity Assessment
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
E&S	Environmental and Social
EP&R	Emergency Preparedness and Response
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
EU	European Union
FAA	Finance Administration Act
FM	Financial Management
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GoSVG	Government of Saint Vincent and the Grenadines
GRADE	Global Rapid Post-Disaster Damage Estimation
GRID	Green, Resilient, and Inclusive Development
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
ICR	Implementation Completion and Results Report
ICT	Information and Communication Technology
IDP	Internally Displaced Person
IFR	Interim Financial Report
IMF	International Monetary Fund
IPF	Investment Project Financing
LITE	Labor-Intensive Temporary Employment
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour
MoFEP	Ministry of Finance, Economic Planning, and Information Technology
MoNM	Ministry of National Mobilization, Social Development, Family, Gender Affairs, Youth, Housing, and Informal Human Settlement

MoTW	Ministry of Transport, Works, Lands, and Physical Planning
MTR	Midterm Review
NEDM	National Emergency and Disaster Management
NEMO	National Emergency Management Organization/Office
OECS	Organisation of Eastern Caribbean States
PDO	Project Development Objective
POM	Project Operations Manual
PPE	Personal Protective Equipment
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
RAP	Resettlement Action Plan
RDVRP	Regional Disaster Vulnerability Reduction Project
RPF	Resettlement Policy Framework
RPS	Regional Partnership Strategy
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SIDS	Small Island Developing States
SRD	Systematic Regional Diagnostic
SPN	Specific Procurement Notices
STEP	Systematic Tracking of Exchanges in Procurement
UN	United Nations
WBG	World Bank Group

TABLE OF CONTENTS

I. STRATEGIC CONTEXT	7
A. Country Context.....	7
B. Sectoral and Institutional Context	10
C. Relevance to Higher Level Objectives.....	13
II. PROJECT DESCRIPTION.....	15
A. Project Development Objective.....	15
B. Project Components	15
C. Project Beneficiaries	22
D. Results Chain.....	23
E. Rationale for Bank Involvement and Role of Partners	24
F. Lessons Learned and Reflected in the Project Design	25
III. IMPLEMENTATION ARRANGEMENTS.....	27
A. Institutional and Implementation Arrangements.....	27
B. Results Monitoring and Evaluation Arrangements.....	28
C. Sustainability.....	29
IV. PROJECT APPRAISAL SUMMARY.....	30
A. Technical, Economic and Financial Analysis	30
B. Fiduciary.....	32
C. Legal Operational Policies.....	36
D. Environmental and Social	36
V. GRIEVANCE REDRESS SERVICES	41
VI. KEY RISKS	41
VII. RESULTS FRAMEWORK AND MONITORING.....	43
ANNEX 1: Implementation Arrangements and Support Plan	54
ANNEX 2: Candidate Activities.....	64
ANNEX 3: Global Rapid Post-Disaster Damage Estimation (GRADE)	70
ANNEX 4: Country Map	73



DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
St. Vincent and the Grenadines	Saint Vincent and the Grenadines Volcanic Eruption Emergency Project		
Project ID	Financing Instrument	Environmental and Social Risk Classification	Process
P176943	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input checked="" type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input checked="" type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
30-Nov-2021	30-Dec-2026

Bank/IFC Collaboration

No

Proposed Development Objective(s)

The Project Development Objective (PDO) is to support Saint Vincent and the Grenadines to (i) provide short-term income support, (ii) improve the capacity of the government to prepare for and respond to emergencies, and (iii) build back better critical services in the wake of the La Soufriere volcano eruption.



Components

Component Name	Cost (US\$, millions)
Component 1: Early recovery income support	7,500,000.00
Component 2: Restoration and “Building Back Better” of critical services, and strengthening of emergency preparedness and response capacity	29,000,000.00
Component 3: Project Management	3,500,000.00

Organizations

Borrower: St. Vincent and the Grenadines

Implementing Agency: Ministry of Finance, Economic Planning, and Information Technology

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	42.00
Total Financing	42.00
of which IBRD/IDA	40.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	40.00
IDA Credit	40.00

Non-World Bank Group Financing

Trust Funds	2.00
Global Facility for Disaster Reduction and Recovery	2.00

IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount



St. Vincent and the Grenadines	40.00	0.00	0.00	40.00
National PBA	40.00	0.00	0.00	40.00
Total	40.00	0.00	0.00	40.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027
Annual	5.00	13.19	5.73	5.36	5.26	5.46
Cumulative	5.00	18.19	23.92	29.28	34.54	40.00

INSTITUTIONAL DATA

Practice Area (Lead)

Urban, Resilience and Land

Contributing Practice Areas

Agriculture and Food, Social Protection & Jobs, Transport, Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Moderate
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Substantial
7. Environment and Social	● Substantial
8. Stakeholders	● Moderate
9. Other	● Moderate



10. Overall

● Moderate

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).



Legal Covenants

Sections and Description

Legal Covenants

- Schedule 2, Section I(A)(1)(b): The Recipient, through MoFEP, shall engage and hire an environmental specialist and a social specialist no later than ninety (90) days as of the Financing Agreement’s Effective Date.
- Schedule 2, Section I(A)(1)(c): The Recipient, through MoFEP, shall develop and adopt a POM, satisfactory to IDA, no later than thirty (30) days as of the Effective Date.
- Schedule 2, Section I(A)(1)(e): The Recipient, through MoFEP, shall contract an external, independent private audit firm, acceptable to IDA, with terms of reference acceptable to IDA, no later than six (6) months after the Effective Date, who will be mandated to conduct an audit of the Project on an annual basis.
- Schedule 2, Section I(C)(1): The Procurement Plan shall set forth which contracts shall be financed with resources from the Financing Agreement and which contracts shall be financed with resources from the Co-Financing (Grant) Agreement.
- Schedule 2, Section I(C)(2): To facilitate the carrying out of Parts 1.1(a) and 1.2(a) of the Project, the Recipient shall make part of the proceeds of the Credit available to Beneficiaries by entering into an agreement with the Financial Institution.

Conditions

Type	Financing source	Description
Disbursement	IBRD/IDA	<p>Disbursement conditions</p> <ul style="list-style-type: none"> • Schedule 2, Section B(1): No withdrawal shall be made with regard to the withdrawal table of the Financing Agreement: <ul style="list-style-type: none"> (a) for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed \$16,000,000 may be made for payments made prior to this date but on or after April 9, 2021, for Eligible Expenditures under Category (2). (b) under Category 1 until the Recipient, through MoFEP, has entered into the Implementation Agreement with the Financial Institution and that the Implementation Agreement has become effective. (c) under Category 2 until the Co-Financing Agreement has been



executed and all conditions precedent to its effectiveness have been fulfilled.

- **Legal Opinion.** With respect to the provisions of Section 10.02 of the General Conditions under the Financing Agreement, the Recipient has confirmed that no additional actions will be required to be undertaken after the signing of the Financing Agreements for it to be considered legally binding. Unless in the Association’s opinion the circumstances that justified its decision change, the Association will rely on the Recipient’s representation and warranty described in Section 9.02 (b) of the General Conditions.
- **Acceptance of the Negotiated Documents.** The Recipient Delegation confirms its agreement with the negotiated legal agreement(s) and that these Minutes constitute the full and final agreement of the Recipient with the aforementioned documents, and that no additional confirmation or evidence of approval of these documents is required prior to the submission of the proposed financing for the consideration by IDA’s Executive Directors.



I. STRATEGIC CONTEXT

A. Country Context

- Between December 28, 2020, and April 8, 2021, the La Soufrière Volcano in St. Vincent and the Grenadines experienced effusive eruptions, culminating in explosive eruptions on April 9, 12, and 13.** Preliminary assessments suggest that, although the explosive eruptions have paused, episodic volcanic activity may continue for another three to nine months, following the pattern of the 1902 eruptions, which lasted for 11 months from May 1902 to March 1903. The recent series of eruptions covered the entire country in layers of ash, with the heaviest concentrations occurring in the northwestern part of the island closest to the volcano. The eruptions also generated massive amounts of gas and superheated pyroclastic flows, which destroyed virtually everything in their path, including trees and structures. They left behind significant tephra (volcanic debris) deposits. Heavy rains following the explosive eruptions mobilized ash concentrations on the volcano's slopes, resulting in lahar flows¹ which, according to the University of the West Indies Seismic Research Center, remain a threat during the rainy/hurricane season.
- Although there was no loss of life, due to an effective monitoring system and successful evacuations, the eruptions have directly affected the entire population, further compounding the effects of COVID-19 and generating estimated gross financing needs of US\$175 million (23 percent of gross domestic product [GDP])² in 2021.** Approximately 22,400 persons were evacuated from the red and orange³ zones. Approximately half of the evacuees (around 11,000) remained in public shelters, and private residences through the end of July.⁴ Of the total displaced persons, about 37 percent were considered vulnerable: 12 percent were children, 10 percent were elderly, and 15 percent were vulnerable for medical or other reasons.⁵ About 60 percent of the displaced persons identified as women or girls. The Government of St. Vincent and the Grenadines (GoSVG) reduced the volcano alert level from red to orange on May 6, 2021, and further to yellow on September 15, 2021, allowing evacuated residents from the red and orange zones to return to their homes. However, as of October 15, 2021, there were still 127 persons in nine public shelters and 323 in private residences. The GoSVG is still providing food, water, sanitary, and safety supplies for persons in the shelters, those who have returned home, and most displaced persons remaining in private residences, including their hosts.⁶
- Though all areas in the red zone are now fully accessible, the volcano continues to be active, and future eruptive activity cannot be discounted at this time.** In addition, large accumulations of tephra remain perched in the upper watersheds, particularly in the island's northern reaches. The steep topography of the island, coupled with rainfall events, has the potential to promote the movement of the

¹ Lahar is an Indonesian term that describes a hot or cold mixture of water and rock fragments that flows down the slopes of a volcano and typically enters a river valley. This hazard is heightened by rain.

² International Monetary Fund: IMF Country Report No. 21/157.

³ Red Zone – very high hazard zone and Orange Zone – high hazard zone, 2014 update of the La Soufrière Volcanic Hazard Management map for St. Vincent Island, University of West Indies, Seismic Research Centre.

⁴ Caribbean Disaster Emergency Management Agency (CDEMA) Situation Report, May 18, 2021. <https://www.cdema.org/>.

⁵ National Emergency Management Organization (NEMO) and United Nations (UN) World Food Programme. May 6, 2021. National Evacuation Report.

⁶ This facility whereby all displaced persons receive assistance is scheduled to end by December 31, 2021



accumulated material to downstream inhabited areas, further threatening lives, livelihoods, and infrastructure.

4. **St. Vincent and the Grenadines is highly vulnerable to geophysical and hydrometeorological events.** Volcanic eruptions, earthquakes, and climate change-related events such as hurricanes, floods, drought, and landslides threaten economic stability, and the population's safety and well-being.⁷ The Organisation of Eastern Caribbean States (OECS) Systematic Regional Diagnostic (SRD), completed in 2018⁸, found that the vulnerability of St. Vincent and the Grenadines to climate change and natural hazards is a key constraint to development. The most recent 2018 ranking of the Global Climate Risk Index places St. Vincent and the Grenadines at 135 out of 140+ countries, alongside other countries including The Bahamas, Liberia, and The Gambia.⁹ Between 1997 and 2016, disasters in St. Vincent and the Grenadines were associated with annual damage and losses of US\$11.3 million per year, equivalent to an annual loss of 1.2 percent of its GDP.¹⁰ Recent emergencies, including Hurricane Ivan (2004), Hurricane Tomas (2010), and the Christmas Trough (2013), produced major flooding throughout the island. In 2016, additional flooding from a slow-moving trough system caused widespread damage. Forecasting models predict that the Atlantic hurricane season, which runs from June to November 2021 and coincides with the rainy season, will be more active than the regular season.¹¹ This will likely lead to further damages due to the volcanic ash deposits until the landscape is stabilized.

5. **As a Small Island Developing State (SIDS), St. Vincent and the Grenadines is also particularly vulnerable to climate change impacts.** The most common threat to St. Vincent and the Grenadines is the potential for hurricanes, tropical storms, and weather-induced floods due to its location in the path of the Atlantic hurricane belt. This has accounted for 81 percent of the country's natural hazard events between 1900 and 2018.¹² High winds and rainfall, coupled with the mountainous terrain, are the principal risk factors. Landslides are also significant hazards, and the risk is elevated during the seasonal rains. Coastal flooding is also a major concern, particularly relating to storm surges and high wave action, as well as sea-level rise. The Grenadines have no rivers, and rainwater harvesting is their primary source of water; hence, they are more susceptible to drought.¹³ These climate change impacts have created vulnerabilities in agricultural production and critical infrastructure for basic services, including water, communications, and transport. St. Vincent and the Grenadines has been proactive in addressing these issues. It has conducted two National Communications on Climate Change (2000 and 2015) under the United Nations Framework Convention on Climate Change and prepared its Strategy for Climate Resilience (2011) under the Pilot Program for Climate Resilience (PPCR) under the Regional Disaster Vulnerability Reduction Project (RDVRP – P117871). The RDVRP has advanced several activities specifically designed to address climate

⁷ Water security indicators for St. Vincent and the Grenadines show that the country faces water scarcity with less than 1,000 m³ of renewable water resources per capita per year. <http://www.fao.org/aquastat/en/>.

⁸ Report Number: 127046-LAC

⁹ GLOBAL CLIMATE RISK INDEX 2020: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2018 and 1999 to 2018, David Eckstein, Vera Künzel, Laura Schäfer, Maik Wings, Briefing Paper, Germanwatch, Bonn.

¹⁰ OECS average computed using data from: Eckstein, David, Vera Künzel, and Laura Schäfer. 2017. "Germanwatch 2018 Climate Risk Index: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2016 and 1997 to 2016." Briefing Paper, Germanwatch, Bonn.

¹¹ National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center, May 20, 2021: *NOAA predicts another active Atlantic hurricane season* | *National Oceanic and Atmospheric Administration*

¹² <https://climateknowledgeportal.worldbank.org/country/st-vincent-and-grenadines/vulnerability>.

¹³ World Bank Climate Change Knowledge Portal. St. Vincent and the Grenadines. Accessed June 2021. <https://climateknowledgeportal.worldbank.org/country/st-vincent-and-grenadines>.



vulnerability, including resilient infrastructure, data collection for climate adaptation, policy reforms, and education and awareness-building activities.

6. **In addition to the climate change impacts, the COVID-19 pandemic also had long-term impacts on productivity, income growth, and social cohesion.** The pandemic has contributed to the further loss of jobs and an increase in poverty which may, in turn, affect the indicators in the tourism, transportation, and logistics sectors of St. Vincent and the Grenadines. Official statistics put COVID-19 cases at 5,204 (as of November 11, 2021), with 71 deaths (the number of COVID cases is 4.7 percent of the population). The number of COVID-19 cases represents approximately 2 percent of the population. Actual cases are likely significantly higher. The volcanic eruptions came when the Government was managing its COVID-19 impacts and seeing reductions in the number of cases and increased vaccine distribution. However, the COVID-19 outlook is expected to worsen due to the number of evacuated persons in emergency shelters where social distancing is more challenging. To date, 79 cases of COVID-19 have been attributed to evacuees in shelters, and two shelters were locked down following the discovery of the virus.

7. **The poor and vulnerable communities of St. Vincent and the Grenadines have been the most affected by and susceptible to the recent volcanic eruptions and previous disaster-related events.** The last Country Poverty Assessment (CPA) (2007–2008) found that the highest ratios of the population classified as ‘poor’ were concentrated in Georgetown and Sandy Bay (55.6 percent)¹⁴ and Chateaubelair (43.1 percent) census divisions. These census divisions are located mostly within the ‘red’ volcanic hazard zone, representing about 15,381 people, equivalent to approximately 3,800 households. This suggests that many displaced households are at risk of falling further into poverty and, in some cases, indigence, particularly with the impact on their livelihoods stemming from the destruction of crops, livestock, and fisheries. Although national poverty decreased from 37.5 percent in 1995/96 to just over 30 percent in 2008,¹⁵ frequent shocks like these to the economy and households continue to be a barrier to poverty reduction.

8. **The country’s economy is expected to contract by 6.1¹⁶ percent in 2021** due to the volcanic eruption and the ongoing COVID-19 shock, following a 3 percent contraction in 2020 and flat growth of 0.5 percent in 2019.¹⁷ As a consequence, the fiscal deficit may approach 9.5 – 10 percent of GDP in 2021, resulting in increased public debt levels. St. Vincent and the Grenadines currently benefit from a stable and sound macroeconomic outlook supported by recently approved fiscal measures and a strong commitment to further economic and fiscal reforms. This assessment is reflected in improving growth prospects, consistently low and stable inflation of 2 percent or less, and a forecasted decline in debt following the port investment through the maintenance of primary budget surpluses and the enshrinement of such targets in a Cabinet-approved Fiscal Responsibility Framework. As noted in the July 2021 joint World Bank-International Monetary Fund (IMF) Debt Sustainability Analysis, conducted in

¹⁴ http://stats.gov.vc/stats/wp-content/uploads/2018/05/SVG-CPA-REPORT-_Vol-1.pdf. In the 2007/2008 CPA, the census divisions of Sandy Bay and Georgetown were combined.

¹⁵ Poverty rates are based on headcount rates in percentage in 2008 (latest data), as measured against the nationally established poverty line. Extreme poverty rates fell more substantially to 2.9 percent in 2008 from 25.7 percent in 1995. The next household survey and poverty assessment was completed in 2019, but the analysis of the information has not been completed.

¹⁶ St. Vincent and the Grenadines: Request for Disbursement Under the Rapid Credit Facility—Press Release; Staff Report; And Statement by The Executive Director for St. Vincent and the Grenadines: July 2021. IMF Country Report No. 21/157.

¹⁷ <https://www.eccb-centralbank.org/statistics/gdp-datas/comparative-report/2>. Accessed August 2021.



conjunction with the IMF's Rapid Credit Facility financing, debt is considered sustainable, although St. Vincent and the Grenadines remain at high risk of debt distress. The Government is committed to achieving primary balances of no less than 2.5 percent of GDP by 2025, putting the debt-to-GDP ratio on a solid downward trajectory after 2021.

9. **Early response measures taken by the GoSVG, including the timely activation of government institutions, allowed for a rapid response to the volcanic eruptions and prevented the loss of lives due to the explosive eruptions.** However, this has nearly depleted sectoral institutional resources and severely strained Emergency Preparedness and Response (EP&R) systems. On April 8, 2021, the Prime Minister, in accordance with the National Emergency and Disaster Management (NEDM) Act, issued a Notice of Declaration of Disaster as a result of the imminent explosive eruption of the volcano. This Notice of Declaration of Disaster activated sectoral and territorial institutions, allowing for the activation of departmental, regional, and sectoral contingency plans to respond to the volcano. This was followed by the issuing of an evacuation order for high-risk northern communities (red and orange zones) to the southern parts of the island. The GoSVG also triggered the drawdown of US\$20 million from the World Bank's Development Policy Loan with a Catastrophe Deferred Drawdown Option (P169956) to be used as budget support and procured critical emergency goods, COVID-19 lab testing supplies, personal protective equipment (PPE), and medical equipment through the World Bank's RDVRP and OECS Regional Health Project (P168539).

10. Furthermore, the GoSVG mobilized US\$50 million through the Supplemental Financing to the Fiscal Reform and Resilience DPC Series (P176822), approved in June 2021, which provided financial liquidity for large and unanticipated expenditure needs, including immediate humanitarian needs in the wake of the volcano. However, significant resources were already consumed to support some 22,400¹⁸ evacuees displaced in shelters and private homes and to implement public works interventions to clean up ash and debris and protect infrastructure. Financial resources and technical support are still needed to address the damages caused to critical sectors across the country and support the GoSVG in building back more resiliently.

B. Sectoral and Institutional Context

11. **A preliminary damage assessment (as of April 20, 2021) suggests that the estimated direct damage to infrastructure, buildings, and crops total US\$82 million (10.4 percent of 2020 GDP).**¹⁹ Potential continued eruption activity under a more prolonged volcanic scenario could bring damages to a total as high as US\$210 million (26.6 percent of 2020 GDP). On top of the damage estimates, economic losses are yet to be fully identified but are expected to be significant given the loss of jobs and livelihoods. It is also expected that there will be health impacts, especially on the most vulnerable, as a result of extended exposure to ash, as well as persons who were/are congregated in shelters during the COVID-19 pandemic, and psychological impacts of the eruptions and displacement.

12. **Through the Detailed Damage Sectoral Analysis (DDSA), coordinated by the Caribbean Disaster Emergency Management Agency (CDEMA), the GoSVG assessed the impacts across key sectors, including social, agriculture, health, water, electricity, and infrastructure.** As the volcanic eruption event

¹⁸ Detailed Damage Sectoral Analysis (DDSA).

¹⁹ Based on the World Bank Global Rapid Post-Disaster Damage Estimation (GRADE).



is ongoing, the DDSA also provided projected costs for immediate to long-term support to affected persons, infrastructure, and services. The costs for delivering temporary to long-term support to the displaced persons are estimated at over US\$26 million, while projected costs for the development of a vulnerability program, including temporary grants, amount to over US\$6 million.²⁰

13. **The agriculture and fishery sectors have reported disproportionate damages amounting to approximately US\$64 million and total losses for agriculture in the red and orange zones affecting approximately 3,151 farmers and fisherfolk from these areas.**²¹ According to the DDSA, 33 percent of the displaced population are poor, and poor and vulnerable groups among the displaced people rely heavily on agriculture as their primary source of employment and income. Impacts within the agriculture and fishing sectors have disproportionate effects on men and women, due to defined gender roles and inequities. For example, in fisherfolk households, men are responsible for repairing physical equipment such as boats and nets and then can quickly return to the sea to earn an income. By contrast, women tend to manage household responsibilities, including any injuries or health-related concerns, care for the children and the elderly, and reestablish household processes before resuming fishing.

14. Furthermore, while women are the managers at the household level, they may not be included in decision-making processes or consulted on their needs and the cascading risks created when these needs are not met. Compounded with income loss and unemployment, the affected population also deals with a sense of loss of community, self-agency, stress, and anxiety, increasing the demand for socioemotional support. While St. Vincent and the Grenadines has limited social protection programs with established links to disaster management, it implemented different response measures to preserve food security, physical and mental integrity, and smooth consumption for the affected population. These measures comprised in-kind assistance such as support services which include life skills, psychosocial support, and cash assistance such as emergency cash relief to selected households. St. Vincent and the Grenadines has requested support to ensure the continuation of this assistance and to create a Labor-Intensive Temporary Employment (LITE) program to support the recovery of basic community infrastructure.

15. **The volcano also generated negative impacts and the ensuing destruction and damage of critical public infrastructure may push back the economic recovery of key economic sectors (tourism and agriculture).** Critical sectors such as water, electricity, transport, and housing were greatly affected, and the estimated cost of damage, including the cost of ash cleanup, is approximately US\$27.6 million. The impacts of the volcano and compounded impacts associated with climate change, including the rainy/hurricane season, are particularly detrimental given their geographic concentration in the north of the country, which has the highest percentage of poor and vulnerable communities. While the central and southern portions of the island were spared the impact of pyroclastic flows, accumulations of ashfall damaged water, energy, and transport infrastructure assets;²² the latter might suffer further structural damage due to the accumulated weight of the ash deposits. Ash and debris have also reduced the depths of river basins, thereby increasing the risk of floods. Fine ash deposits, which present a continued respiratory health issue, may also damage water and electricity infrastructure. COVID-19 has already

²⁰ Supplementary Estimates 2021.

²¹ Food and Agriculture Organization of the UN Regional Office for Latin America and the Caribbean, <http://www.fao.org/americas/noticias/ver/en/c/1397638/>.

²² Including roadways, retaining walls, and bridges.



created a fragile economic situation in the country for the tourism and hospitality sectors. The damage to critical infrastructure is likely to affect these sectors further.

16. **The impacts of the volcanic eruption also stretch across St. Vincent and the Grenadines' transport infrastructure network.** Based on reports from the GoSVG, in St. Vincent and the Grenadines, there are about 704.2 km of road comprising 128.1 km major roads, 118.1 km secondary roads, and 458.03 km minor roads or footpaths. There are also many road crossings (fords and bridges) due to the many rivers and streams in St. Vincent and the Grenadines; and in the red and orange zones alone, there are 61 road crossings. There are also about 366 public buildings in the country spanning education, health, security, and administration. As a consequence of the eruptions, preliminary damage to fords, bridges, and buildings is estimated to be US\$15.8 million in the red zone and US\$7.6 million in the orange zone. Several significant buildings in these sectors have been rendered inoperable, including a medical diagnostic facility, health centers that serve rural communities, schools, satellite emergency warehouses, police stations, community centers, and an agriculture tissue culture facility. As of August 18, 2021, the damage to roadways has not yet been calculated as they are still being cleaned.

17. **St. Vincent and the Grenadines has taken important steps in the last decade to incorporate disaster risk management (DRM) and climate change adaptation (CCA) into its sectoral development policies and has also implemented numerous policies for emergency and disaster response and disaster risk reduction (DRR).** Disaster preparedness and emergency response in St. Vincent and the Grenadines is implemented under the NEDM Act No. 15 of 2006, the Emergency Powers Act No. 45 of 1970, and the Natural Disaster (Relief) Act of 1947. The NEDM Act establishes the disaster planning and response framework for St. Vincent and the Grenadines, and disaster management activities are conducted in accordance with the National Disaster Response Plan (2005). This plan assigns planning, preparedness, and response activities to the various agencies and representatives and assigns specific responsibilities to agencies during disaster response. The GoSVG plans to update its National Disaster Response Plan and started working on this before the volcano's explosive eruption stage.

18. **St. Vincent and the Grenadines DRM system includes participatory institutional structures, which have proven essential for effective disaster response.** The NEDM Act is executed through the National Emergency Management Organization (NEMO), which consists of the National Emergency Council, the National Emergency Executive Committee, and the District Disaster Management Committees. With the declaration of an emergency, NEMO leads the Emergency Operations Center and the coordination of national agencies under the authority of the NEDM Act and the guidance of the National Disaster Response Plan. NEMO also spearheads communication with development partners in coordination with CDEMA. The National Emergency Council is chaired by the Prime Minister and is composed of ministers; permanent secretaries; district representatives; and key ex officio members from government agencies, corporations, businesses, and nongovernmental organizations. District Disaster Committees function at the local level and operate to implement planning and disaster response operations in their respective districts.

19. **The GoSVG is also scaling up and establishing programs to protect livelihoods.** At present, it focuses on emergency response and relief operations; however, the GoSVG is committed to several short- and medium-term efforts to support livelihoods and economic recovery. This includes an emergency employment program for ash cleanup and debris removal, a Continuity of Learning Program for school-age children, a Return to Happiness program for psychosocial support, a preschool program (Growing



Through the Ashes), and a grant program (Soufrière Relief Grant) for Internally Displaced Persons (IDPs), among others. The socioeconomic response plan highlights that the GoSVG is focusing on addressing gender issues and meeting the needs of the most vulnerable IDPs. The GoSVG has set aside US\$7.9 million to scale up its social assistance program.²³

20. **The Government has focused its emergency response efforts on addressing urgent and critical needs.** This included support for shelters, relief packages, and budgetary support to cover anticipated expenditures for an extended period due to the expected compounded impacts of future eruptions and the hurricane/rainy season. Similarly, recurrent disruptions in water supply and power systems are expected due to the volcano eruption and rainy/hurricane season, which will also affect the agriculture and infrastructure sectors. Damage to the agricultural sector is island-wide and will not recover until a new crop cycle can be completed. Infrastructure, also, will face continued threats until the landscape is stabilized. Therefore, in response to the volcano event, the GoSVG has requested a multipronged, flexible financing package from the World Bank and other multilaterals.

21. **The extent of the catastrophe has eclipsed the GoSVG's capacity to mitigate its consequences.** The economic costs of the volcanic eruption and related humanitarian efforts are significant and compounded by the effects of COVID-19. Government resources are insufficient to conduct a systemic ash cleanup, restore basic services, and rehabilitate basic infrastructure, with gross financing needs estimated at US\$175 million (23 percent of 2020 GDP)²⁴ in 2021. Moreover, on top of the damages estimated, economic losses are yet to be fully quantified but are expected to be significant given the loss of jobs and livelihoods. On May 6, 2021, the GoSVG sent an official letter to the World Bank expressing its interest in accessing IDA 19 funds through (a) a budget support operation and (b) an emergency volcano response project. The proposed Project has the potential to mobilize additional parallel financing to help St. Vincent and the Grenadines build back better by integrating climate adaptation and mitigation elements into the Project activities. This will support a greener economy and deal with the intensifying catastrophes caused by climate change and the worsening consequences of sea-level rise, heat-waves, and other effects of global warming.

C. Relevance to Higher Level Objectives

22. **The World Bank Group's (WBG) engagement in St. Vincent and the Grenadines is guided by the WBG Regional Partnership Strategy (RPS) for the OECS, which was discussed by the Board of Executive Directors on November 13, 2014 (Report No. 85156-LAC).** The RPS is structured around two pillars: (a) fostering conditions for growth and competitiveness and (b) enhancing resilience. The Performance and Learning Review, discussed by the Board on May 23, 2018 (Report No. 118511-LAC), reaffirmed the RPS strategic objectives and extended it to end-FY20. The SRD for the OECS completed in FY19 identified the following priorities for inclusive and sustainable growth: (a) build cross-cutting resilience to external shocks, (b) embed growth in the blue economy, (c) strengthen and harness human capital, (d) embrace new technologies, and (e) strengthen regional integration. A new Regional Partnership Framework for the OECS is under preparation for delivery in mid-2022.

²³ St. Vincent and the Grenadines. Ministry of Finance, Economic Planning, and Information Technology (MoFEP). May 2021. *Supplemental Budget*.

²⁴ International Monetary Fund: *IMF Country Report No. 21/157*.



23. **The proposed Project will also contribute to the World Bank’s twin goals, as well as its Climate Change Action Plan (2016–2020) and its Gender Equality Strategy (2016–2023).** The proposed Project will contribute to reducing extreme poverty and will boost shared prosperity by supporting the recovery and rehabilitation of communities affected by the current disaster and strengthening the resilience of St. Vincent and the Grenadines to climate change and future events. This exogenous shock has rolled back development gains and has disproportionately pushed vulnerable communities into poverty. In this regard, a “Building Back Better”²⁵ approach will focus on how both immediate-term activities and more long-term support can incorporate resilience, adaptation, and mitigation interventions to improve development outcomes. The proposed Project is aligned with Objective 4 of the World Bank’s Gender Strategy by supporting recovery strategies that address and reduce gender-based violence (GBV) and increasing women’s voice and decision-making processes in DRM and rehabilitation activities.

24. **The proposed Project will be guided by the principles of the World Bank Green, Resilient, and Inclusive Development (GRID) initiative to ensure that interventions target the most vulnerable while also advancing longer-term resilience and sustainability to St. Vincent and the Grenadines.** The Project will particularly support the GRID Pillar 2 - Protecting Poor and Vulnerable Peoples and Pillar 4 - Strengthening Policies, Institutions and Investments for Rebuilding Better. The proposed Project will aim for the social inclusion of disadvantaged or vulnerable individuals and groups by including them in stakeholder engagement processes and Project benefits. In this regard, those individuals or groups who by virtue of, for example, their age, gender, religion, physical, mental, or other disability; social status; economic disadvantages; and/or dependence on unique natural resources, may be more limited than others in their ability to take advantage of the Project’s benefits. The Project understands that such individuals/groups are also more likely to be excluded from or may be unable to participate fully in the mainstream consultation process and may require specific measures and/or assistance to do so. Measures to ensure social inclusion are cross-cutting in all Project activities. Measures will also be reflected in the Stakeholder Engagement Plan (SEP), Environmental and Social Management Framework (ESMF), and other Environmental and Social Standards (ESS) instruments relevant to the Project.

25. **The proposed Project is aligned with the WBG’s COVID-19 pandemic Response Approach Paper ‘Saving Lives, Scaling up Impact, and Getting Back on Track’.** The proposed Project aims to structure its support around the principle of “Building Back Better” and to address the critical needs of reconstruction while making investments that allow St. Vincent and the Grenadines to be better prepared for the impacts of climate change. This includes, where possible, rebuilding in a manner that considers location of structures, incorporates resilience planning, and utilizes more climate- and disaster-resistant materials. The proposed Project also aims to invest in lower carbon technologies and infrastructure which is more inclusive. Under these objectives, activities will be applied against Pillar 1 - Saving Lives and Pillar 4 - Strengthening Policies, Institutions and Investments for Rebuilding Better of the WBG’s COVID-19 response paper. They will also include considerations for how good practice in disaster management can

²⁵ “Building Back Better” approaches look to use of the recovery, rehabilitation, and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating climate change and disaster risk reduction measures, into the restoration of physical infrastructure and societal systems and look into the revitalization of livelihoods, economies, and the environment. Such approaches ensure that interventions are inclusive of the most vulnerable while also advancing longer-term resilience and sustainability to not only be better prepared for the impacts of climate change in the future but also invest in lower carbon technologies and infrastructure which is more inclusive.



accommodate compounding pandemic and disaster risk and mitigate the exposure and spread of COVID-19 in emergency shelters.

26. **Relevance to climate change impacts, including climate-induced events such as hurricanes.** The Project aims to support the GoSVG to restore livelihoods and critical services following the eruptions of the La Soufrière Volcano. Further, there is the opportunity to make transformative investments that will allow St. Vincent and the Grenadines to directly address future climate change impacts and disasters, in addition to major seismic events, in accordance with climate adaptation and disaster-resilient standards. For example, Project’s investments in recovery activities related to volcanic ash and debris removal from roads and public buildings will reduce the risk of further damage imposed by potential disaster events. Water systems rehabilitation and repair of public buildings will support efforts to build back better by ensuring activities are done with climate- and disaster-resilient considerations to reduce the risk to the people and communities to future disasters and shocks, such as hurricanes, floods, or landslides. The core capacity-building activities under the Project for example, developing plans and training exercises and drills, can also be applied to climate-related disasters through a multi-hazard approach that incorporates climate change-induced aspects in integrated emergency response and incident management structures, both strategically and operationally. Guided by the GoSVG’s climate change initiatives and operating under the GRID principles, the Project will seek to ensure that interventions protect poor and vulnerable peoples and strengthen policies, institutions, and investments for building back better.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

27. The Project Development Objective (PDO) is to support St. Vincent and the Grenadines to (i) provide short-term income support, (ii) improve the capacity of the government to prepare for and respond to emergencies, and (iii) build back better critical services in the wake of the La Soufrière Volcano eruption.

PDO Level Indicators

28. The PDO will be measured by the following outcome-level indicators:

- (a) Number of households impacted by the volcanic eruption and climate-related events, benefiting from short-term income support program (number; disaggregated by gender)
- (b) Number of people benefiting from restored utility/infrastructure services (number; disaggregated by gender)
- (c) The GoSVG has improved command and control systems in place (Yes/No).

B. Project Components



29. **The PDO will be achieved through three components** that align with the initial findings of the World Bank's Global Rapid Post-Disaster Damage Estimation (GRADE), and the DDSA coordinated by CDEMA, and support the Government's overall recovery program. These components are: (a) Early recovery income support; (b) Restoration and "Building Back Better" of critical services, and strengthening of emergency preparedness and response capacity; and (c) Project management.

30. **Component 1. Early recovery income support (US\$7.5 million).** The objective of this component is to provide temporary grants to help smooth consumption of selected poor or vulnerable populations affected by the La Soufrière volcanic eruption. It will also provide cash-for-work to support a labor-intensive work and maintenance program focused on cleaning activities associated with ex-ante disaster mitigation or ex-post emergency response or infrastructure recovery. The activities under Component 1 are embedded within the broader Government social protection strategy, which focuses on shock-responsive social assistance. This component comprises three subcomponents.

31. **Subcomponent 1.1. Temporary grants and support services program (US\$4.5 million).** The objective of this subcomponent is to support the continuation, expansion, and strengthening of the ongoing temporary grants and complementary support services.

32. **Temporary Grants (US\$4.3 million).** Through the Ministry of National Mobilization, Social Development, Family, Gender Affairs, Youth, Housing, and Informal Human Settlement (MoNM), the Government is currently providing unconditional temporary grants to approximately 4,000 displaced households affected by the volcanic eruption of La Soufrière. This program targets selected poor or vulnerable households from the red, orange, and yellow zones displaced by the volcanic eruptions of La Soufrière, who will be provided with income support for a period of six months. The benefit amount is determined according to the number of household members and based on the MoNM's current benefit amounts. The benefit amount ranges between a minimum of EC\$ 300 and a maximum of EC\$ 600 per month based on the number of household members according to the cap set forth in the Financing Agreement and agreed by the Bank in the Project Operations Manual (POM). The MoNM has targeting methods aligned with international good practice. The entry point of registration for beneficiaries is NEMO's National Evacuation Registry (NER), which is coordinated by the MoNM. Once they are registered, applicants are assessed and prioritized based on (a) eligibility criteria including geographic zones (for example, red, orange, and yellow), (b) income-based poverty and vulnerability thresholds (estimated from the official poverty line and the Consumer Price Index as established by the MoNM and agreed with the Bank and established in the POM), and (c) categorical criteria including households headed by women and/or with elderly, disabled members and/or with an unemployed head of household. A community validation takes place through the emergency community councils that support potential beneficiaries' validation process in their communities. Given that the budget may be limited, beneficiary selection will prioritize households from the selected geographic areas in the lowest income levels based on the established poverty line. Beneficiaries will be registered in the MoNM beneficiary registry. More detailed eligibility criteria will be specified in the POM, along with the framework governing intake, registration, enrollment, and selection processes.

33. **Support services (US\$0.20 million).** This activity will strengthen the capacity of the MoNM to provide existing support services, such as a family life education program and a farming program, to enhance beneficiary households' self-agency to support a resilient recovery. Based on an assessment, the family life education program will be provided to 750 selected beneficiaries with special support needs,



while the farming program will be provided to 200 selected beneficiaries. All beneficiaries will be selected based on more detailed eligibility criteria established in the POM. The family life education program will be delivered by facilitators, providing follow-up support, and coordinating with the community in the program. It will include educational sessions on psychosocial support, life skills including health and hygiene, and financial education, including home budget management and education on the use of the temporary grants. The farming program aims at providing theoretical and practical agricultural skills to selected beneficiaries. An existing Memorandum of Understanding (MOU) between the MoNM and the Ministry of Agriculture, Forestry, Fisheries, Rural Transformation, Industry and Labour (MoA) ensures that beneficiaries receive practical and theoretical knowledge on crop production. The MoNM, through Project funds, will finance the farming toolkit to ensure access by the beneficiaries of the program. The family life education program will consider the specific needs of women, men, and vulnerable populations. Such needs will include aspects related to childcare arrangements.

34. This subcomponent will finance temporary grants, goods and consulting services, including financing consultancies and services related to communications, training of beneficiaries, hiring of facilitators, and procurement of material and basic equipment to deliver the support services. A Project Officer will also be hired through the PSIPMU to support the MoNM in executing subcomponent 1.1.

35. **Subcomponent 1.2. Labor Intensive Temporary Employment (LITE) Program (US\$3 million).** The subcomponent will support, on an as-needed basis, the implementation of a LITE Program to provide cash-for-work in the event of natural and/or climate-related disasters (including risks associated with heavy rains mobilizing ashfall and volcanic debris). It will also support the longer-term resilient recovery of community infrastructure. This subcomponent will respond to the Government's request to support cleaning activities associated with ex-ante disaster mitigation or ex-post emergency response or infrastructure recovery and protect transportation routes from the accumulation of volcanic ash, flood water and debris following the volcanic eruptions of La Soufrière and other climate-related events.

36. The LITE Program will build on the existing experience of the Roads, Buildings, and General Services Authority (BRAGSA) in implementing the Road Clean-Up Program, which is a cash-for-work seasonal program aimed at basic public infrastructure maintenance and the creation of short-term employment benefiting unemployed working-age people. The LITE Program will target individuals over 18 years of age, potentially from poor households, including households that are female-headed and other criteria further established in the POM. The beneficiaries will be paid based on the number of days worked. Unless otherwise stated in the POM, a maximum of 10 days will be paid per beneficiary at a daily range between EC\$ 50 – EC\$ 75 for a maximum total of EC\$ 750 per Government's request to support cleaning activities associated with ex-ante disaster mitigation or ex-post emergency response or infrastructure recovery, unless otherwise specified in the POM. BRAGSA will identify and select the cash-for-work beneficiaries. The eligibility criteria and the selection process of the LITE beneficiaries is established in the POM. LITE activities will include income-earning opportunities targeted at women, not only as site workers but also in supervision and monitoring of the implementation of the work, and/or will include gender-specific needs mentioned above.

37. The works will support the recovery of basic community infrastructure and focus on critical public works to provide longer-term benefits and mitigate risk, especially related to the resilience of



infrastructure assets to future climate change impacts and natural hazards.²⁶ The beneficiaries will be provided with tools and safety gear to conduct the works. BRAGSA will prepare, plan, and select the subprojects, as needed, to help ensure an inclusive recovery that supports “Building Back Better” processes. The menu of eligible activities will include works with a labor content of 60 percent or more and which can be classified as (a) feeder road rehabilitation and maintenance, including cleanup of volcanic debris and improving water drainage and (b) cleanup of public buildings from volcanic debris and other climate-related disasters. BRAGSA will organize the works to be performed and will also control and supervise their implementation.

38. This subcomponent will finance cash-for-work; goods (including tools and safety gear needed to undertake the small infrastructure works of the LITE Program); trainings for beneficiaries; consultant services needed to support the planning, preparation, and supervision of the execution of the small infrastructure works (required for effective implementation of the subcomponent); communications, and administrative fees of the payment services.

39. The payment of the temporary grants and the cash-for work will be made through the existing payment mechanisms, including a digital e-wallet payment mechanism to deliver temporary grants and cash-for-work transfers through the banking system and per procedures documented in the POM. The Ministry of Finance, Economic Planning, and Information Technology (MoFEP) will enter into an implementation agreement with the Bank of St. Vincent and the Grenadines (BOSVG) to conduct such payments. The MoNM has subscribed to an agreement with the majority state owned²⁷ BOSVG to pilot a payment system based on e-wallets which will be scaled up. This component will strengthen said payment by financing the education of beneficiaries on the use of the systems and providing financial education to selected beneficiaries as described above. The MoNM will also conduct a rapid assessment of the ongoing pilot, and the Project will build on the lessons learned to further strengthen its payment mechanism and sustainability.

40. Under Component 1, and per section 10.2 of the Environmental and Social Commitment Plan (ESCP) and paragraph 99 below, the MoFEP will establish no later than 30 days after Project effectiveness a grievance and redress mechanism to receive, review, and address complaints and grievances submitted by beneficiaries and other people affected by the temporary grants and the LITE Program. The programs will publish information on the rules, eligibility criteria, amount of benefit, services provided, and other relevant information on the MoNM and the Public Sector Investment Programme Management Unit (PSIPMU) websites and on other widely known, relevant, community information sites.

41. **Component 2: Restoration and “Building Back Better” of critical services and strengthening of emergency preparedness and response capacity (US\$29 million).** During disasters, the continued

²⁶ Climate vulnerabilities that agricultural and infrastructure assets face include flooding, drought, heavy rainfall, tropical storms/hurricanes, sea level rise, and landslides. Works under the project will seek to improve resilience, particularly with respect to improved water drainage and landscape restoration. For example, restoration and replanting of affected areas would reduce erosion and mitigate impacts from flooding. These and similar activities will contribute to climate resilience and adaptation by reducing impacts from climate-related hazards, promoting improved resilience over the medium and long terms.

²⁷ The Bank of Saint Vincent & the Grenadines, formerly the National Commercial Bank (SVG) Ltd. was founded in June 1977. The Government of St. Vincent and the Grenadines share holds of 43.13 percent, and the National Insurance Services 20 percent, the remaining holders are private. <https://www.bosvg.com/about-us/shareholding>



operation of critical public infrastructure is key to efficient response and recovery. This component will support the rapid restoration and “Building Back Better” of critical infrastructure damaged by the volcanic eruptions and subsequent debris flows and lahars while also ensuring that investments incorporate transformative measures that increase climate resilience. Investments under this component will focus on three main areas: (a) support for reconstruction planning that incorporates climate change considerations, (b) restoration and reconstruction of critical infrastructure services, and (c) strengthening of EP&R systems and capacity.

42. **Maintenance of project flexibility to accommodate compounding disaster events.** It is important to recognize that the Project is designed to respond to an ongoing event and in a context where areas in the red zone have still not been fully assessed. The volcano continues to be in an active stage, and future eruptions cannot be discounted at this time. Furthermore, compounding disaster events are highly likely as rainfall will certainly promote the movement of the accumulated material to downstream inhabited areas, which will present a risk to lives, livelihoods, and infrastructure. Given this context, the Project has been designed with flexibility to adapt to future risks and needs and is described below through a framework approach. Candidate activities and financing for the first 18 months across sectors are described in annex 2.

43. **Subcomponent 2.1. Support to reconstruction planning that incorporates climate change considerations.** This will support the integration of necessary climate and disaster considerations into technical studies, feasibility studies, and detailed engineering designs of infrastructure interventions and operations mainly in public facilities, transport infrastructure, water supply systems, agricultural centers, and slope stabilization. These studies will address the critical needs of reconstruction while helping St. Vincent and the Grenadines to be better prepared for the impacts of climate change and build resilience into physical and operational infrastructure, including the resilient operation of systems during disasters, in a more inclusive manner. Such studies will be informed by standards of universal design and address the needs of vulnerable populations, including women, the elderly, and disabled persons. Participatory processes will be key to ensuring community needs are voiced, and reconstruction is inclusive to all. This will particularly help strengthen the self-agency of women in reconstruction and decision-making processes. Furthermore, restoration and reconstruction activities for critical transport infrastructure will need to be informed by studies that also assess compounded disaster and climate change risks, including floods, debris and mud flows, and landslide risks. Reconstruction activities will integrate considerations for longer-term climate risks and resilient design, construction, and operation and management principles (including beyond the physical structures). These planning efforts will directly guide investment selection and will be structured to ensure that all investments under the Project contribute to “Building Back Better” efforts. To the extent possible, the studies will also explore the possibility of improving resilience and promoting decarbonization through new technologies for energy efficiency.

44. **Subcomponent 2.2. The restoration and reconstruction of critical infrastructure services.** Activities will be assessed against the context of changing climate patterns and the integration of mitigation and adaptation interventions in restoration and reconstruction.²⁸ Given that St. Vincent and

²⁸ Climate change concerns will be integrated with the restoration and reconstruction of critical services. This will guide the design of specific interventions associated with restoration and reconstruction activities. These can include considerations for river defense designs incorporating anticipated sea level rise, bridge designs that minimize trapping debris flows from intense rains, agricultural drought response improvements, and similar activities.



the Grenadines is already highly susceptible to hydrometeorological risks, climate change will further exacerbate existing disaster impacts that affect water scarcity, floods, and landslides. Using the emergency operation to support “Building Back Better” will help the GoSVG adapt to and increase resilience to disasters and climate change. Reconstruction and rehabilitation works will be complemented by functional upgrades and climate-resistant designs, including energy efficiency features where relevant, through the enforcement of building code legislation to increase the resilience of buildings to climate-related risks.

45. **Immediate restoration of services.** The Project will support physical response activities, including materials and construction services; equipment rental; design and construction supervision for works contracts under the Ministry of Transport, Works, Lands, and Physical Planning (MOTW), NEMO Central Water and Sewerage Authority (CWSA); and other expenditures relating to restoration and rehabilitation operations. The POM, subject to the World Bank review, will articulate the approach for executing such response measures and define the positive list of measures eligible for financing under this component. The potential response and immediate restoration activities will include: (a) cleanup of volcanic ash and debris; (b) restoration/augmentation of affected water supply systems; (c) river cleaning; (d) purchase and/or rental of machinery and equipment (including agricultural equipment and supplies for restoration of agriculture productivity); (e) reconstruction of schools, roads, drains, culverts, bridges, and emergency warehouses; and (f) restoration of transport infrastructure.²⁹ Retroactive financing will be considered for activities started in the aftermath of the disaster and prior to Project effectiveness.

46. **A prioritized list of public infrastructure in need of restoration or reconstruction will be included under the POM, with a focus on identifying measures to increase climate and disaster resilience.** Prioritization will be carried out using participatory approaches in line with the Project’s environmental and social (E&S) instruments. This will ensure E&S risks are duly considered in finalizing investments to enhance resilience to climate change impacts and to mitigate potential negative environmental or social impacts. Given the vulnerability of St. Vincent and the Grenadines to climate and natural hazards, the reconstruction of all infrastructure supported by this component will be assessed against future climate patterns, and opportunities to integrate mitigation and adaptation measures will be included.³⁰ For example, reconstruction of the water supply systems will incorporate the use of higher-quality, more disaster-resilient materials; and reconstruction of schools and other public buildings will utilize data and findings from climate, hazard, engineering, and EP&R assessments to inform appropriate location, redesign, and reconstruction in a climate- and disaster-resilient manner. Likewise, repair and reconstruction of roads, drains, culverts, and bridges will incorporate climate change considerations in designs and choice of materials to ensure more resilient structures; and the repair and upgrade of critical agricultural fishing centers and facilities will incorporate climate change considerations related to

²⁹ The equipment for transport and connectivity restoration as well as communication will enhance climate resilience by enabling the GoSVG to clear roads, restore thoroughfares, and remove debris (key emergency response activities following hurricanes, floods, or landslides) and to command and control its operational teams on the ground. Restoration of water supplies and river cleaning will also be done in a way that will enhance resilience in the future by complementing reconstruction referenced earlier.

³⁰ Examples of climate mitigation and adaptation reconstruction include energy-efficient equipment and lighting, renewable energy, and solar panels; siting of infrastructure considering flood and hurricane maps and projections; flood-resistant building, road, drain, culvert, and bridge design; improved drainage systems including vegetation surrounding buildings; water supply provisioning considering changing precipitation and drought patterns; and hurricane-resistant buildings, roads, drains, culverts, and bridges to reduce losses, among others.



locations. Construction of emergency warehouses will also be informed by climate and hazard assessments and will incorporate energy-efficient systems to improve sustainability and reduce long-term costs. In addition, the proposed Project will finance design and construction supervision for works contracts under MOTW, NEMO, CWSA, as well as training and technical assistance (TA) on the asset management system (including roads, water, and bridges) to ensure that Project interventions are appropriately executed and systematically maintained so investments would be sustainable in the long term. Efforts are also being made through stakeholder meetings, dialogues with World Bank trust fund programs, and bilateral donor discussions about accessing parallel grant financing to further strengthen “Building Back Better” processes that ensure inclusive recovery and the greater integration of climate and disaster resilience in Project investments.

47. **Subcomponent 2.3. Strengthening of EP&R systems and capacity.** This activity aims to improve the capability of the GoSVG to systematically prepare for and respond to potential compounding emergencies and the impacts of a changing climate, particularly in line with its mandate under the national emergency response plans for multiple hazards (recurrent annual events as well as low-frequency, high-impact disasters). It builds on the Disaster Preparedness and Response Capacity Assessment (DPRCA) conducted by the World Bank, NEMO, and CDEMA and financed by the ACP-EU Natural Disaster Risk Reduction Program of the European Union (EU) that identified 13 areas of urgent or high priority that are critical impediments to the effective functioning of the country’s overall EP&R systems.

48. Activities under this component will address the critical impediments and, in so doing, improve capacities and capabilities to prepare for and respond to emergencies such as volcanic eruptions, earthquakes, and climate change-induced disasters such as hurricanes and floods.³¹ Based on the La Soufrière response operation, aspects related to evacuation and early warning systems were quite strong and safeguarded lives very effectively. However, gaps related to command and control systems such as gathering and distributing information, making informed decisions, and developing situational awareness; logistics; and command and control support structure and multi-agency coordination were identified and reported back by the Government. Coordination efforts for EP&R activities require a structural presence, be it for command and control, emergency aid movement, or the response teams’ staging and equipment. These capabilities act as a core element in establishing a culture of preparedness, ensuring a dependable common operating picture and resilient services when most other critical infrastructure and government services are disrupted. This subcomponent will look at the nexus of information, personnel, and equipment with an eye for pragmatic operational effectiveness around integrated emergency management systems, including an exploration of legislative roles and responsibilities, mechanisms for multi-agency coordination, and the use of emergency response plans and protocols to support emergency incident command and management.

49. Activities under this subcomponent may include (a) conducting assessments on legal and institutional frameworks, human resources capacity, operational facilities (such as emergency shelters) and equipment, and information management system, (b) providing technical assistance (including training) and purchasing goods to enhance capacities, (c) updating and harmonizing disaster preparedness and contingency plans at the national and local levels, (d) improving response, monitoring and data

³¹ Institutional arrangements, updating of Emergency Operation Center operations, contingency plans, coordination and response protocols, and strengthening of the GoSVG’s continuity of operations.



collection systems, and (e) enhancing multi-agency coordination, command and control, and communication capabilities.

50. **Parallel Co-financing³² under the EU-Caribbean Regional Resilience Building Facility managed by the Global Facility for Disaster Reduction and Recovery (GFDRR)** is being arranged to support activities to strengthen the multi-hazard EP&R systems in St. Vincent and the Grenadines. In this regard, US\$2 million through the EU-Caribbean Regional Resilience Building Facility trust fund will complement Project funding to strengthen NEMO's EP&R capacity in the key areas as described under paragraph 49 above.

51. **Project stakeholders.** Participating line agencies, identified thus far, are those with direct responsibility in their respective areas relating to emergency and infrastructure management, as follows:

- (a) Ministry of National Security /NEMO
- (b) MoNM
- (c) CWSA
- (d) MoTW
- (e) BRAGSA
- (f) MoA.

52. **Component 3: Project Management (US\$3.5 million).** This component will support the administrative management of the Project by the PSIPMU and implementing partners through, but not limited to, (a) a project coordinator; (b) financial management (FM) and procurement specialists to carry out the fiduciary aspects of the Project, including audits; (c) monitoring and evaluation (M&E) specialists; (d) technical experts needed for Project preparation and implementation (including E&S management and social protection specialists); and (e) technical focal points in the MoA, CWSA, MoNM, MoTW and BRAGSA. The PSIPMU will coordinate the provision of training and workshops³³ and manage the financing of necessary goods, equipment, and operating costs, including costs associated with convening and reporting to the Project Steering Committee (PSC).

C. Project Beneficiaries

53. **The proposed Project will target the communities affected by the La Soufrière Volcano eruptions, especially the population in the northern part of the island in the 'red', 'orange', and 'yellow' volcanic hazard zones.** Direct beneficiaries from Components 1 and 2 are estimated at 21,227 (19.2 percent)³⁴ of the total population, of which 14,141 (66.6 percent) are women; 4,065 (19.2 percent) are

³² "Parallel Co-financing" means an amount of one million six hundred and fifty thousand Euro (USD\$ 2 million) included under the Co-Financing Agreement (as defined under the Financing Agreement) of the Project, which will assist in financing part sub-component 2.3. This component will be jointly financed by the Project (IDA) and EU-Caribbean Regional Resilience Building Facility managed by the GFDRR. The specific activities to be financed across funding sources will identified in the Project procurement plan.

³³ Workshops will include technical discussions and capacity-building activities around the utilization of climate and disaster risk information and the prioritization of reconstruction and rehabilitation activities to strengthen climate and disaster resilience.

³⁴ Government of Saint Vincent and the Grenadines. This represents persons from the North Windward, North Leeward, and North Central Windward constituencies.



vulnerable; 6,831 (32.2 percent) are children;³⁵ 2,622 (12.4 percent) are elderly; and 10,203 (48.1 percent) could be classified as dependent. Indirect beneficiaries from Components 1 and 2 include the entire population of St. Vincent and the Grenadines of 110,696 persons³⁶ who were affected by the explosive eruptions phase of the La Soufrière Volcano. Further, heavy ashfall, ash accumulation, and extensive mudflow directly affected 2,594 persons (2.3 percent of the total population) of which 1,250 (48.2 percent) are women. The total population of the island will also benefit indirectly from the increased capacity of the authorities to build back better infrastructure. Also, under Component 2, the EP&R investment areas will enhance the GoSVG's capacity to respond to and support early recovery from volcanic eruptions, addressing gaps and needs in the GoSVG's ability to execute its mandate as defined under the different multi-hazard emergency response plans. The core capacities and capabilities needed to organize a response operation and coordinate resources on the ground can also be applied to any type of emergency—including hurricanes, floods, and pandemics—through a multi-hazard, multi-sectoral approach to integrated emergency response and incident management structures and frameworks. Building this capacity will benefit the total population of St. Vincent and the Grenadines. Criteria for the selection of investments and beneficiaries will be further detailed in the POM.

D. Results Chain

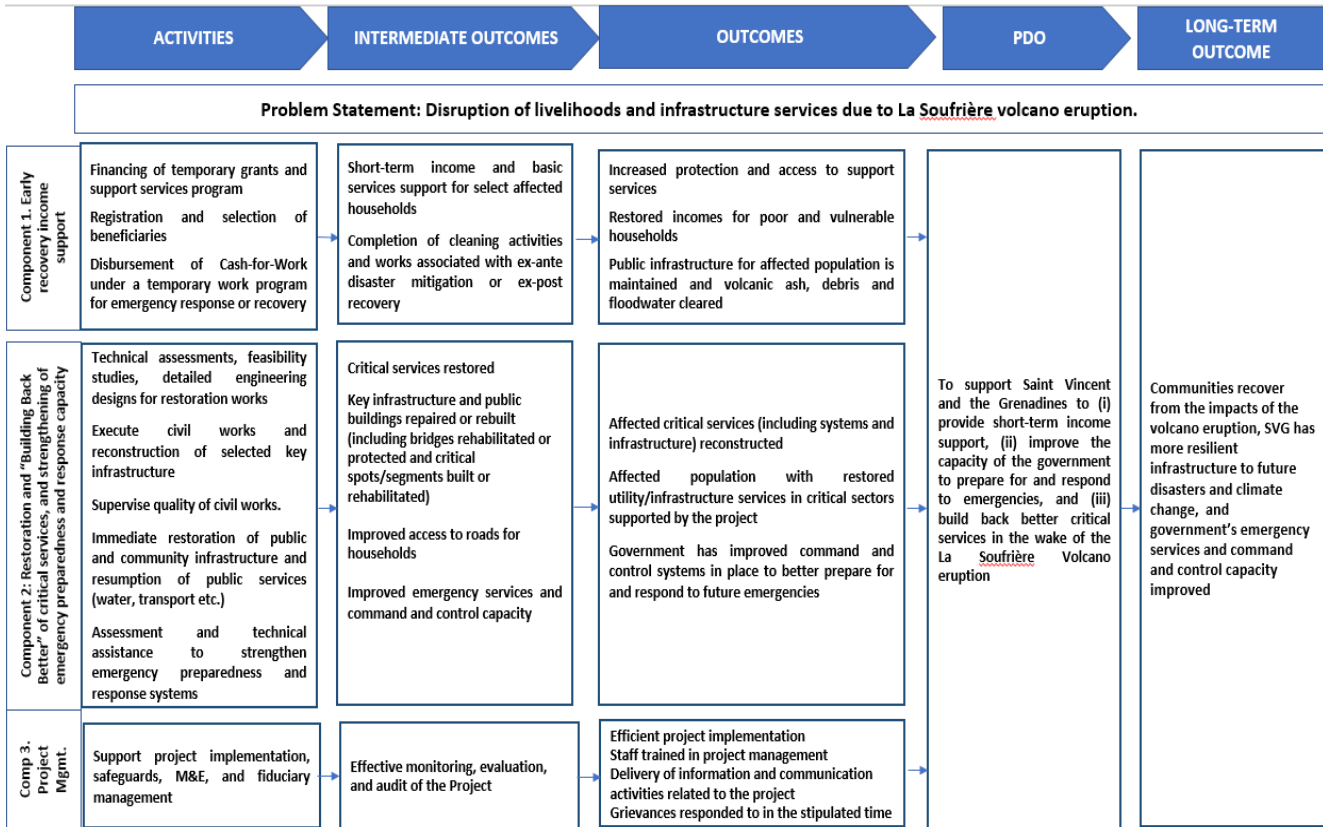
54. To develop the results chain for the proposed Project, a theory of change approach was adopted and is illustrated in Figure 1.

³⁵ This represents the 0–17 years age group.

³⁶ <http://www.gov.vc>. This represents all persons (not limited to any age group).



Figure 1. Theory of Change



55. **Critical assumptions are the following:** (a) the current eruption sequence of the La Soufrière Volcano stops within six months of Project approval; (b) the local suppliers of goods, works, and services can meet the demands of the emergency response and early recovery activities; (c) transportation to/from the affected areas has been reestablished at a minimum, and remote communities are reachable; (d) adequate coordination mechanisms are in place among the implementing agency, specialized agencies, regional governments, and local communities; (e) alternative methods for participatory approaches and data collection are available to ensure effective implementation and monitoring; (f) procurement processes advance smoothly and have an adequate market response; and (g) no other emergencies causing significant damages (that is, heavy rains, landslides, floods, and hurricanes) occur during implementation.

E. Rationale for Bank Involvement and Role of Partners

56. **The proposed Project will be critical to support the GoSVG in its emergency recovery and restoration of services.** First, it provides the much-needed financing to critical sectors and economic activities in areas affected by the La Soufrière Volcano eruptions. Second, the proposed Project builds on the World Bank's decades of experience in regional disaster recovery and resilience. This includes the emergency recovery assistance provided after Hurricane Tomas in 2010, which caused significant impacts on people, livelihoods, and infrastructure in St. Vincent and the Grenadines, as well as the World Bank's



support in the region following Hurricane Sandy in 2012, Hurricane Joaquin in 2015, and, most recently, Hurricanes Irma and Maria in 2017.

57. **The proposed Project's design is also fundamentally underpinned by the World Bank's global experience in financing and supporting the implementation of EP&R projects or projects with EP&R components.** This includes projects such as the Istanbul Seismic Risk Mitigation Project (P078359), the Bangladesh Urban Resilience Project (P149493), and more recent engagements such as the development of EP&R investment plans in Cabo Verde (P160628), Western Balkans (P165377), Sierra Leone (P166075), and Seychelles (P148861). Experiences from such projects suggest that an integrated approach is desirable to drive a systematic, ongoing approach to EP&R. The World Bank's comparative advantage is in building countries' EP&R systems ex-ante, with comprehensive financing and policy dialogues, as well as its convening power in delivering systemic value for clients.

58. **The proposed Project will support the GoSVG's response to the disaster and has the potential to mobilize additional resources for TA from the EU (in addition to the EU US\$2 million grant under Component 2) and be supported by the Canada-Caribbean Resilience Facility.** Development partners have also committed to supporting St. Vincent and the Grenadines, including TA, provision of supplies, and support in conducting damage assessments. CDEMA is leading the coordination of donor assistance, and the UN has initiated a US\$29 million flash appeal. The IMF provided US\$11.6 million in concessional financing and the Caribbean Development Bank will be providing US\$5 million in loans and US\$0.5 million in temporary grants.

F. Lessons Learned and Reflected in the Project Design

59. The Project design has been informed by the World Bank's involvement in multi-sector post-disaster recovery and reconstruction, its longstanding experience and operational program in the Caribbean region, evaluations from previous operations (including Implementation Completion and Results Reports [ICRs] and Independent Evaluation Group assessments) and international good practice. Key lessons incorporated into Project design include the following:

- (a) **Implementation of emergency projects is improved by building on existing systems and capacities, with specific adaptations to enhance the delivery of programs.** Project activities under Component 1 are designed to scale existing payment mechanisms and utilize programs already established and employed by the GoSVG. This will ensure Project activities align to institutional strengths and enhance implementation and operational efficiencies. However, the Project will also strengthen existing systems by developing information systems to monitor and administer the program, engagement of the community to enhance program communication and transparency, and implementation of accompanying measures such as life skills workshops to enhance beneficiary recovery and resilience. This approach draws on lessons from the St. Maarten Emergency Income Support and Training Project (P167368); St. Vincent and the Grenadines Human Development Service Delivery Project (P154253); Arab Republic of Egypt's Emergency Employment Investment Project (P146143); Chad Safety Nets Project (P156479); and the recent COVID-19 emergency operation Brazil: Income Support for the Poor Affected by COVID-19 (P174197).



- (b) **Simplified objectives and limited scope improve the efficiency of emergency recovery operations.** A key lesson from similar operations is that in low-capacity contexts, such as SIDS, emergency operations should prioritize recovery activities and set realistic recovery goals. A simple project design, such as with the Grenada Hurricane Ivan Emergency Project (P092692), is particularly important when activities to be implemented are urgent. While recovery needs in Saint Vincent and the Grenadines are significant, the proposed Project was designed to have a limited scope for improving its efficiency by focusing on (i) providing short-term income support, (ii) improving the capacity of the government to prepare for and respond to emergencies, and (iii) supporting the “Building Back Better” critical services in the wake of the La Soufrière Volcano eruption.
- (c) **Building sustainable institutional capacity in EP&R requires engagement with both decision-makers and technical practitioners.** The experience from many EP&R projects focusing on command and control structures suggests that, while it is important to establish strong dialogue with senior officials of the implementing agencies, it is equally important to work closely with counterparts at the technical level to ensure continuity and build institutional capacity. The regional DPRCA TA suggests that deep knowledge and familiarity with government policies, processes, and procedures, as well as roles and responsibilities of various departments and teams, will reduce institutional fragmentation and enable timely support and advisory services to the counterpart agencies.
- (d) **Utilizing existing implementation arrangements facilitates effective emergency response.** Implementation arrangements for emergency operations should be straightforward and pragmatic while remaining responsive to country circumstances. In emergency response operations, simplicity in project design and sustained implementation support are key to achieving the development objectives on time. This lesson was drawn from the Hurricane Tomas Emergency Recovery Loan (P124939). The implementation arrangements for the proposed Project build on those of the Regional Disaster Vulnerability Reduction APL1 - Grenada and St. Vincent and the Grenadines (P117871). As part of these arrangements, the MoFEP, through its PSIPMU, will oversee Project activities and establish and manage the PSC to ensure the participation of relevant sector ministries and government entities in Project implementation.
- (e) **Partnership and community-based approaches in identifying priority investments increase ownership and accountability.** Promoting community-based approaches and participation is essential for an effective and sustainable reconstruction process. The proposed Project will offer communities the opportunity to identify priorities among local interventions that will directly affect the lives of affected populations. Through participatory processes, the proposed Project will also ensure that women, people with disabilities, and other vulnerable groups are included throughout implementation. The approach builds off lessons from projects such as the Housing Recovery Project (P166537) in Dominica, which uses community-based approaches to support monitoring and enhance transparency, and experiences defined within the GRID, which show how participatory processes enhance the social inclusion of disadvantaged or vulnerable individuals and groups by including them in stakeholder engagement processes and project benefits.
- (f) **Effective M&E in emergency operations is key to ensure the achievement of goals set in the recovery plan.** Typically, emergency operations include economic variables as part of



the key outcome indicators, complementing the focus on reconstruction and rehabilitation indicators, which requires additional effort and resources to ensure that related activities are completed and evaluated. The proposed Project will ensure that M&E guidelines are agreed to and included in the POM. Training for the implementing agency should also focus on mainstreaming M&E into the day-to-day Project administration.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

60. **The MoFEP will be responsible for the overall Project implementation through the PSIPMU.** The PSIPMU will be responsible for fiduciary, procurement, E&S risk management, and M&E aspects. Given the multi-sectoral nature of the Project, an intergovernmental PSC comprising permanent secretaries of relevant ministries including the MoA; the MoNM; Ministry of Health, Wellness, and the Environment; the CWSA; Ministry of Foreign Affairs, National Security, Legal Affairs, and Information; the MoTW; the heads of NEMO and BRAGSA; and heads of technical agencies or their designated representatives will be established and always maintained throughout Project implementation. The PSC will be the principal coordinating body for the Project; however, it will not be a decision-making body. The PSC will be chaired by the Director of Economic Planning of the MoFEP. This committee will provide oversight for Project implementation as well as central policy guidance as required periodically. The frequency of the PSC meetings will be determined in the POM. Memorandums of Understanding are not required across government ministries. Also, at least one focal point for the Project will be appointed in each implementing agency who will work closely with the project coordinator in the MoFEP.

61. **The Project team will be under the leadership of a project coordinator and will also include, as core staff, three Project officers and specialists in procurement, FM, M&E, social protection, E&S management, and engineering.** The project coordinator will report to the Director of Economic Planning and will have the overall responsibility to supervise the staff in planning, organizing, and executing the project's day-to-day administrative, technical, and legal activities. The POM will include the Project team's organizational structure and describe the duties and responsibilities of staff on the Project's technical, administrative, FM, procurement, E&S management, and M&E procedures. The PSIPMU will also supplement existing capacities by hiring two accounts clerks, a procurement assistant, a quantity surveyor, and a communications officer. Two of the project officers will work closely with NEMO and MoNM, the project coordinator and the communications specialist, to coordinate and support communications activities across project components and ensure transparency for activities under Component 1.

62. **Implementation arrangements for Component 1.** Under Subcomponent 1.1, Temporary grants and support services program, the line entity involved in implementing this subcomponent is the MoNM. It will provide temporary grants and support services to selected affected households. The MoFEP will conduct fiduciary tasks and oversee the implementation through its PSIPMU. All responsibilities in line with this support will be detailed in the POM.



63. Under Subcomponent 1.2, the LITE Program will be implemented by BRAGSA and the MoFEP, which will conduct fiduciary tasks and provide oversight of the implementation through its PSIPMU. All responsibilities in line with this support will be detailed in the POM.

64. **Under subcomponent 2.2, the restoration and reconstruction of critical infrastructure services** will be implemented by MOTW, NEMO, CWSA, and the MoFEP, which will conduct fiduciary tasks and provide oversight of the implementation through its PSIPMU. The Project will support the technical assistance to finance design and construction supervision for works contracts and engineer support under MOTW, NEMO, and CWSA. All responsibilities in line with this support will be detailed in the POM.

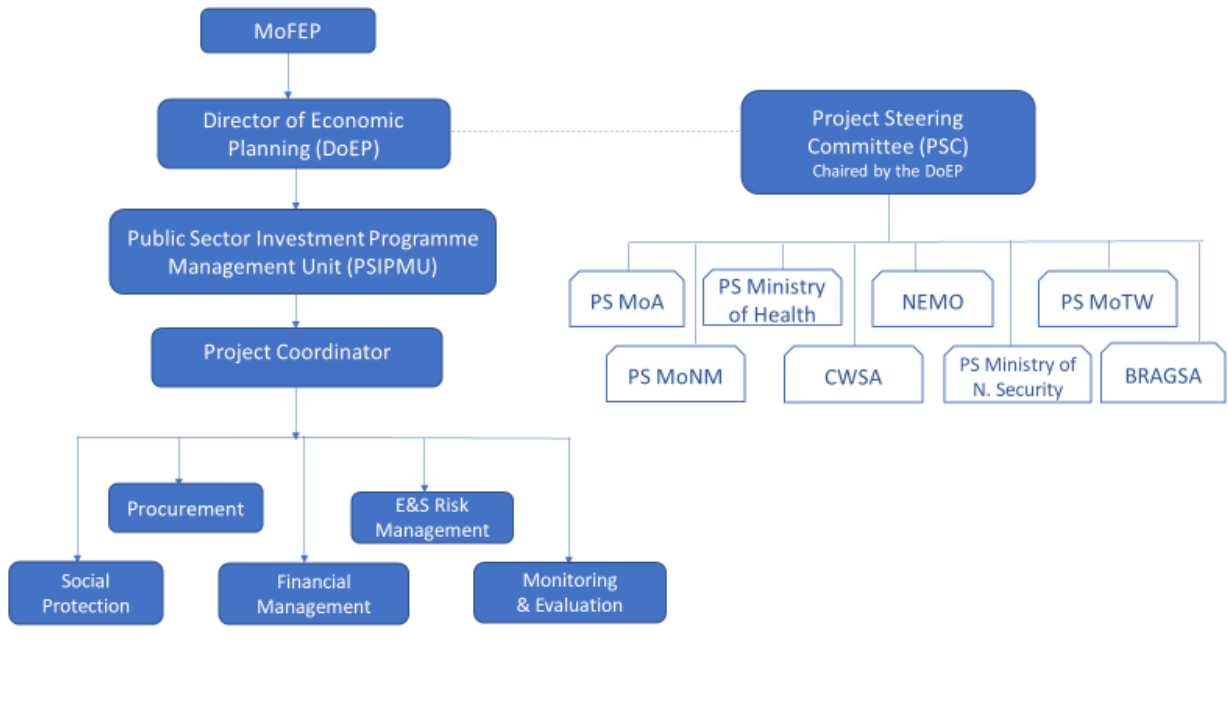
B. Results Monitoring and Evaluation Arrangements

65. **M&E will be carried out by the PSIPMU, based on the indicators included in the Project's Results Framework.** Accordingly, the PSIPMU will (a) collect, consolidate, and report on Project performance data, including physical and financial progress and E&S monitoring and (b) provide periodic information on intermediate Project results and progress toward higher-level outcomes (according to the Results Framework). The reports will also include data on grievances and resolutions to enable timely corrective action. Throughout Project implementation, the implementing agency will prepare biannual progress reports. The Project will finance the baseline data gathering to assess social, environmental, and economic impacts of key activities. Project outcomes and outputs will be evaluated through outcomes and intermediate-level indicators defined in the Project's Results Framework. The PSIPMU will contract independent consultant(s) to prepare the Project ICR.

66. **The Project will support interventions to strengthen the M&E capacity of the implementing agencies, and the MoFEP will coordinate regular reporting.** The Project will finance M&E-related training as part of capacity-building exercises, including data analysis capacity-building to improve monitoring and reporting. Development of the Management Information System (MIS) for the implementing agencies will also facilitate improved monitoring of service delivery to the Project beneficiaries. At the project level, each implementing agency will be required to submit a progress report on the project activities to the MoFEP, which will then be consolidated and submitted to the World Bank. This will be done monthly during the first two years of the Project and quarterly during the final three years. This support for the line ministries will help strengthen institutional capacity in analytics.



Figure 2. Implementation Arrangements



Note: PS = Permanent Secretary.

C. Sustainability

67. **Resilient infrastructure.** The proposed Project will adopt a “Building Back Better” approach to the rehabilitation and reconstruction of damaged infrastructure, ensuring that investments also allow St. Vincent and the Grenadines to be better prepared for the impacts of climate change. The sustainability of infrastructure investments will be ensured by using hazard and climate assessment maps and data to inform construction locations and standards, improved engineering standards—following the national building code, engineering norms and construction regulations, operation and management, and international best practices—and expert engineering TA, technical audits, and on-site construction monitoring support to improve the long-term climate resilience of public infrastructure. In addition, in coordination with a World Bank ongoing TA (Resilient Transport in Small Island Developing States (RTSIDS) funded by GFDRR Japan Program), the proposed Project will work on improving the asset management system to ensure that Project interventions are properly maintained systematically to sustain investments in the long term.

68. **Temporary Grants, support services, and LITE.** The Early Recovery Income Support (ERIS) under Component 1 of this Project provides temporary grants, access to support services to help smooth consumption, enhance households’ self-agency to support a resilient recovery, and protect households from negative coping strategies on a sustained basis to ensure that resilience to future events is improved (for example, food insecurity). Moreover, the ERIS will respond to the Government’s request to support cleaning activities associated with ex-ante disaster mitigation, ex-post emergency response, or infrastructure recovery.



69. **Institutional and financial sustainability.** The operationalization of a coordination mechanism and the technical experience with planning and implementing rehabilitation and reconstruction investments, combined with Project management, are expected to improve the capacity of the GoSVG to plan and scale rehabilitation and reconstruction efforts. The fiscal effects of disasters require significant capital expenditures for repairing and reconstructing damaged infrastructure. By making the Project-supported investments more resilient to adverse natural events and putting in place a more systematic, coordinated approach to rehabilitation and recovery, the proposed Project will also help reduce the Government's contingent liabilities and improve its ability to respond to future disasters from natural hazards.

70. **Community-responsive designs with traditional and preferably locally available materials.** The rehabilitation and reconstruction of community-level infrastructure will follow a community-based process, using culturally appropriate designs and local workers and contractors to the extent possible. Efforts will be made to ensure that women and other potentially vulnerable groups, including people with disabilities, are included and that by experienced forepersons and other skilled professionals guide their work. This will be particularly relevant to agriculture rehabilitation activities, which have had disproportionate impacts on women. Training will be provided to skilled laborers and communities to ensure compliance with recommended building practices and technical requirements. It is expected that this process will be replicated across other affected regions. Intense local involvement in the rehabilitation and reconstruction process should help ensure the sustainability of the improved hazard-resistant techniques promoted under the proposed Project.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical Analysis

71. **During implementation, a prioritization process will be undertaken, based on criteria to be defined in the POM.** Potential investments will be screened for eligibility based on (a) the level of damage; sector relevance; and the likely economic, financial, and E&S impacts of restoration and (b) the results of a participatory and inclusive process which will involve relevant development partners and representatives of vulnerable communities, among others. In addition, technical designs for the prioritized investments will include climate-smart investments and measures such as energy efficiency and adaptation to climate-related hazards such as flooding and landslides. The proposed Project aims to provide the GoSVG with the necessary resources and TA to prepare and implement an efficient recovery/rehabilitation plan. Hence, it was designed in an expedited manner to allow for immediate response, with significant flexibility. The procedures for the selection of investments and necessary World Bank no-objections will be further detailed in the POM.

72. **Reconstruction versus replacement.** The technical approach will consider rehabilitation of structures whenever technically and financially feasible, while incorporating climate change considerations in works. Where the condition of the existing building does not allow for structural strengthening, the proposed Project will consider demolition and reconstruction, which will be undertaken when the cost of strengthening the infrastructure approaches its replacement cost. The



evaluation of the replacement value will include all costs associated with reconstruction in line with the current standards and codes, including the costs of demolition of existing buildings.

73. **Non-eligible investments.** There will be no involuntary resettlement, in the form of physical displacement under the proposed Project. All buildings and infrastructure will be reconstructed within the bounds of existing building footprints or on available publicly owned land while incorporating climate change and “Building Back Better” considerations. Furthermore, the proposed Project will not support activities that are located on environmentally sensitive or culturally significant lands or pose a high negative impact to ecosystems, cultural heritage, or socioeconomic structure. The identification of such situations will be defined by E&S safeguard procedures.

74. **Disaster and climate change resilience.** The proposed Project will promote the “Building Back Better” approach, which comprises improvements in design standards, construction quality, and functionality and the incorporation of climate change mitigation and adaptation measures, as appropriate. The integration of disaster risk and climate change considerations into the design of infrastructure investments will enhance the resilience of infrastructure to future disaster and climate risks and help protect people’s lives, livelihoods, and assets, thereby contributing to the GoSVG’s CCA efforts.

Economic and Financial Analysis

75. **The economic assessment indicates that the proposed interventions are economically viable and beneficial.** The results of the economic analysis³⁷ conducted during Project preparation are summarized in Table 1, focusing on Component 2 of the proposed Project. Several options have been considered, including different discount rates, from a 4 percent discount rate, as recommended for IDA countries³⁸ and up to 8 percent. The analysis shows an internal rate of return of 13.92 percent and a net present value of approximately US\$31.32 million, indicating that with valuations at 6 percent and 8 percent discount rates, the project would still be economically viable. Due to the urgent nature of the operation, the estimations are based on a simplified and preliminary economic analysis of the proposed Project.

³⁷ Investment cost is equal to US\$27 million, which comprises Component 2 of the proposed project, and is distributed during the five years of the proposed project with proportions of 10 percent for the first year; 15 percent for the second year; and 25 percent each for the third, fourth, and fifth years. Benefits are calculated as the (avoided) losses corresponding to the social and infrastructure sectors and 90 percent of the total damages to these sectors to reflect the potential gain from rehabilitation and reconstruction of transport infrastructure and building assets.

³⁸ Risk-Adjusted Discount Rates in Economic Analysis of Investment Projects. World Bank. 2017.



Table 1. Summary of Economic Analysis

	IRR (percentage)	NPV (US\$ million)		
		4%	6%	8%
Baseline	13.92%	31.32	18.23	10.40
Sensitivity Analysis				
(a) 2 years delay in benefits	9.8%	25.06	11.85	4.06
(b) 10 percent increase in investment costs	11.68%	14.41	7.29	7.07
(c) 10 percent decrease in benefits	11.47%	24.12	12.76	6.03
(d) both (a) and (b)	8.57%	20.67	8.39	.80
(e) all: (a)+(b)+(c)	7.22%	14.09	3.46	-2.91

B. Fiduciary

(i) Financial Management and Disbursement Arrangements

76. **FM assessment was carried out during Project Appraisal on September 20, 2021, by the World Bank to evaluate the adequacy of the FM arrangements for the implementation of the Project.** The objective of the assessment was to determine whether the PSIPMU will have acceptable FM and disbursement arrangements in place for this Project. The assessment concluded that with the mitigating measures described in the *risks* section (paragraph 87), the Project will have adequate FM arrangements in place that can provide, with reasonable assurance, accurate and timely information on the use of Project funds. The PSIPMU has performed moderately satisfactorily to date on FM.

77. **The Project’s FM and disbursement arrangements will be streamlined to facilitate execution, avoid unnecessary incremental operational arrangements, and rely as much as possible on existing country systems.** The accounts for this Project will be executed through the Standard Integrated Government Financial Information System (SIGFIS - SmartStream). The project’s activities will be mapped against the Government’s Treasury Department existing chart of accounts, and if necessary, new accounts would be added. The Accountant General will provide the PSIPMU with access to SmartStream, which would allow for oversight and review of Project expenditures and generation of expenditure statements.

78. **FM staffing/personnel.** The PSIPMU has four project accountants whose responsibilities are project assigned, and one accountant is assigned to this Project. Overall, each accountant is responsible for ensuring that appropriate and satisfactory FM arrangements are maintained for their respective projects. The Project accountant prepares the financial reports and bank reconciliations and assists in the preparation and monitoring of the budget. The Project accountant reports directly to the project coordinator. Given the expected increase in workload, the PSIPMU is recommended to hire an additional accountant to be assigned to this Project.

79. **Budgeting.** An annual budget will be prepared by the project coordinator, in collaboration with the technical personnel from the PSIPMU and relevant line ministries. The Project’s budget will be approved by the Director of Economic Planning and then submitted to the MoFEP for approval, and upon approval, the budget is included in the GoSVG’s Estimates of Revenue and Expenditure. The annual budget is revisited quarterly and updated as needed.



80. **Internal control.** The POM will describe the internal control mechanisms to be put in place by the implementing agency to properly manage, control, and conduct oversight of the implementation arrangements, including financial and technical reporting. Though the Project funds will be advanced to the MoFEP, the Project has to be registered in the National Budget in accordance with national laws. The MoFEP must abide by the Constitution and the Finance Administration Act (FAA) to ensure that the funds are adequately executed, managed, controlled, and incorporated in the GoSVG's institutional accounting and budget systems. The PSIPMU has established accounting policies and internal control procedures over the review and approval of transactions and payments. The POM has been reviewed by the World Bank and found acceptable, but an update will be required to reflect the Project-specific arrangements.

81. **Accounting and financial reporting.** The Project will follow cash basis accounting, and all Project transactions will be recorded in the SIGFIS (SmartStream). The PSIPMU will work with the Treasury Department to include the Project's activities in SmartStream using the appropriate coding designed for external funds in accordance with the Project design (components and activities). Project implementation will rely on the SIGFIS, and execution will rest with the PSIPMU. The PSIPMU will be responsible for producing and submitting interim financial reports (IFRs) to the World Bank on a quarterly basis, along with the accounting records from which they are prepared. These reports would provide the required monitoring information and would be used for disbursement. The format and content of the quarterly IFRs were discussed during project appraisal and will be agreed upon and included in the POM and the Project Disbursement and Financial Information Letter (DFIL). The IFRs would include a short narrative outlining the major Project achievements for the quarter, the Project sources and uses of funds, bank reconciliation statements, and necessary procurement tables. These reports would be submitted to the World Bank no later than 45 days after the end of each reporting period. Upon completion of all Project activities and payments and as part of the final deliverable (Final Progress Report), the MoFEP will submit to the World Bank a consolidated report on the use of funds for deliverables, showing offsets for any paid advances and any uncommitted balance to be refunded.

82. **Disbursement and flow of funds.** Disbursement of project funds will be processed in accordance with the World Bank procedures as will be stipulated in the DFIL and the Disbursement Guidelines for Investment Project Financing, dated February 2017. Advances will be processed to a segregated Designated Account (DA) denominated in U.S. dollars, held at the BOSVG and pooled for IDA and EU funds under the Project. Advances to the DA would be made based on the forecast of the project's eligible expenditures for a period of six months, based on Interim Financial Reports (IFRs). Supporting documentation for expenditures made from the DA would also be based on the IFRs. As eligible expenditures are incurred, the PSIPMU would withdraw the amount to be financed by the World Bank from the DA (US\$ or EC\$) in accordance with the financing agreement. The PSIPMU would operate a local currency account, to finance project expenditures in local currency. These accounts would operate in accordance with the procedures and guidelines set forth in the World Bank's Disbursement Guidelines. Disbursement methods that may be used to withdraw funds are reimbursements, advances, direct payments, and special commitments.

83. **Special Provision.** Projects in situations of urgent need of assistance or capacity constraints: Disbursements under contracts for goods, works, non-consulting services and consulting services procured or selected through international open or limited competition or Direct Selection, as set out in the procurement plan, must be made only through Direct Payment and/or Special Commitment disbursement methods. Please note that the special provision applies only to the IDA Credit.



84. All payments will be made by the PSIPMU through the Treasury Department once payment obligations have been incurred, verified, and properly documented. To make payments, the system requires that funds be committed by source, allowing the tracking of credit disbursements to Project expenditures. Further details are included in the POM and PSIPMU Accounting Manual.

85. Retroactive financing will be allowed, up to an amount of US\$16 million equivalent, to cover payments made for eligible project expenditures, including works, goods, consulting services, and non-consulting services between April 9, 2021 and the signing of the Financing Agreement.

86. The flow of funds established for the temporary grants and cash-for-work transfers under subcomponents 1.1 and 1.2 will proceed as follows: The MoFEP will enter into an agreement with the BOSVG which will be required to open a separate bank account for temporary grants and the cash-for-work transfers. The MoNM and BRAGSA will approve the master list of eligible beneficiaries of the cash transfers under subcomponent 1.1, and LITE cash-for-work activities under subcomponent 1.2, respectively. The master lists will be reviewed by the PSIPMU and processed for payment from the Project's DA. The BOSVG will open the e-wallets and issue the electronic cards of the beneficiaries according to a list approved by the MoNM and BRAGSA provided through the PSIPMU. The BOSVG will then proceed to make payments to the beneficiaries' e-wallets. Monthly financial reconciliations of payments will be made by the BOSVG and sent to the PSIPMU, the MoNM and BRAGSA within a reasonable time upon completion of payments. Outstanding balances will be refunded back to the Project's DA. Further detailed payment procedures are established in the POM.

87. If beneficiaries under subcomponent 1.2 cannot access digital payments deployed by the BOSVG by virtue of their geographical location, the PSIPMU will agree with the Bank on special procedures for processing payments in cash which will be documented in the POM.

88. **External auditing.** The external audit of the Project will be conducted annually by an external, independent, private audit firm, acceptable to the World Bank, to be contracted under the Project no later than six months after the Project's effectiveness. The PSIPMU will ensure the Project Procurement Plan includes the hiring of the audit firm and will prepare the auditor's terms of reference, which will include all Project's sources of funds and would be reviewed by the World Bank before engaging the audit firm. The annual audit reports would include an opinion on the Project financial statements, including cumulative figures, for the year and as of the end of the fiscal year, DA reconciliation, review of the internal controls, review of the Recipient's compliance with the terms of the Financing and Grant Agreements, and a Management Letter. The Project's annual audit report would need to be submitted to the World Bank for review no later than six months following the end of the fiscal year. In accordance with the World Bank's disclosure of information, the audited financial statement would be published and made available to the public. The financial audit will include an extended scope to: (i) conduct a review of a sample of the beneficiaries under subcomponents 1.1 and 1.2 to verify compliance of the operational procedures of the programs from the eligibility of beneficiaries up to payment and receipt of benefits; and (ii) conduct spot checks at the payment sites during the payment dates to ensure compliance of payment procedures on the ground and transparency.

89. **Supervision plan.** FM supervision and implementation support will include on- and off-site visits. If circumstances permit, on-site visits will be carried out at least twice a year and calibrated based on assessed risks and Project performance. In case of lack of physical access to the Project facilities once



implementation begins, virtual FM implementation support and supervision will be conducted using information and communication technology (ICT) tools. Off-site implementation support will comprise desk reviews of IFRs and audited financial statements and continuous monitoring of funds flow and budget execution progress.

90. **The residual FM risk is assessed as Substantial.** Overall FM arrangements related to staffing, budgeting, financial reporting, internal control and internal auditing, flow of funds, and audits are deemed adequate to provide reasonable assurance on the proper use of the Project funds for the achievement of the PDO. The main FM risks are as follows: (a) lack of institutional and fiduciary capacity to implement a multi-sector project; (b) limited capacity of the public financial management system; and (c) emergency nature of the Project including temporary grants activities. To mitigate and manage these risks, the following measures will be implemented: (a) leveraging a well-established fiduciary infrastructure at the PSIPMU of the MoFEP; the PSIPMU is familiar with World Bank-financed operations and is acquainted with the World Bank's policies and guidelines and maintains an adequate FM system; (b) developing a detailed POM including internal controls, flow of funds, and payment mechanisms; (c) ex ante audit of all payments by internal auditors of the Treasury Department; and (d) independent ex post audits of Project-related expenditures by an independent firm.

(ii) Procurement

91. **Procurement procedures.** The recipient will carry out procurement under the proposed Project in accordance with 'The World Bank Procurement Regulations for Investment Project Financing (IPF) Borrowers (Procurement Regulations)' dated July 2016 and revised in November 2020 under the New Procurement Framework; the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated July 2016; and other provisions stipulated in the Financing Agreements.

92. **Procurement will be carried out by the PSIPMU within the MoFEP.**

93. **Procurement approaches will utilize the flexibility provided by the World Bank's Procurement Framework for fast-track emergency procurement by the countries.** Key measures to fast-track procurement include: (a) use of simple and fast procurement and selection methods fit for an emergency situation including direct contracting, as appropriate; (b) streamlined competitive procedures with shorter bidding time; (c) use of framework agreements including existing ones; (d) procurement from UN agencies enabled and expedited by World Bank procedures and templates; (e) force account and community-driven development as needed; and (f) increased thresholds for Requests for Quotations and national procurement, among others.

94. **Advance procurement and retroactive financing.** The recipient may advance with the procurement under the above procurement arrangements and may seek the World Bank's approval for advance contracting and the recognition of retroactive financing within the parameters set forth in the Loan/Financing Agreement. For the contract (advance contracting) to be eligible, the procurement procedures followed by the recipient shall be consistent with Sections I, II, and III of the Procurement Regulations, and all vendors/suppliers/contractors/consultants should have signed the Letter of Acceptance of the World Bank's Anticorruption Guidelines and Sanctions Framework. The Implementation Agreement with the recipient will include management of procurement and contracting



processes. The Procurement Plan will be limited to procurement by the MoFEP, which has the local capacity to coordinate with the GoSVG on procurement activities, including works, and the expertise to handle large-scale procurement of goods, works, and services at the global level.

95. **A Project Procurement Strategy for Development (PPSD) is required, in accordance with the World Bank’s Procurement Framework** A simplified PPSD was finalized and cleared by the Bank before negotiations phase.

96. **The major planned procurements include:** (a) procurement of materials and services required for the reconstruction of damaged critical infrastructure, including consulting services, as needed, for design and supervision; (b) detailed engineering assessments of damaged critical infrastructure; (c) immediate recovery activities; and (d) supplies and equipment to reestablish the livelihoods of affected populations.

97. **The residual risks related to procurement are Substantial, resulting from potential delays due to the pandemic and mobility restrictions, including blockages in roads due to the impact of natural hazards.** Risks related to overall price increases, transport prices increases and poor response from the markets, are also present. Other potential risks are PSIPMU being overwhelmed with other projects, poor designs, and terms of reference which may result in delays in the procurement processes.

98. **To mitigate this risk, the following measures are proposed:** (a) using the support of UN agencies where possible; (b) strengthening the procurement capacity of the PSIPMU through an international procurement consultant to support at key stages of the procurement process, particularly during activity prioritization, preparation of bidding documents and evaluation of bids; (c) appointing a procurement assistant to provide administrative support; (d) strengthening the technical team which will prepare critical inputs to procurement, including technical specifications for equipment, terms of reference, and bills of quantities; and (d) training the procurement officer and technical experts on the World Bank Procurement Regulations and on contract management.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

99. **The overall E&S risk classification rating for this proposed Project is considered Substantial** due to the potential environmental, social, health, and safety implications inherent to the potential scale of the emergency recovery works to be financed under the proposed Project, as well as the challenges for effective institutional coordination to adequately manage risks under the backdrop of the ongoing COVID-19. The Project’s key environmental risks are associated with project activities to stabilize slopes and riverbeds, and the rehabilitation and reconstruction of high-priority public and community-level infrastructure. These investments carry the potential for significant impacts, in a context of uncertainty around the details of civil works to be supported, the sensitive health and safety aspects derived from the



disaster context as well as the COVID-19 pandemic, and the context of strained implementation capacity in a disaster setting to effectively manage environmental, health and safety risks and impacts. In addition, there is a potential challenge with the removal and disposal of debris and ash from the volcanic eruption. The government is now storing the ash in some central places and exploring options for its commercial use. The Project will follow the government guidelines and international best practices for safe use and disposal options of volcanic ash. Some of the Project's cross-cutting social risks relate to the exclusion of vulnerable groups, sexual exploitation and abuse and sexual harassment (SEA/SH), labor influx, involuntary resettlement, crime and violence, and the potential for social discontent, if people feel that their needs are purposely ignored (this usually happens in a context where there is ineffective stakeholder engagement and a lack of proper feedback and complaints mechanism). The Bank will review and update, if necessary, the Environmental and Social Risk Classification (ESRC) regularly throughout the life of the project.

100. **The core Project instruments to assess and manage E&S risks and impacts will be prepared by the MoFEP, through the PSIPMU.** These instruments, which will be developed, consulted, and disclosed within the time frames indicated below, will consist of: (a) an Environmental and Social Management Framework (ESMF) within 90 days of Project effectiveness; (b) a Stakeholder Engagement Plan (SEP) within 90 days of Project effectiveness (a draft of which has already been developed during preparation and disclosed by the implementing agency on September 24, 2021³⁹); (c) Labor Management Procedures (LMP) within 90 days of Project effectiveness; and (d) a Resettlement Policy Framework (RPF) within 90 days of Project effectiveness. The Project will initially focus on the Early Recovery Income Support Program (ERISP). No physical works are expected before finalizing, disclosing, and adopting the E&S instruments. Until the completion of these instruments, the Project will use the existing Environmental Management Framework and Rapid Assessment Framework of the RDVRP (P117871) as the basis for developing (including consultations) of the ESMF and RPF of this project and submit the screening report, Environmental and Social Management Plan (ESMPs), and Resettlement Action Plan (RAPs) to the World Bank for review and approval before carrying out the relevant Project activities. The MoFEP will not start any physical activities before the ESMPs and RAPs have been prepared, consulted, and disclosed by the MoFEP and approved in advance by the World Bank⁴⁰.

101. **The ESMF will include E&S screening checklists for the risk classification of site-specific Project activities and scoping of site-specific-level Environmental and Social Impact Assessments (ESIAs) and ESMPs.** It will also include generic E&S management procedures/codes of practice, in line with the World Bank's Environmental and Social Framework (ESF) and the Environmental Health and Safety Guidelines. These tools can be quickly and easily adapted and tailored to site-specific Project activities and incorporated into site-specific ESMPs and bid documents, covering, among other aspects, management of diverse construction impacts, occupational and community health and safety, COVID-19 transmission prevention and response, debris and hazardous materials management, worker camp management, SEA/SH risk management procedures, workers' Code of Conduct, guidelines for universal access design in line with the Environmental and Social Standard on Community Health and Safety (ESS4), and measures to avoid/mitigate potential impacts on natural habitats. The ESMF will explain the requirements of safe storage, transportation, commercial use (if any) and disposal of ash including assessment of existing sites

³⁹ <http://www.gov.vc/index.php/volcanic-eruption-emergency-project-veep>. The SEP also been disclosed by the Bank.

⁴⁰ http://www.gov.vc/images/pdf_documents/VEEP_ESCP_Negotiated-Version.pdf



for disposal. The ESMF will further include detailed institutional roles and responsibilities, monitoring and reporting requirements, an estimated E&S budget, and capacity-building measures. Full implementation of E&S instruments, including site-specific ESIA and ESMPs, and monitoring and reporting on the same, is specified in the Environmental and Social Commitment Plan (ESCP) prepared for the proposed Project and the draft version disclosed by the implementing agency on September 24, 2021⁴¹. The ESMF will also spell out the provision to be followed to carry out the environmental and social due diligence for retroactive financing of any activity under Category 2, as defined under the Financing Agreement. The ESMF shall include terms of reference for the E&S audit, to be carried out within a timeframe acceptable to the Bank, and before a decision on retroactive financing is made.

102. Site-specific ESIA and ESMPs will be consulted and disclosed locally before proceeding with site-specific Project activities. Those developed for higher-risk site-specific Project activities (according to criteria to be specified in the ESMF) will require prior review and approval by the World Bank. The Project will focus on existing damaged structures. The RPF will be used for cases that lead to economic displacement, including temporary land use for contractors' camps and storage of equipment, but that would not cause physical displacement but could cause interruption and/or restriction of access to any business adjacent to site-specific project activities causing loss of income. Any RAPs will be consulted, submitted to the World Bank for prior approval, and disclosed.

103. Effective and demonstrable citizen engagement will be central to the Project implementation. Given the communication and engagement limitations posed by the post-disaster scenario and the COVID-19 pandemic, careful planning is needed to reduce any risk of exclusion of vulnerable groups. An indicator has been included in the Results Framework to measure beneficiary satisfaction with the Project's stakeholder engagement process. The indicator measures the level of satisfaction with the process of consulting people living in the targeted Project area during preparation and implementation. The proposed Project considers citizen engagement as a cross-cutting issue for all subcomponents and activities. These will follow, when possible, a community-based and owner-driven resilient approach and will engage communities early in Project implementation. This is important for vulnerable communities, which have been substantially affected by the La Soufrière volcanic eruptions. During implementation, people's feedback will be sought on communication activities regarding the Project's progress and about feedback channels, including the grievance redress mechanism (GRM). The SEP will ensure the participation of all stakeholders to understand the needs of the affected populations; ensure transparency and coordination between government entities, the PSIPMU, and communities; and receive feedback and grievances. The SEP will set out the nature and periodicity of stakeholder consultations and require regular beneficiary feedback surveys, which will be used to measure and improve citizen engagement. As part of the post-disaster response, informing and receiving real-time feedback from citizens can provide insight into how the crisis affects vulnerable women and other vulnerable populations, enabling timely course correction. A communications strategy will be embedded as part of the consultative and accountability processes, including the GRM.

⁴¹ <http://www.gov.vc/index.php/volcanic-eruption-emergency-project-veep>. The negotiated version of the ESCP was disclosed by the client on November 03, 2021 http://www.gov.vc/images/pdf_documents/VEEP_ESCP_Negotiated-Version.pdf. The World Bank also disclosed both draft and negotiated ESCP.



104. **A robust GRM will be put in place by the MoFEP to address concerns and complaints promptly and transparently with no cost or discrimination toward Project-affected communities.** Implementing staff and local-level coordination structures will be oriented on their roles and responsibilities to address grievances, particularly around exclusion and manipulation of targeting and entitlements. Channels will be developed to allow for community M&E of site-specific Project activities such as through social audits or citizen feedback platforms. All these measures are expected to help deepen citizen engagement and reinforce community cohesion. The GRM will have channels to address Grievances related to subcomponent 1.1(a) and 1.2(a) Temporary grants and Gender Based-Violence. The GRM also is expected to provide early warnings on emerging environmental, social, and health and safety risks.

105. **The strengthening of technical and institutional capacity is an E&S priority.** The MoFEP will be responsible for the implementation and compliance of the ESF. The Project officer and the Environmental Resource Analyst of the PSIPMU within MoFEP have been assigned as the social focal point and the environmental focal point, respectively, for the Project. In addition to the focal points, the PSIPMU will recruit an environmental specialist and a social specialist as early as possible but no later than ninety (90) days after the effective date of the project. The environmental and social focal points are familiar with the World Bank safeguards policy and the ESF. They are involved in the projects supported by the World Bank and have participated in training/workshop on ESF. The focal points will be responsible for the preparation of the E&S instruments for the project. If required, the MoFEP will hire additional consultants to support the focal points in the timely preparation of the E&S Instruments. The focal points will continue their support during project implementation through coordinating the E&S issues among different implementing agencies; reviewing the subproject-specific E&S screening, assessment, and ESMPs; and periodically monitoring the project work. The environmental and social specialists will support the management of E&S risks, including environmental, health, safety, and labor; physical and/or economic displacement due to land acquisition (resettlement); cultural heritage; and stakeholder engagement, among other relevant aspects. They will be responsible for day-to-day work on project E&S issues. Other key tasks are associated with support, supervision, enforcement, contractor management, monitoring and reporting, training, participation, gender, citizen engagement and feedback, and information disclosure related to the ESS of the World Bank.

106. **Climate change.** As one of the SIDS, St. Vincent and the Grenadines is highly vulnerable to climate change due to its geographic location and size. Its production systems are heavily dependent on natural resources. The country is also susceptible to natural hazards, including floods, landslides, and hurricanes which are becoming more severe and frequent. The proposed Project will contribute to the GoSVG's climate change objectives and World Bank climate targets by generating climate co-benefits related to mitigation and adaptation. The proposed Project supports investments that maximize climate co-benefits with all investments designed to be resilient to climate-induced events using best practice climate-resilient approaches and standards. Where relevant, these co-benefits will be achieved by: (a) providing energy-efficient equipment; (b) incorporating climate adaptation and resilience measures in the design of the works financed under the proposed Project, considering hydrometeorological and climate risks, such as flooding and other extreme weather events; and (c) applying and implementing building and construction codes for climate-resilient infrastructure.



107. **Gender.** The World Bank Gender Strategy for 2016–2023⁴² and the GFDRR Gender Action Plan for 2016–2021⁴³ identify climate change and DRM as emerging areas that require a gender lens. They also highlight the importance of analyzing gender equality and women and girls’ empowerment as the key to strengthening resilience. Both the strategy and the plan are aligned with the UN Sendai Framework for Disaster Risk Reduction 2015–2030,⁴⁴ which states among its principles that DRR requires gender, age, disability, and cultural perspectives in all policies. In the case of St. Vincent and the Grenadines, early indications are that the La Soufrière volcanic eruptions have disproportionately affected women and girls.

108. **Gender gap.** The National Evacuation Report (June 5, 2021)⁴⁵ estimates that 60 percent of displaced individuals are female, of which 62 percent are older than 18 years. The report further shows that the women of working age (older than 18 years) have been affected and displaced by a ratio of 2:1 compared to men of the same age group. In St. Vincent and the Grenadines, there are approximately 13,327 farmers (64.6 percent males and 35.4 percent females), of which 28.2 percent are in the red and orange zones.⁴⁶ In terms of the fishing sector, there are 1,748 registered fishers throughout St. Vincent and the Grenadines, with 469 in the affected area; 75.9 percent of fishers in the red and orange zones are males, while females represent 24.1 percent. Meanwhile, 76.6 percent of ‘Tri Tri’ fishers in the red and orange zones are women. Given that the fishing grounds for this national delicacy have been adversely affected by lava flows and lahars, women and their dependents will be disproportionately affected in the short to medium term. While specific data are not available, the combination of displacement and the destruction of agriculture and fishery infrastructures in the disaster zone means that the eruptions could negatively affect women’s employment opportunities.

109. **Gender actions.** To close the gender gap, the Project will support the restoration or reconstruction of critical agricultural infrastructure, including repairing and upgrading agricultural and fishery centers and facilities, which serve as important hubs of commerce and employment for disaster-affected women. The selection and development of these interventions will ensure the inclusive participation of displaced women beneficiaries and help address the disproportionate impacts of women and close the gap in gender participation and decision-making in recovery and reconstruction processes. In addition, under Component 1, the Project will target LITE program activities for females affected in the agriculture and fisheries sectors, support temporary grants to females or female-headed households, and/or ensure that grant program activities consider gender-specific needs, such as daycare arrangements, as needed.

110. **Gender indicator.** The proposed Project will assess results against specific indicators included in the Results Framework, including: (a) women beneficiaries receiving temporary grants as income support and cash-for-work payments for temporary employment (percentage of the women displaced); (b) women beneficiaries provided with support services to enhance households’ self-agency (percentage of

⁴² GFDRR. 2016. *World Bank Group Gender Strategy*.

<http://documents1.worldbank.org/curated/en/820851467992505410/pdf/102114-REVISED-PUBLIC-WBG-Gender-Strategy.pdf>.

⁴³ GFDRR. 2016. *Gender Action Plan*. <https://www.gfdr.org/en/gfdr-gender-action-plan-2016-2021>.

⁴⁴ The Sendai Framework for Disaster Risk Reduction 2015–2030 (Sendai Framework) was the first major agreement of the UN’s post-2015 development agenda, with seven targets and four priorities for action. It was endorsed by the UN General Assembly following the 2015 Third UN World Conference on Disaster Risk Reduction. <https://www.undrr.org/publication/sendai-framework-disaster-risk-reduction-2015-2030>.

⁴⁵ Private residence and rented accommodation - MoNM (NEMO Call and Data Centre). Report produced by the UN World Food Programme.

⁴⁶ Ministry of Agriculture; it is assumed that the sex disaggregation in the red and orange zones follows the national average.



the women displaced); and (c) women economically benefiting from project investments in agriculture in affected areas (percentage increase of the women employed through agriculture investments).

111. Additionally, the proposed Project will include mechanisms to promote equal access and feedback from diverse population groups and improve data collection and awareness of gender reconstruction, household, and livelihood needs. The selected consultative and feedback mechanisms will be detailed in the POM and E&S documentation. The Project will collect and use gender-disaggregated data to design and enhance social benefits and, where required, mitigate negative gender impacts. Throughout the consultation and implementation phases, the proposed Project will ensure that the needs of women, particularly heads of households, in terms of safety, hygiene, and employment opportunities are specifically addressed.

V. GRIEVANCE REDRESS SERVICES

112. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing Project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address Project-related concerns. Project-affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service> and for information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

113. **The proposed Project's overall risk is assessed as Moderate.** With respect to the World Bank's Systematic Operations Risk-Rating Tool (SORT) categories, only two risk categories are assessed as "Substantial", as outlined below.

114. **The E&S risk rating is considered Substantial.** Potentially significant environmental risks and impacts may include, among others: (a) diverse impacts on lands and land use, including on natural habitats or other sensitive landscapes, from debris clearing and disposal, earthworks, and works; (b) generation, management, and disposal of non-hazardous and hazardous solid wastes; (c) generation and discharge of wastewater; (d) sludge generation and disposal from potential water and sanitation works; (e) traffic risks; (f) risks from unsustainable fisheries practices and other unsustainable food security-related practices; and (g) various health and safety risks to the Project workers and local communities, including from exposure to hazardous materials and wastes, worksites involving physically unstable settings such as landslide-prone areas or collapsing buildings, the risks of spread of COVID-19 and outbreaks of other infectious diseases, and natural hazards such as hurricanes, landslides, and floods.



115. **The Project's E&S risks will be mitigated through:** (a) the development, consultation, and application of a range of the Project's E&S instruments, as detailed in Section IV, Part D of this document; (b) strengthening of E&S technical and institutional capacity by the MoFEP maintaining one full-time environmental specialist and one full-time social specialist, including regular reporting to the World Bank and ensuring the timely preparation of the Project's E&S instruments; (c) assurance that works that have physical impacts do not begin without the Project's required E&S instruments in place and disclosed and the necessary E&S clauses in contract documents; and (d) the implementation of robust citizen engagement, GRM, and SEP to ensure the participation of all stakeholders, understand the needs of the affected populations, ensure transparency and coordination between government entities, and receive and address feedback and grievances.

116. **Fiduciary risks. The inherent fiduciary risk is Substantial due to FM and Procurement risks.** FM risks include: (a) lack of institutional and fiduciary capacity to implement a multi-sector project; (b) limited capacity of the public financial management system; and (c) emergency nature of the Project, including temporary grants activities. To mitigate and manage these risks, the following measures will be implemented: (a) leveraging a well-established fiduciary infrastructure at the PSIPMU of the MoFEP; the PSIPMU is familiar with World Bank-financed operations and is acquainted with the World Bank's policies and guidelines and maintains an adequate FM system; (b) development of a detailed POM including internal controls, flow of funds, and payment mechanisms; (c) ex-ante audit of all payments by internal auditors of the Treasury Department; and (d) independent ex-post audits of Project-related expenditures by an independent firm.

117. **Procurement risks and mitigation measures:** the main risk identified is a delay in the implementation of procurement due to the current workload of PSIPMU, the complexity of the contracts to be financed under the Project, and the poor market response. To mitigate this risk, the following measures are proposed: (a) hire an experienced procurement consultant to support PSIPMU at key stages of the procurement process, particularly the preparation of bidding documents and evaluation of bids; (b) strengthen the technical team, which will prepare critical inputs to procurement, including technical specifications for equipment, Terms of Reference and Bills of Quantities; (c) train procurement specialists and technical experts on the World Bank Procurement Regulations and contract management; and (d) engage with other agencies to identify potential vendors/contractors qualified for the project.



VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: St. Vincent and the Grenadines

Saint Vincent and the Grenadines Volcanic Eruption Emergency Project

Project Development Objectives(s)

The Project Development Objective (PDO) is to support Saint Vincent and the Grenadines to (i) provide short-term income support, (ii) improve the capacity of the government to prepare for and respond to emergencies, and (iii) build back better critical services in the wake of the La Soufriere volcano eruption.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Support SVG to provide short-term income support and restore critical services.			
Number of households impacted by the volcanic eruption and climate-related events, benefiting from short-term income support program (number; disaggregated by gender) (Number)		0.00	4,000.00
of which are women (Percentage) (Number)		0.00	55.00
Number of people benefiting from restored utility/infrastructure services (number; disaggregated by gender) (Number)		0.00	15,000.00
of which are women (Percentage) (Number)		0.00	40.00
The GoSVG has improved command and control systems in place (Yes/No)		No	Yes



Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Early recovery income support			
Households provided with support services to enhance household's self-agency (Number)		0.00	750.00
Of which are women (Percentage) (Number)		0.00	55.00
Households receiving temporary grants (Number)		0.00	4,000.00
Of which are women (Percentage) (Number)		0.00	55.00
Volcanic ash, debris and floodwater cleared following the volcanic eruption and/or climate-related events (in critical spots/segments, houses, and public buildings) (Number)		0.00	30.00
Restoration of critical services, resilient reconstruction, and strengthening emergency preparedness			
Water systems rehabilitation and/or augmented, in accordance with climate and disaster resilient improvements and practices with operational capacity restored. (Number)		0.00	1.00
Government has improved command and control systems in place to better prepare for and respond to emergencies such as volcanic eruption, as well as climate change-related disasters such as hurricanes (Yes/No)		No	Yes
Public buildings repaired in accordance with volcanic eruption risk and climate and disaster-resilient improvements (Number)		0.00	5.00
Women economically benefiting from project investments in agriculture in impacted areas (% increase of the women economically benefiting from agriculture investments). (Number)		0.00	55.00
Implement project activities at the community level, with women included in decision making processes. (Yes/No)		No	Yes
Number of bridges rehabilitated or protected (Number)		0.00	1.00
Number of critical spots/segments built or rehabilitated (Number)		0.00	25.00



Indicator Name	PBC	Baseline	End Target
Project Management			
Grievances responded to in the stipulated time (Percentage)		0.00	60.00
Beneficiary satisfaction with project’s stakeholder engagement process (Percentage)		0.00	60.00
of which are women (Percentage) (Percentage)		0.00	50.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Number of households impacted by the volcanic eruption and climate-related events, benefiting from short-term income support program (number; disaggregated by gender)	This indicator will measure the number of households impacted by the volcanic eruption and climate change-related events, benefitting from a temporary income support program (CT).	Monthly	Progress Reports (MoNM, MoTW, BRAG SA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
of which are women (Percentage)	This indicator will measure the proportion of women impacted by the volcanic eruption, and climate change-induced events,	Monthly	Progress Reports (MoNM, MoTW, BRAGSA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section



	benefitting from temporary income support as a share of the total beneficiaries benefitting from the short-term income support program				
Number of people benefiting from restored utility/infrastructure services (number; disaggregated by gender)	This indicator will measure the number of people benefiting from restored public services in a resilient manner financed by this Project.	Semi-annual	Progress Report (PSIPMU)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
of which are women (Percentage)	This indicator will measure the proportion of women benefiting from restored public services in a resilient manner financed by this Project.	Semi-annual	Progress Report (MoTW, CWSA, BRAGSA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
The GoSVG has improved command and control systems in place	This indicator measures the capacity and capability of the GoSVG to systematically prepare for and respond to emergencies. The basic elements of command and control system are people (gather information, make decisions, take action, communicate, and cooperate with one another in the accomplishment of a common goal), information	Semi-annual	Progress Reports (NEMO)	Progress Reports prepared by PSIPMU	PSIPMU M&E section



	management, and the command and control support structure (ICS).				
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Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Households provided with support services to enhance household’s self-agency	This indicator will measure the number of households provided with support services to enhance household’s self-agency to support a resilient recovery.	Monthly	Progress Reports (MoNM)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Of which are women (Percentage)	This indicator will measure the proportion of women provided with support services to enhance self-agency as a share of the total households provided with said services.	Monthly	Progress Reports (MoNM)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Households receiving temporary grants	This indicator will measure the number of Households receiving grants to support the extension of the temporary grants program	Monthly	Progress Reports (MoNM)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Of which are women (Percentage)	This indicator will measure the proportion of Women Beneficiaries receiving	Montly	Progress Reports (MoNM)	Progress Reports prepared by PSIPMU	PSIPMU M&E section



	grants to support the extension of the temporary grants as a share of the total beneficiaries.				
Volcanic ash, debris and floodwater cleared following the volcanic eruption and/or climate-related events (in critical spots/segments, houses, and public buildings)	<p>This indicator will measure temporary employment provided under component 1 to support labor-intensive work and maintenance program which focuses on clearing and protecting transportation routes from the accommodation of floodwater, volcanic ash, and debris following the volcanic eruptions of La Soufrière and other climate-related events.</p> <p>The type of interventions includes, inter alia, clearing of roads, drainage structures (culverts, small bridges), houses, and public buildings.</p>	Semi-annual	Progress Reports (BRAGSA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Water systems rehabilitation and/or augmented, in accordance with climate and disaster resilient improvements and practices with operational capacity restored.	This indicator will measure the number of water systems rehabilitated and/or augmented by the project which could include	semi-annual	Progress Reports (CWSA)	Progress Reports prepared by the PSIPMU	PSIPMU M&E section



	rehabilitation or replacement of all damaged systems components (intakes, transmission, distribution, storage) and/or augmentation (e.g new wells, desalination, storage, transmission, distribution) in accordance with climate and disaster-resilient standards and practices.				
Government has improved command and control systems in place to better prepare for and respond to emergencies such as volcanic eruption, as well as climate change-related disasters such as hurricanes	This indicator will measure the GoSVG's capacity and capability to systematically prepare for and respond to emergencies such as volcanic eruption and earthquakes, as well as climate change-induced disasters such as hurricanes. The basic elements of command and control system are people (gather information, make decisions, take action, communicate, and cooperate with one another in the accomplishment of a common goal), information management, and the command and control support structure (ICS).	Semi-annual	Progress Report (NEMO)	Progress Reports prepared by the PSIPMU	PSIPMU M&E section



Public buildings repaired in accordance with volcanic eruption risk and climate and disaster-resilient improvements	This indicator will measure the number of public buildings and critical agricultural and fishing centers and facilities, repaired by the project in accordance with the climate and disaster-resilient standards (for example expansion of NEMO building / EOC, strengthening shelters for multi-hazards use)	Semi-annual	Progress Reports (MoTW, BRAGSA, NEMO, MoA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Women economically benefiting from project investments in agriculture in impacted areas (% increase of the women economically benefiting from agriculture investments).	This indicator will measure the percentage of women economically benefiting from project investments in agriculture in impacted areas	Monthly	Progress Report (MoA)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Implement project activities at the community level, with women included in decision making processes.	This indicator will measure the inclusion of women in decision-making processes related to project activities implemented at the community level.	Annually	Progress Reports (PSIPMU)	Progress Reports prepared by PSIPMU	PSIPMU M&E section
Number of bridges rehabilitated or protected	Number of bridges rehabilitated or protected	Semi-annual	Progress Reports (MoTW, BRAGSA)	PSIPMU Progress Reports	PSIPMU M&E section



<p>Number of critical spots/segments built or rehabilitated</p>	<p>The type of interventions includes, inter alia: (a) repairing roads with improvements to bases and or surfaces; (b) constructing drainage structures (culverts, small bridges, and on steep gradients, removing landslides); and (c) constructing retaining walls and erosion control structures within the existing right of way.</p>	<p>Semi-annual</p>	<p>Progress Reports (Mo TW, BRAGSA)</p>	<p>PSIPMU Progress Reports</p>	<p>PSIPMU M&E section</p>
<p>Grievances responded to in the stipulated time</p>	<p>The indicator will measure the proportion of grievances responded to in the stipulated time, as defined by the safeguards document, related to component 1 & 2</p>	<p>Semi-annual</p>	<p>Progress Reports (PSIPMU). Measurement methodology will be defined in the POM.</p>	<p>Progress Reports prepared by the PSIPMU</p>	<p>PSIPMU M&E section</p>
<p>Beneficiary satisfaction with project's stakeholder engagement process</p>	<p>This indicator will measure the average citizen satisfaction rate with the project's stakeholder engagement process. This indicator aims to report on the effectiveness of citizen engagement processes in the project. The</p>	<p>Annually (PSIPMU will start reporting from year 3 of the project)</p>	<p>Perception survey (PSIPMU)</p>	<p>Perception survey. Measurement methodology will be defined in the POM.</p>	<p>PSIPMU M&E section</p>



	<p>planned project surveys will be extended to obtain feedback from community members on their satisfaction with: (i) access to project information and awareness of decisions taken, (ii) their opportunities to provide feedback and participate in the dialogue; and (iii) the responsiveness of the implementing entity to feedback provided. These criteria will be rated on a 1-5 scale and will be equally weighted. In addition, qualitative feedback will be collected as well to improve the stakeholder engagement processes, if needed. For example, what is working well? How can the project improve its information dissemination strategy? etc. The PSIPMU will oversee this survey and report annually (PSIPMU will start reporting from year 3 of the project). Results will be gender-disaggregated. Detailed mechanisms for</p>				
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	collecting this data will be developed by the PSIPMU M&E section, with the support of the Bank, and included in the Project Operations Manual.				
of which are women (Percentage)	This indicator will measure the number of women's satisfaction rate with investment activities under the project.	Annually (PSIPMU will start reporting from year 3 of the project)	Perception survey (PSIPMU)	Perception survey. Measurement methodology will be defined in the POM.	PSIPMU M&E section



ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: St. Vincent and the Grenadines

St. Vincent and the Grenadines Volcanic Eruption Emergency Project

A. Implementation Arrangements

1. **The GoSVG will be responsible for the overall Project implementation through the PSIPMU within the MoFEP**, while a PSC will provide overall policy direction and guidance for Project implementation. The MoFEP, as the implementing agency, will build on the RDVRP activities and the experience from implementing a World Bank project. A PSC, chaired by the MoFEP and including representatives from the MoA; the MoNM; the CWSA; Ministry of Foreign Affairs, National Security, Legal Affairs and Information; the NEMO; the MoTW; and BRAGSA, as well as other relevant government agencies, will be responsible for coordinating among government agencies during the implementation of the Project.

2. A dedicated Project team is being established within the PSIPMU under the strategic oversight of the MoFEP, to perform the day-to-day implementation activities including contract management, procurement, FM, E&S safeguards, project officer to support component 1.1, citizen engagement, and M&E. The PSIPMU will be staffed with a mixture of MoFEP civil servants and external specialists to be engaged by the Project, as needed. If needed, following existing operational policies, and based on contract amount, a field office can be established for field oversight of civil works and construction supervision contracts and for reporting implementation progress and other implementation issues to the PSIPMU.

3. The PSIPMU will implement the Project in accordance with a POM, which will be prepared in consultation with the World Bank and will set forth the guidelines and specific procedures for carrying out the Project. The POM will include (a) the detailed description of all Project activities supported under the Financing Agreement, (b) eligibility of beneficiaries under Subcomponents 1.1 and 1.2, (c) Implementation Agreement model, (c) the sequencing of activities and a planned timetable for the activities, (d) the prioritization framework, (e) the ESMF, (f) the procurement and FM arrangements for the Project, (g) the coordination arrangements governing the day-to-day execution of the Project, and (h) the M&E data collection and reporting arrangements. The PSIPMU currently does not have a communications team, but the provision of TA and/or staff to increase capacities through the Project or additional trust fund resources will be explored, given the importance of communication in an emergency project.

Procurement

4. The MoFEP, through the PSIPMU, will be responsible for the Project procurement activities. The recipient will carry out procurement under the proposed Project in accordance with the World Bank's Procurement Regulations; the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated July 2016; and other provisions stipulated in the Financing Agreements. The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions. The general description of various items under



different expenditure categories, as assessed in the PPSD and to be financed by the World Bank, will be described in the POM.

5. The applicable method of procurement for each specific contract and the World Bank's review requirements (prior or post review) will depend on the nature, value, and risk of each contract and are specified in the Procurement Plan approved by the World Bank.

6. **POM.** The procurement arrangements and procedures will be detailed and fully documented in the procurement section of the POM, based on the provisions of the Financing Agreement, and as agreed between the MoFEP and the World Bank. The manual will also detail the processing timelines and the hierarchy of approval within the MoFEP.

7. **Procurement Plan.** Contracts eligible for financing shall be procured in accordance with the Procurement Plan, which defines the applicable procurement methods, estimated costs, prior review requirements, and time frame. The Procurement Plan will also identify the contracts to be purchased under the Financing Agreement and under the Co-Financing (Grant) Agreement. A draft Procurement Plan for the first 18 months of the Project will be prepared by the MoFEP, to be finalized for the World Bank's approval and published through STEP. The Procurement Plan will be updated annually, or as required, to reflect Project implementation needs and improvements in institutional capacity and procurement risk.

Financial Management (FM)

8. The FM assessment for the Project was carried out in accordance with OP/BP on Investment Project Financing (IPF), and the Financial Management Manual for World Bank IPF Operations (OPCS5.05-DIR.01 issued February 10, 2017). Under the World Bank's OP/BP on IPF with respect to projects financed by the World Bank, the recipient and the Project implementing agency are required to maintain FM systems—including staffing, budgeting, internal control, accounting, financial reporting, and auditing systems—adequate to provide the World Bank with assurance that funds will be used in an efficient and economical way to enable PDOs to be met. The conclusion of the assessment is that the FM systems at the MoFEP meet the World Bank's requirements.

9. The MoFEP has been implementing World Bank-assisted projects through the PSIPMU and is familiar with World Bank requirements on the maintenance of acceptable FM arrangements. The FM risk of the Project before mitigating measures is assessed as High, mainly due to (a) the lack of institutional and fiduciary capacity to implement a multi-sector project, (b) the weaknesses in the public financial management system, and (c) the emergency nature of the Project including temporary grants activities. However, FM risk can be reduced to Substantial after the following proposed mitigating measures are implemented within the current FM system which will be reassessed during implementation: (a) leveraging a well-established fiduciary infrastructure at the PSIPMU of the Economic Planning Division within the MoFEP and maintaining separate books of accounts for the Project; (b) developing a detailed POM including internal controls, flow of funds, and payment mechanisms; (c) conducting ex ante audit of all payments by internal auditors of the Treasury Department; and (d) conducting independent ex post audits of Project-related expenditures by an independent audit firm. Extended scope for oversight of the implementation of selected activities (e.g., temporary grants) through third-party verification mechanisms will be included in the terms of reference for the auditors and included in the POM.



10. **FM implementation arrangements.** The Project's FM and disbursement arrangements will be streamlined to facilitate execution, avoid unnecessary incremental operational arrangements, and rely as much as possible on existing country systems. The accounts for this Project will be executed through the Standard Integrated Government Financial Information System (SIGFIS - SmartStream). The existing FM arrangements at the PSIPMU of the MoFEP will be used for the implementation of the Project. It includes acceptable staffing, budgeting, accounting, financial reporting, internal controls and audit. The MoFEP will have a robust information system that will regularly report the progress of Project implementation. The MoFEP shall designate an FM focal person who will (a) facilitate the FM processes within the MoFEP and (b) coordinate the FM requirements of the Project with the PSIPMU.

11. **Budgeting arrangements.** The Project shall prepare an Annual Work and Financial Plan together with disbursement projection to be submitted to the World Bank before the start of each fiscal year.

12. **Accounting arrangements.** The accounting records of the Project shall be maintained by the MoFEP. Processing and accounting of Project transactions shall be mainstreamed. Hence, adequate staff resources at the PSIPMU shall be made available to ensure timely completion of the financial reports, monitoring of the DA, and preparation of withdrawal applications. Separate books of account will be maintained for the Project. There shall also be separate DA for the Project which will be pooled for both IDA and EU Grant. FM staff complement will be hired for the Project to support day-to-day operations and specifically SmartStream. The PSIPMU will work with the Treasury Department to include the Project's activities in SmartStream using the appropriate coding designed for external funds in accordance with the Project design (components and activities). Project implementation will rely on the SIGFIS, and execution will rest within the PSIPMU.

13. **Internal controls.** The POM will describe the internal control mechanisms to be put in place by the MoFEP to properly manage, control, and oversee the Implementation Agreement, including financial and technical reporting. Though Project funds will be advanced to the MoFEP, the Project is nonetheless registered in the National Budget. The MoFEP follows the Constitution and the FAA to ensure that those funds are adequately executed, managed, controlled, and incorporated in the GoSVG's institutional accounting and budget systems. The PSIPMU has established accounting policies and internal control procedures over the review and approval of transactions and payments. The POM has been reviewed by the World Bank and found acceptable, but an update will be required to reflect Project-specific arrangements.

14. **Disbursement and Funds flow arrangements.** Disbursement of project funds will be processed in accordance with the World Bank procedures as will be stipulated in the DFIL and the Disbursement Guidelines for Investment Project Financing, dated February 2017. Advances will be processed to a segregated DA denominated in U.S. dollars, held at the BOSVG and pooled for IDA and EU funds under the Project. Advances to the DA would be made based on the forecast of the project's eligible expenditures for a period of six months, based on Interim Financial Reports (IFRs). Supporting documentation for expenditures made from the DA would also be based on the IFRs. As eligible expenditures are incurred, the PSIPMU would withdraw the amount to be financed by the World Bank from the DA (US\$ or EC\$) in accordance with the financing agreement. The PSIPMU would operate a local currency account, to finance project expenditures in local currency. These accounts would operate in accordance with the procedures and guidelines set forth in the World Bank's Disbursement Guidelines.



Disbursement methods that may be used to withdraw funds are reimbursements, advances, direct payments, and special commitments.

15. Retroactive financing will be allowed up to an amount of US\$16 million equivalent to cover payments made for eligible project expenditures including goods, non-consulting services, consulting services, and works, under Category 2 of the Financing Agreement withdrawal table between, April 9, 2021 and the signing of the Financing Agreement.

16. The proceeds of the loan will be disbursed against eligible expenditures in accordance with the financial plan of the Project. All payments will be made by the PSIPMU through the Treasury Department once payment obligations have been incurred, verified, and properly documented. To make payments, the system requires that funds be committed by source, allowing the tracking of credit disbursements to Project expenditures. Detailed flow of funds arrangements is described in the POM.

17. The flow of funds established for the temporary grants and cash-for-work transfers under subcomponents 1.1 and 1.2 will proceed as follows: The MoFEP will enter into an agreement with the BOSVG which will be required to open a separate bank account for temporary grants and the cash-for-work transfers. The MoNM and BRAGSA will approve the master list of eligible beneficiaries of the cash transfers under subcomponent 1.1, and LITE cash-for-work activities under subcomponent 1.2, respectively. The master lists will be reviewed by the PSIPMU and processed for payment from the Project's DA. The BOSVG will open the e-wallets and issue the electronic cards of the beneficiaries according to a list approved by the MoNM and BRAGSA provided through the PSIPMU. The BOSVG will then proceed to make payments to the beneficiaries' e-wallets. Monthly financial reconciliations of payments will be made by the BOSVG and sent to the PSIPMU, the MoNM and BRAGSA with a reasonable time upon completion of payments. Outstanding balances will be refunded back to the Project's DA. Further detailed payment procedures are established in the POM.

18. If beneficiaries under subcomponent 1.2 cannot access digital payments deployed by the BOSVG by virtue of their geographical location, the PSIPMU will agree with the Bank on special procedures for processing payments in cash which will be documented in the POM.

19. **Financial reporting arrangements.** The PSIPMU will be responsible for producing and submitting IFRs to the World Bank on a quarterly basis, along with the accounting records from which they are prepared. These reports would provide the required monitoring information and would be used for disbursement purposes. The format and content of the quarterly IFRs will be agreed upon and included in the POM and Project DFIL. The IFRs would include a short narrative outlining the major Project achievements for the quarter, the Project sources and uses of funds, bank reconciliation statements, and necessary procurement tables. These reports would be submitted to the World Bank no later than 45 days after the end of each reporting period. Upon completion of all Project activities and payments and as part of the final deliverable (Final Progress Report), the MoFEP will submit to the World Bank a consolidated report on the use of funds for deliverables, showing offsets for any paid advances and any uncommitted balance to be refunded.

20. **External audit arrangements.** The external audit of the Project will be conducted annually by an external, independent, private audit firm, acceptable to the World Bank, to be contracted under the



Project no later than six months after the Project's effectiveness which will cover the Grant and Credit. The PSIPMU will ensure the Project Procurement Plan includes the hiring of an audit firm and will prepare the auditors' terms of reference, which would be reviewed by the World Bank before engaging the audit firm. The annual audit reports would include an opinion on the Project's financial statements, including cumulative figures, for the year and as of the end of the fiscal year, DA reconciliation, review of the internal controls, review of the Recipient's compliance with the terms of the Financing Agreement, and a Management Letter. The financial audit will include an extended scope to (i) conduct a review of a sample of the beneficiaries under subcomponents 1.1 and 1.2 to verify compliance of the operational procedures of the programs from the eligibility of beneficiaries up to payment and receipt of benefits, and (ii) conduct spot checks at the payment sites during the payment dates to ensure compliance of payment procedures on the ground and transparency.

21. The Project's annual audit report would need to be submitted to the World Bank for review no later than six months following the end of the fiscal year. In accordance with the World Bank's disclosure of information, the audited financial statements would be made publicly available. Extended scope for oversight of the implementation of selected activities (e.g., temporary grants) through third-party verification mechanisms will be included in the terms of reference for the auditors.

22. **Supervision plan.** FM implementation support missions will be conducted twice a year focusing on the adequacy of the FM system to ensure that funds are used for the intended purposes with due regard to economy and efficiency. Based on the level of FM risks at the time of FM supervision, the reviews may include any or all of the following: (a) review and verification of specific transactions, (b) review of bank reconciliations, (c) analysis of the financial statements in relation to the funds disbursed by the World Bank, and (d) physical verification of existence of structures. In case of lack of physical access to Project facilities once implementation begins, virtual FM implementation support and supervision will be conducted using ICT tools. Desk reviews will also be conducted on a regular basis and upon submission of the annual external audit of the Project and the IFR. Issues arising from these reports will be used to review and adjust the scope of the planned FM implementation support.

Safeguards

23. The implementation of the ESMF will be consistent and aligned with the Project implementation arrangements to ensure that identification and mitigation of risks are incorporated efficiently during subproject implementation. This includes programming the safeguards screening and assessments according to contract packages. A dedicated Safeguards Monitoring Section will be established in the PSIPMU to ensure the strict and proper implementation of the ESMF throughout the Project cycle. The Safeguards Monitoring Section will be staffed by designated MoFEP safeguards specialists. The institutional arrangements for safeguards implementation are reflected in the Environmental and Social Commitment Plan.

B. Implementation Support Plan (ISP) and Resource Requirements

24. **The World Bank will provide implementation support to the PSIPMU and the implementing agency.** This support will include (a) monthly virtual implementation support missions, (b) periodic technical discussions and field visits by the World Bank, (c) monitoring of the PSIPMU reporting on



implementation progress and achievement of results, (d) review of the quarterly FM reporting, and (e) review of the periodic updates of the Procurement Plan.

25. **Overall approach to implementation support.** Implementation support will be provided by the World Bank task team, consisting of staff with relevant competencies in project operations, procurement, finance, M&E, safeguards, DRM, and EP&R. The task team will conduct implementation support missions every six months (at a minimum) throughout the Project's implementation period. Implementation support missions will include field visits to verify physical implementation and compliance with the processes as stated in the POM. Additional support will include frequent coordination with the PSIPMU for updates on implementation performance and progress. The task team will monitor progress of the following: (a) achievement of results indicators, (b) overall and component-specific Project implementation progress, (c) proper fiduciary management of all activities carried out by the PSIPMU, (d) safeguards compliance, (e) reconciliation of payments with contracts, and (f) monitoring compliance of key legal obligations. The task team will also mobilize staff and consultants who will directly support Project implementation with specialized TA, as needed.

26. The task team will work closely with the PSIPMU to ensure the Recipient's compliance with the World Bank's fiduciary and safeguards policies and to monitor progress in achieving Project outcomes. The PSIPMU will prepare and transmit to the World Bank progress reports, work plans, and financial reports, as well as reports on implementation issues, among others.

Financial Management

27. The World Bank's FM specialist will provide timely and effective support to the PSIPMU. The Project will be monitored through (a) desk reviews of audit reports, IFRs, and status of action plans agreed with the counterparts following visits or audit findings, if any, and (b) on-site reviews of the continuous adequacy of the Project FM arrangements. These will include monitoring and reviewing the status of implementation of any agreed actions and issues identified by the auditors, including other issues related to Project accounting, reporting, budgeting, internal controls, and flow of funds. A review of a sample of transactions will also be conducted during supervision missions or on-site monitoring reviews.

Procurement

28. Procurement procedures. The Borrowers will carry out procurement under the proposed Project in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" (Procurement Regulations), dated July 2016 and revised in November 2020, under the "New Procurement Framework" (NPF), and the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated July 1, 2016, and other provisions stipulated in the Financing Agreements. Further, the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated October 15, 2006, and revised in January 2011, will apply.

29. Procurement arrangements. The Project will be implemented by the PSIPMU within the Ministry of Finance. PSIPMSU will have the responsibility of managing the process of implementing the Project consistent with World Bank Policies, the financing agreements, procedures and practices for environment and social safeguards (including resettlement, if needed), procurement, disbursement, accounting, and



financial management. PSIPMSU will establish a Project Implementation Unit (PIU) dedicated to the project, with functions, staffing, and sufficient resources to manage all aspects of Project implementation. Given the current workload of the PSIPMU, additional procurement support may be needed. An international procurement consultant will be hired under the Bank team to offer day to day procurement support and customized training.

30. PPSD Summary: A simplified PPSD has been prepared to define the applicable procurement arrangements, appropriate selection methods, including market approach, and the type and frequency of reviews to be conducted by the World Bank. The PPSD will be approved by the Bank before negotiations.

31. Procurement Plan. A procurement plan for the first 18 months of the Project has been developed as part of the PPSD preparation. The Project will be executed in accordance with the World Bank Procurement Regulations and the provisions stipulated in the Procurement Plan and the OM.

32. The World Bank's Standard Procurement Documents shall be used for all contracts subject to international competitive procurement. In the limited number of cases where local procurement procedures are used, the Borrower will be required to use procurement documents and forms of contract acceptable to the Bank. Wherever national market approach will be applied, the Letter of Acceptance of the World Bank's Anticorruption Guidelines and Sanctions Framework will be required.

33. For open, international competitive procurement, the Recipient shall publish the Specific Procurement Notices (SPN) for all goods, works, non-consulting services, and the Requests for Expressions of Interest on its free-access website, if available, and in at least one newspaper of national circulation in the Recipient's country, and in the official gazette. For open international procurement selection of consultants using an international shortlist, the Recipient shall also publish the SPN in UNDB online, through STEP, and, if possible, in an international newspaper of wide circulation.

34. Procurement under the project will comprise approximately 60 contracts with a total estimated cost of USD 31,200,000 million, broken down into works, goods and consultancy contracts, mostly of low value, low risk nature.

35. The procurement to be financed under the project constitutes a considerable challenge, not only in terms of the number and value of the contracts to be procured but also in terms of the technical input that PSIPMU will procure. It will, therefore, require a considerable investment of both procurement and technical expertise if these contracts are to be procured in a timely manner so as to meet the development objectives of the project.

36. The phasing of the commencement of procurement processing for all of these contracts will be carefully integrated into the PSIPMU's overall project management plan, so as to spread the procurement workload over time and also synchronize the delivery of works and services and the completion of civil works with the needs of the project and with the operational limitations that apply in the SVG context, such as restrictions on civil works during the hurricane season. Given the low value, most contracts will have to be procured nationally or regionally, which impose a greater risk of lack of responsiveness from the current markets hit by the pandemic.



37. Procurement Prior Review: The prior review thresholds applicable to Substantial risk projects, listed in the table below, will apply to the project. All Bank-financed contracts estimated to cost at or above the thresholds stated in the below table shall be subject to the Bank’s procurement prior review. Even below the prior review thresholds, the project team will provide extensive procurement support and handholding to the Borrower’s staff in order to support them in conducting procurement.

Table1. Procurement Prior Review Thresholds for Substantial Risk Projects (US\$ millions)

Type of Procurement	Prior Review Threshold (US\$m)
Works (including turnkey, supply & installation of plant and equipment, and PPP)	10.0
Goods, information technology, and non-consulting services	2.0
Consulting services: firms	1.0
Consulting services: individuals	0.3

38. **Procurement Risk Rating.** The project procurement risk subsequent to the mitigation measures is Substantial. The risks and mitigation measures are listed in below: the main risk identified is delay in the implementation of procurement due to the current workload of PSIPMU, the complexity of the contracts to be financed under the project and the poor market response. To mitigate this risk, the following measures are proposed: (i) hire an experienced procurement consultant to support PSIPMU at key stages of the procurement process, particularly preparation of bidding documents and evaluation of bids; (ii) strengthen the technical team which will prepare critical inputs to procurement, including technical specifications for equipment, Terms of Reference and Bills of Quantities; (iii) train procurement specialists and technical experts on the World Bank Procurement Regulations and on contract management, and (iv) engage with other agencies to identify potential vendors/contractors qualified for the project.

Environment and Social Safeguards

39. The World Bank’s E&S safeguards specialists will provide technical support and oversight throughout Project implementation, including guidance in the preparation of required safeguards instruments (ESMF, ESMPs, and Environmental Codes of Practice). Semiannual assessments on safeguards compliance from the E&S specialists will be conducted through the implementation support missions and field visits. The PSIPMU will receive support from the World Bank to prepare relevant E&S documents and instruments, conduct due diligence processes, and monitor the timely preparation of E&S assessments and management instruments, which must be completed before any physical activity can commence. During Project implementation, the World Bank will monitor the Project’s ESF performance, provide timely advice, and work closely with the PSIPMU on areas for improvement on a continuing basis. The World Bank will also provide capacity-building support to the PSIPMU, recipient institutions, and partner agencies. The PSIPMU will ensure that a functioning GRM is in place.



Midterm Review

40. A Midterm Review (MTR) will be carried out halfway through Project implementation to review the Results Framework and achievement of targets, Systematic Operations Risk-Rating Tool ratings, FM reports, procurement activities, safeguards compliance, disbursement status, and other relevant items. In preparation for the MTR, an independent review of implementation progress will be carried out, including beneficiary assessments, as appropriate. The MTR will provide recommendations as to any potential changes or restructuring necessary to improve the Project’s relevance, efficacy, or efficiency.

Implementation Completion and Results Report

41. To evaluate Project outcomes, an ICR will be drafted by the recipient and the World Bank within six months of Project completion. Impact evaluations and beneficiary assessments may be conducted as part of the ICR process. ICRs are tailored to enhance development effectiveness through a continuous process of self-evaluation, lesson learning and application, knowledge sharing, and accountability for results. The lessons learned from ICRs improve the quality and effectiveness of World Bank operations, while recipient/stakeholder participation in the ICR process informs the design, preparation, and implementation of potential follow-on projects.

42. **Table 1.1 and Table 1.2 indicate the level of inputs and staffing needed to provide implementation support for the proposed Project.**

Implementation Support Plan and Resource Requirements

43. The following Implementation Support Plan (ISP) is based on the preliminary estimates of the skill requirements, timing, and resource requirements throughout the Project implementation period. As the needs of the PSIPMU evolve over time, the ISP will be reviewed annually to ensure that it provides the required support. Table 1.1 and Table 1.2 indicate the level of inputs that will be needed from the World Bank to provide implementation support for the Project.

Table 1.1. ISP

Time	Focus	Skills Needed	Partner Role
First 18 months	<ul style="list-style-type: none"> • Support to PSIPMU • Successful start of the Project across all components • Technical designs and prioritization • FM systems functioning • Procurement • Establishment of M&E system • Monitoring of implementation of Project activities 	All skills	<ul style="list-style-type: none"> • Task team to support smooth start-up • Ensure the implementation of ESS are on track • Support PSIPMU
18–50 months	<ul style="list-style-type: none"> • Ensure adequate implementation support of all aspects of the Project • Monitor implementation of Project activities, including site visits • Support final evaluation and ICR 	All skills	<ul style="list-style-type: none"> • Ensure safeguards are on track • Support PSIPMU • Provide TA



Table 1.2. Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task team leaders	40	10	International or field-based staff
Technical specialist (DRM)	40	20	International or field-based staff
Technical specialist (transport)	35	5	International or field-based staff
Technical specialist (water infrastructure)	35	5	International or field-based staff
Technical specialist (fisheries)	20	5	International or field-based staff
Technical specialist (community engagement and gender aspects)	20	4	International or field-based staff
Environmental specialist	20	5	International or field-based staff
Economist (M&E)	10	5	International or field-based staff
Social specialist	20	Local travel as needed	STC field-based staff
Procurement specialist	50	Local travel as needed	STC field-based staff
FM specialist	20	Local travel as needed	STC field-based staff
Country office operational support	75	Local travel as needed	STC field-based staff
Consultants for infrastructure	50	Local travel as needed	STC field-based staff
Consultant for safeguards	75	Local travel as needed	STC field-based staff
Consultant for communications	75	Local travel as needed	STC field-based staff

Note: STC = Short-term consultant.

**ANNEX 2: Candidate Activities****Table 2.1 Summary Costs Proposed Activities Components 1 and 2**

	First 18 Months	Greater than 18 Months	Component Total (USD)
Component 1	\$4,500,000	\$3,000,000	\$7,500,000
Component 2	\$15,795,000	\$15,205,000	\$31,000,000
Total Components 1 and 2			\$38,500,000

Table 2.2 Candidate Activities First 18 Months**Component 1**

Agency	Activity	Short Description	Estimated Cost (USD)
MONM	Support services	Psycho/social support councilors	\$200,000
MONM	Temporary grants	Direct payment support to qualified individuals	\$4,300,000
MONM	LITE Program	Reserved for labor Intensive Employment Program	\$3,000,000
		Subtotal MONM	\$7,500,000

Component 2

Agency	Activity	Short Description	Estimated Cost (USD)
MOA	Assessment of Apiculture Industry	Assessment of the impact on the bee population and honey production	\$50,000
MOA	Repair and upgrade of livestock centers	Improve animal genetic stock (including importing new animals), purchase of laboratory and on-farm equipment and supplies for testing.	\$295,000
	Repair and upgrade of livestock infrastructure	Reconstruction and repairs of livestock centers in Belmont and Owia	\$370,000
MOA	Repair of biotechnology Centre	Purchase of laboratory equipment and supplies, greenhouses and irrigation systems	\$200,000
MOA	Procurement of Apiculture materials	Purchasing of equipment, safety gears and other supplies.	\$100,000



MOA	Procurement of Forestry Supplies	Purchasing of equipment and supplies	\$150,000
MOA	Procurement of specialized vehicles and equipment	To facilitate the clearing of logs and other debris in watershed areas	\$250,000
MOA	Reconstruction of apiculture infrastructure and replacement of colonies	Upgrading of rearing facility and acquisition and production of new colonies	\$250,000
MOA	Repairs to Fisheries Centers	Cleaning and repairs to Calliaqua, Owia and Chateaubelair Fisheries Centers	\$1,150,000
MOA	Fisheries Equipment	Purchase and installation of fish aggregating devices	\$500,000
		Subtotal MOA	\$3,315,000
MOTW	Engineer support	sustainable assessments/responses - technical services (3 no. yrs.) – assistant engineers & technicians	\$430,000
MOTW	PPE	PPE Equipment for Workers, Hard hats, goggles, respirators, water boots, cover all	\$40,000
MOTW	Asset management	asset management - equipment – hardware, software & training	\$210,000
MOTW	Baily Bridge	equipment – bailey bridges, 3 No. 40m x 7m,	\$666,666
MOTW	Baily Bridge	equipment – bailey bridges, 3No. 30m x 7m	\$333,333
MOTW	Heavy Equipment	backhoes - 2	\$300,000
MOTW	Heavy Equipment	Compressors, trailer mounted - 2	\$115,000
MOTW	Heavy Equipment	trucks 4 ton - 4	\$340,000
MOTW	Heavy Equipment	Backhoe mounted rock hammer - 2	\$120,000
MOTW	Heavy Equipment	Rock drill with hammer - 2	\$4,000
MOTW	Road Restoration	Clearing Boulders & Debris, roadway, drains, under bridges	\$1,000,000 (TBD)
	Road Repairs and Reconstruction	To repair damage roads and reconstruct roads including Jennings and Perseverance roads	\$5,800,000 (TBD)
	Design and Supervision of Roads	Design and supervision construction of road repairs and reconstruction	\$650,000
		Subtotal MOTW	\$10,010,999 (TBD)
NEMO	Design and supervision for upgrading Belmont Observatory	Procure consultancy service to design and supervise upgrade to accommodate research centre, sleeping quarters and additional storage.	\$50,000



NEMO	Design and construction supervision for upgrading NEMO headquarters	Additional space for the Soufriere monitoring unit, expand the national emergency operation centre, create storage space and conference facility.	\$150,000
NEMO	Assessment of management information system	Procure service to conduct an assessment of NEMO's information management and decision-making tools	\$50,000
NEMO	Media consultancy	Assess NEMO communication needs and develop a crisis communication framework and strategy.	\$50,000
NEMO	Development of communication materials	Procure services to develop a suite of communication products including public service announcements (PSAs), videos, etc.	\$50,000
NEMO	Seismologist consultancy	Establish methodologies for monitoring and develop in-house capacity to perform seismic duties.	\$120,000
NEMO	Purchase specialized vehicles	Mountainous terrain 4WD vehicles	\$60,000
NEMO	Purchase of IT equipment	Tablets, computers and accessories, servers, drones, office equipment etc.	\$150,000
NEMO	Seismic equipment	Gas sampling, ground deformation, seismometers, digitizers, accessories etc.	\$300,000
NEMO	Warehouse equipment	Forklifts, trolley jacks, platform ladders, hand carts etc.	\$185,000
NEMO	Generators	Purchase and installation of generators at warehouses.	\$250,000
NEMO	Security systems	Procure and install security systems at NEMO Headquarters, satellite warehouses and Belmont Observatory	\$75,000
NEMO	Warehouse retrofitting	Install extractor fans, roof repair, etc.	\$200,000
NEMO	Water tanks and generator platforms	To construct platforms at the Campden Park warehouse.	\$10,000
NEMO	River defense construction	River embankment protection at the Campden Park warehouse.	\$450,000
		Subtotal NEMO	\$2,150,000
CWSA	Investigation and designs of the groundwater source to be connected to Sandy Bay and Owia systems	Investigation of groundwater and spring sources at higher elevations in the red zone	\$320,000



		Total All Activities	\$15,795,000
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Table 2.3 Component 2 Candidate Activities Greater Than 18 Months

Agency	Activity	Short Description	Estimated Cost (Usd)
CWSA	Installation of new groundwater well, force mains and storage tank to be connected to Sandy Bay and Owia systems	Construction and installation of a) groundwater well, b) force mains, c) storage tank, and d) any rehabilitation or expansion of hydraulic structure to guarantee the functionality of the Sandy Bay and Owia systems. This activity includes all electromechanical equipment to guarantee the functionality of the groundwater production system.	\$2,650,000
CWSA	Construction of new intake and pipeline at Fancy	Design and construction of new intake and pipeline at Fancy system. This activity includes all electromechanical equipment to guarantee the interconnection and functionality of the new intake and pipeline with the exiting Fancy production system.	\$350,000
CWSA	Repair and install Perseverance treatment facility	Design and construction of rehabilitation works and ancillary equipment to repair the Perseverance treatment facility. This activity includes all electromechanical and hydraulic equipment to guarantee the interconnection and functionality of the new rehabilitate treatment facility with the exiting Perseverance production system	\$1,200,000
CWSA	Repair and install storage and pipeline at Waterloo area, part of Perseverance system	Design and construction of rehabilitation works, pipelines, and equipment to the Perseverance system at Waterloo area. This activity includes all electromechanical and hydraulic equipment to guarantee the interconnection and functionality of the new rehabilitate storage and pipelines with the exiting Perseverance production system at the Waterloo area.	\$650,000
		Subtotal CWSA	\$4,770,000
MOA	Training in livestock production	Training in laboratory testing and disease detection	\$50,000
MOA	Assessment of Forest Biodiversity	Species surveys, forest mapping and inventory	\$250,000
MOA	Fisheries Sector	Assessment of the impact of ash fall and mud	\$100,000



	Assessment	flows/lahars on coastal areas, fishing grounds and fish population	
MOA	Restoration and rehabilitation of watershed areas	Cutting and clearing of fallen trees and logs in upper and middle watershed areas (including riverbanks) and slope stabilization	\$450,000
MOA	Reconstruction of Biotechnology Centre	Repair and Upgrade of Laboratory, Propagation and Hardening facilities for tissue culture plants and seedlings	\$205,000
MOA	Fishing fleet replacement and expansion	Construction and deployment of FADs	\$500,000
		Subtotal MOA	\$1,555,000
MOTW	Bridge replacement design and supervision	crossings in north windward, Bridge Replacement	\$1,200,000
MOTW	Vehicles	sustainable assessments - equipment - vehicular	\$300,000
MOTW	Bridge Replacement including New Bridges	works construction-crossings in north windward, Bridge Replacement, fords conversion to bridges	\$2,000,000
MOTW	New Bridge works design and supervision	consultancies-crossings in north windward, – design & supervision New bridge construction	\$1,200,000
		Subtotal MOTW	\$4,700,000
NEMO	Design and construction supervision for the new warehouse	Construct an energy efficient warehouse	\$100,000
NEMO	Equipment for the new warehouse	To procure warehouse equipment	\$1,700,000
NEMO	Procurement of management information system	Procure and install information management and decision-making tools, including assessment management system- bar code scanner, asset tags and software	\$300,000
NEMO	Upgrading of the Belmont Observatory	Upgrade to accommodate research centre, sleeping quarters and additional storage.	\$250,000
NEMO	Retrofit existing warehouse	Retrofit existing warehouse to improve energy efficiency	\$650,000
NEMO	Design for Construction additional warehouse	Design for Construction additional warehouse energy efficient warehouse	\$180,000
NEMO	Upgrade of NEMO headquarters	Create additional space to accommodate the Soufriere Monitoring Unit, expand the National	\$1,000,000



		Emergency Operation Centre, create storage space and conference facility.	
		Subtotal NEMO	\$4,180,000
		Total All Activities	\$15,205,000



ANNEX 3: Global Rapid Post-Disaster Damage Estimation (GRADE)

1. Responding to the ongoing La Soufrière volcanic eruption in St. Vincent and the Grenadines, a rapid post-disaster damage assessment, deploying the GRADE methodology,⁴⁷ was undertaken. The objective was to estimate the potential direct damage⁴⁸ that may be caused by the ongoing event and understand the spatial distribution of current and potential future damages to support the development of a road map for recovery and reconstruction. As the event is ongoing, there is significant uncertainty over the final impacts of the entire current eruption sequence. Therefore, two different scenarios, as detailed below, were assessed. This assessment also builds on the data and analytics of the World Bank's Country Disaster Risk Profile (CDRP⁴⁹) for St. Vincent and the Grenadines. This report is valid as of April 20, 2021.

Direct Damage Impact

2. **This report does not consider economic losses which are likely to significantly increase the overall economic impact.** This analysis looks at the direct damage only.

- **Two scenarios have been developed to estimate potential direct damage and not economic losses⁵⁰** related to buildings (residential and nonresidential), infrastructure (including roads and other infrastructure), and agriculture:
 - **Scenario 1 - the current situation (as of April 26).** Currently, reported impacts and ashfall accumulation indicate direct damage of US\$82 million.⁵¹ These damages are expected to increase as the current eruption sequence continues.
 - **Scenario 2 - a customized 'worst credible' scenario using a combination⁵² of the historical May 1902 and April 1979 eruptions.** Were this scenario to occur with current asset values,⁵³ the cost of direct damage would be in the region of US\$210 million. This may be considered a first-order estimation of the potential future total direct damage due to the still-evolving 2021 eruption sequence over the coming weeks and months.

⁴⁷ The GRADE approach developed at the World Bank and conducted by the Urban, Disaster Risk Management, Resilience and Land Global Practice (GPURL) Disaster-Resilience Analytics & Solutions (D-RAS) Knowledge Silo Breaker. The methodology aims to address specific damage information needs in the first weeks after a major disaster. For details of the methodology, see [here](#).

⁴⁸ Direct damage is quantified using the gross capital stock, which is the replacement cost of an asset rebuilt newly to the same pre-damaged typology and standard. This is not to be confused with book value (depreciated assets)/net capital stock.

⁴⁹ The CDRP is a methodology that quantifies a portion of direct damage of the building stock as a result of different natural hazards.

⁵⁰ This report does not consider economic losses which are likely to significantly increase the overall economic impact.

⁵¹ Note that the cannabis plant damage is not included as part of the US\$72 million or US\$210 million estimates from the two scenarios and has been estimated separately. All damage estimates, unless indicated, refer to the damages excluding the cannabis plant sector.

⁵² See section II(b) for more details on how the historical events were combined to create a hybrid scenario.

⁵³ Using capital replacement costs which is the actual cost to replace an asset at its pre-damage condition. This may not be the 'market value' of the asset and is typically distinguished from the 'actual cash value' payment which includes a deduction for depreciation, and so on.



- The results for each sector and scenario are summarized in Table 3.1 (absolute values) and Table 3.2 (values relative to the capital stock for each sector).
- **Of St. Vincent’s 11 census divisions, Georgetown is the most affected, accounting for 27 percent of the current estimated direct damage (Scenario 1).** This is followed by Chateaubelair (24 percent) and Sandy Bay (8 percent), currently the second and third worst-affected census divisions.

Table 3.1. Best Estimate of Direct Damage for the Two Scenarios Defined Above

	Direct Damage (US\$, millions)				
	Buildings		Infrastructure	Agriculture ^a	Total
	Residential	Nonresidential			
Scenario 1	11	4	37	31	82
Scenario 2	50	39	68	52	210

Note: a. Agriculture damages shown in Table 3.1 and Table 3.2 do not include legal cannabis plantations for which there is a high amount of uncertainty on the crop value, with loss estimates ranging from US\$16 million to US\$60 million (best estimate US\$25 million), for both scenarios, in addition to the agriculture loss shown. The agricultural exposure is only represented at the national level.

Table 3.2. Best Estimate of Direct Damage for the Two Defined Scenarios (as Percentage of the Capital Stock)

	Direct Damage (as Percentage of Sectoral Capital Stock)				
	Buildings		Infrastructure	Agriculture	Total
	Residential	Nonresidential			
Scenario 1	0.9	0.2	2.6	29.6	1.9
Scenario 2	4.2	2.3	4.9	49.6	4.8

Assets at Risk

- **The economic value of key assets at risk was also evaluated.** In the ‘red’ and ‘orange’ volcanic hazard zones, the total built assets at risk are evaluated to be approximately US\$383 million (Table 3.3).
- **From a social vulnerability point of view, a higher proportion of the population living in the ‘red’ and ‘orange’ zones is classified as socioeconomically ‘poor’.** The population classified as ‘poor’ occupy smaller and less-expensive houses—houses which are more vulnerable to natural hazards. This would affect potential disaster recovery planning in the future.



Table 3.3. Residential and Nonresidential Buildings and Infrastructure Capital Stock Currently at Risk within Each Volcanic Hazard Zone in St. Vincent Island (US\$, millions)

Exposure Type	Red Zone	Orange Zone	Yellow Zone	Green Zone
Residential	63.6	42.1	107.4	991.3
Nonresidential	106.4	48.1	96.8	1,421.5
Infrastructure	74.1	49.2	125.6	1,158.9
Total	243.5	139.5	329.9	3,571.7

Note: The agricultural exposure is represented only at the national level.



ANNEX 4: Country Map

