

Report and Recommendation of the President to the Board of Directors

Project Number: 49319-001

November 2015

Proposed Loans, Grants, and Administration of Grant
Republic of Vanuatu: Cyclone Pam Road
Reconstruction Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 25 October 2015)

Currency unit - vatu (Vt) Vt1.00 = \$0.0091 \$1.00 = Vt110.00

ABBREVIATIONS

ADB – Asian Development Bank

BBB - build back better

DRF - Disaster Response Facility

DSC – design and supervision consultant

EARF – environmental assessment and review framework

EMP – environmental management plan

GDP – gross domestic product GEF – Global Environment Facility

km – kilometer m – meter

MFEM – Ministry of Finance and Economic Management
MIPU – Ministry of Infrastructure and Public Utilities

PAM – project administration manual PMU – project management unit PRC – program recovery committee

TCP - Tropical Cyclone Pam

NOTE

In this report, "\$" refers to US dollars, unless otherwise stated.

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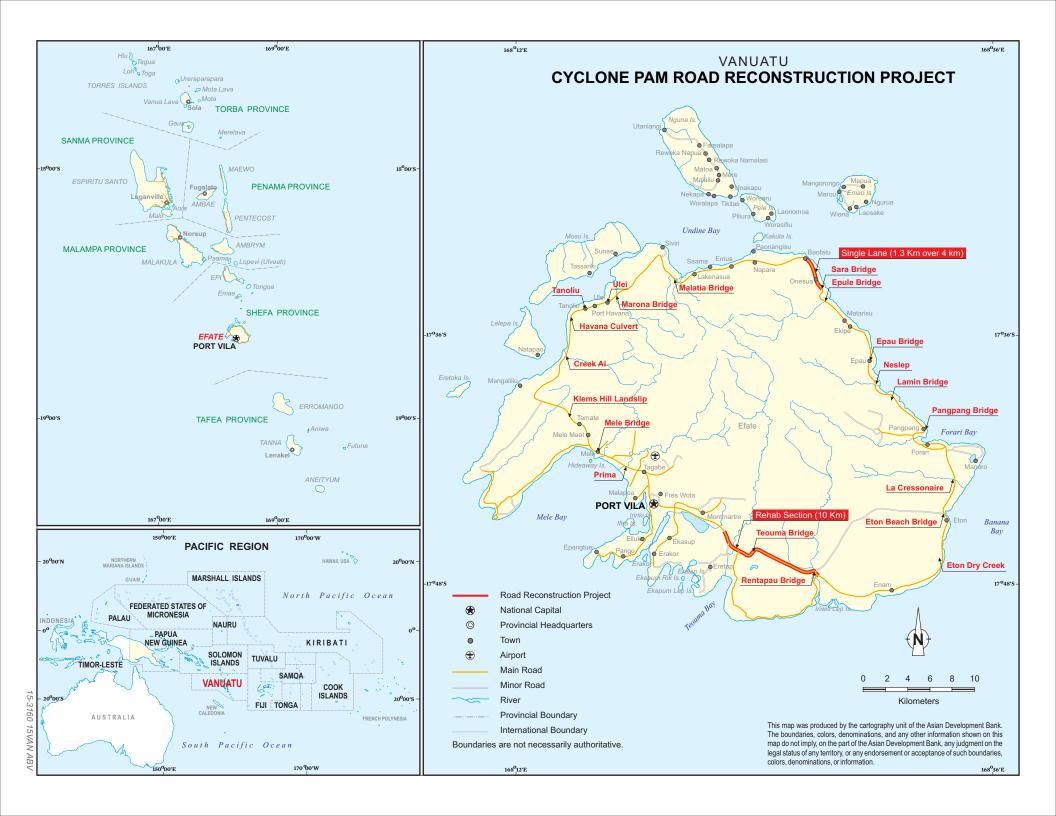
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PROJECT AT A GLANCE

1.	Basic Data			Project Nu	mber: 49319-001
	Project Name	Cyclone Pam Road Reconstruction	Department	PARD/PLCO	
	•	Project	/Division		
	Country	Vanuatu	Executing Agency	Ministry of Fi	
	Borrower	Government of Vanuatu		Economic Ma	anagement
2.	Sector	Subsector(s)		ADB Financi	ing (\$ million)
1	Transport	Road transport (non-urban)			10.80
		Transport policies and institutional dev	elopment		2.81
			Total		13.61
0	Ctrataria Avanda	Cubaannananta	Olimata Ohan wa Infa-		
3.	Strategic Agenda Inclusive economic	Subcomponents Pillar 2: Access to economic opportunities,	Climate Change Information (\$ million)	rmation	1.80
	growth (IEG)	including jobs, made more inclusive	Climate Change impac	rt on the	High
	Environmentally	Disaster risk management	Project Project	or on the	riigii
		Global and regional transboundary	1.10,001		
	3 - (environmental concerns			
	Regional integration (RCI)	Pillar 1: Cross-border infrastructure			
4.	Drivers of Change	Components	Gender Equity and M	lainstreaming	
	Governance and capacity	Civil society participation	Some gender element		1
	development (GCD)	Institutional development			
	Knowledge solutions	Pilot-testing innovation and learning			
	(KNS)	000 : 1 00 :			
	Partnerships (PAR)	Official cofinancing Regional organizations			
	Private sector	Promotion of private sector investment			
	development (PSD)	Tromotion of private dedter investment			
5	Poverty Targeting		Location Impact		
•	Project directly targets	No	Rural		High
	poverty	-			3
•	•				
	Risk Categorization:	Low			
	Safeguard Categorization	n Environment: B Involuntary Re	esettlement: B Indigenou	s Peoples: C	
8.	Financing				
	Modality and Sources		Amount (\$ million)		
	ADB			13.61	
		nt: Asian Development Fund		9.81	
		n: Asian Development Fund		3.80	
	Cofinancing			2.68	
		acility - Least Developed Countries Fund		2.68	
	Counterpart			2.21	
	Government			2.21	
	Total			18.50	
9.	Effective Development C				
	Use of country procurement	nt systems No			
	Lice of country public finan	ncial management systems No			



I. THE PROPOSAL

- 1. I submit for your approval the following report and recommendation on (i) proposed loans, (ii) proposed grants, and (iii) the proposed administration of a grant to be provided by the Global Environment Facility (GEF), each to the Republic of Vanuatu for the Cyclone Pam Road Reconstruction Project.¹
- 2. The project will support the efforts of the Government of Vanuatu to reconstruct, and climate- and disaster-proof the transport sector infrastructure on Efate ring road, which suffered flood and storm damage as a result of Tropical Cyclone Pam (TCP) during 12–14 March 2015.

II. THE PROJECT

A. Rationale

- 3. **Climate and disaster risks**. Vanuatu is one of the 20 most vulnerable countries in the world to disasters caused by natural hazards, including cyclones, floods, landslides, storm surges, earthquakes, tsunamis, and droughts.² Climate change will affect disaster risk through changes in the intensity and frequency of weather hazards. Projections for Vanuatu indicate the frequency and intensity of extreme rainfall events are projected to increase, as is the intensity of cyclones. Transport infrastructure, in particular, is highly vulnerable to these hazards.
- 4. **Description of the disaster.** TCP struck Vanuatu as an extremely destructive category 5 cyclone, with wind speed estimated at 250 kilometers (km)/hour and wind gusts peaking at 320 km/hour. The center of the cyclone passed east of Efate Island (location of the capital, Port Vila), and then continued southward, passing just west of Erromango and Tanna Islands. Heavy rainfall and destructive high storm surges caused severe flooding and widespread damage, particularly in Tafea and Shefa provinces, where 11 fatalities were confirmed, and an estimated 65,000 people were displaced from their homes. Approximately 17,000 buildings were damaged or destroyed including houses, schools, clinics and other medical facilities (footnote 3). TCP caused widespread crop destruction and compromised the livelihoods of at least 80% of Vanuatu's rural population (footnote 3).
- 5. The government and the international community (e.g., bilateral aid agencies, United Nations agencies, and nongovernment organizations) provided immediate emergency relief supplies and transported these to the remote islands in Shefa and Tafea provinces. On 20 March 2015, the Asian Development Bank (ADB) approved a \$1,000,000 grant from the Asia Pacific Disaster Response Fund for humanitarian and relief efforts, and processed a grant of \$5,000,000 financed by the Japan Fund for Poverty Reduction, to support the rehabilitation of junior secondary schools in Tafea Province.⁴⁵
- 6. **Damage and loss assessment.** Immediately after TCP, the government led a rapid joint post-disaster needs assessment with assistance from, and in partnership with, development partners including ADB, the European Union, the United Nations, and the World Bank. ADB provided technical expertise for the assessment of damaged transport infrastructure

¹ The design and monitoring framework is in Appendix 1.

World Bank. Pacific Islands Overview. http://www.worldbank.org/en/country/pacificislands/overview

Government of Vanuatu. 2015. Post Disaster Needs Assessment Report. Port Vila.

⁴ ADB. 2015. Vanuatu Cyclone Pam Disaster Response Project. Manila.

⁵ ADB. 2015. Report and Recommendation of the President to the Board of Directors on a Proposed Grant to Vanuatu for the Cyclone Pam School Reconstruction Project. Manila.

and public buildings. The rapid assessment estimated the total value of the losses caused by TCP to be approximately Vt48.5 billion (about \$449.4 million equivalent). This is equivalent to 64.1% of the gross domestic product (GDP) of Vanuatu. Out of the total damage costs, the housing sector sustained the highest level of damage (32%), followed by the tourism sector (20%), the education sector (13%), and the transport sector (10%). In contrast, the largest economic loss was sustained by agriculture (estimated at 33% of the total loss) and tourism (26%). The total medium- to long-term recovery needs equal about \$316 million; the social sector (comprising housing, health, and education) has the highest needs, amounting to \$205 million (65%), followed by the transport sector at \$34 million (11%) (footnote 3). The needs in the social sector is funded by other development partners including ADB (footnote 5).

- 7. **Economic impacts.** Destruction caused by TCP, coupled with flooding, is expected to have a substantial negative impact on growth, particularly in the tourism sector, which is the main earner of foreign exchange. The closure of two major hotels and a number of motels until December 2015 imposes accommodation constraints on visitors, and the loss of a main source of revenue. Prior to TCP, the economy was projected to show strong growth over the medium term—4.6% in 2015 and 4.7% in 2016, slowing slightly to 4.4% in 2017 (footnote 3). However, post-TCP recovery and reconstruction, some of which has commenced, will have a positive effect on GDP growth in 2015, offsetting some of the projected economic losses. When the effects of recovery and reconstruction are included, GDP growth in 2015 is estimated at 1.4%, representing a decline of 3.2% percentage points from the pre-TCP baseline scenario (footnote 3).
- 8. **Damage to transport sector.** The major impact on the transport sector was on the Efate ring road. Large water flows and the accumulation of upstream debris caused extensive damage to bridges, approach roads, piers, abutments, river banks, and service connections. The accumulation of debris at bridges, coupled with pressure from flood waters, burst through several riverbanks and approach roads, disconnecting the bridges and widening the rivers and streams. Several major bridge components have been completely destroyed. Several culverts and headwalls collapsed completely or washed away as a result of flooding or storm surge. About 19 km of the sealed road—which is located mostly on very flat, low-lying coastal terrain—also suffered extensive pavement damage, with roadside drains blocked or filled with accumulated sediment and debris. Waves have scoured the sealed road in several locations, reducing traffic to a single lane. The damage assessment highlighted that the repairs to Efate ring road should be addressed as soon as possible to minimize secondary economic impacts, and to restore connectivity to tourism centers and to essential services such as hospitals, schools, markets, and main commercial centers in Port Vila.
- 9. **Government's recovery and reconstruction plan.** On 22 June 2015, the government approved the Strengthening Ni-Vanuatu Resilience for the National Recovery and Economic Strengthening Program, administered by a program recovery committee (PRC) chaired by the director general of the Prime Minister's Office. On 5 August 2015, the government organized a development partners' round table conference and announced that it successfully completed the humanitarian action plan and has commenced program implementation, which is estimated to

⁶ Vanuatu: Post-Disaster Needs Assessment Executive Summary (accessible from the list of linked documents in Appendix 2).

⁷ The 130-km major sealed highway provides transport services to the rural population (about 29,150 people) around the Efate Island and connects to the capital (Port Vila, with an urban population of 55,525); it is the only road link servicing the rural population.

Other members of the PRC are director generals of the ministries of finance and economic management, foreign affairs and trade, and infrastructure and public utilities.

be completed by 2017. The government requested all development to actively contribute and support its program emphasizing capacity development for stronger Ni-Vanuatu disaster resilience. The program includes post-cyclone recovery and reconstruction efforts in the transport sector, specifically for road and bridge rehabilitation and restoration of areas damaged by landslides on Efate ring road.

- 10. **Request for emergency assistance.** ADB received the government's request for emergency assistance on 25 August 2015 to support its program in the transport sector. ADB's emergency response is guided by the Interim Pacific Approach, 2015, which extends the validity of the Pacific Approach, 2010–2014. The processing of the emergency project was delayed by 2 weeks due to political instability within the government, and the absence of key government officials who were engaged on official duties overseas during the earlier stages of project preparation.
- 11. **Lessons in disaster response.** The project incorporates key lessons from recent disasters in Solomon Islands. It supports the government to "build back better" (BBB)—i.e., upgrade infrastructure during reconstruction—and strengthen resilience to future disasters and climate change, particularly through more resilient roads and bridges. The government's capacity for BBB will be further strengthened by integrating the design and supervision consultants (DSCs) into the engineering unit of the Ministry of Infrastructure and Public Utilities (MIPU). Due to the limited number of technical and engineering staff, project design and construction supervision will be outsourced, and financed from the project. The DSCs will be recruited under advance action to expedite project implementation. To ensure synergies and a lack of duplication of activities in the road sector, subproject selection will be closely coordinated with development partners. 12

B. Impact and Outcome

12. The impact will be accelerated economic and social recovery in Vanuatu's TCP-affected provinces. The outcome will be socioeconomic activities restored to at least pre-TCP levels.

C. Output

13. There will be only one output: transport infrastructure in damaged locations on Efate ring road reconstructed, and climate- and disaster resilience improved. The tentative list of civil works include (i) 10 km of road rehabilitated; (ii) 8 major stream crossings and their approach roads rehabilitated and protected; ¹³ (iii) minor damage to 9 bridges or box culverts and causeways repaired, and debris cleared; ¹⁴ (iv) 200 meters (m) of river channel realigned (upstream and downstream), and river training structures constructed; (v) 1,000 m of sealed pavement protected against erosion from storm surge; (vi) 8 km of roadside and cross-road drainage improved; (vii) 6 culvert headwalls reconstructed; (viii) 250 m of guard rail reconstructed; (ix) 180 m of riverbanks protected; (x) a 100 m by 50 m landslide at Klem's hill

The project meets the five eligibility criteria for, and satisfied the six characteristics of emergency assistance loans. ADB, 2004. Disaster and Emergency Assistance Policy, Manila.

ADB. 2004. Disaster and Emergency Assistance Policy. Manila.

10 ADB. 2015. Interim Pacific Approach, 2015. Manila; and ADB. 2009. ADB's Pacific Approach, 2010–2014. Manila.

ADB. 2014. Report and Recommendation of the President to the Board of Directors on a Proposed Loan and Grant to Solomon Islands for the Transport Sector Flood Recovery Project. Manila.

¹² The Japan International Cooperation Agency, which built the Teuoma Bridge after it was damaged in the 2001 earthquake, is considering its reconstruction.

The bridges include Mele, Prima, Creek Ai, Marona, Lamin, Malatia, Pangpang, and Rentapau.

¹⁴ The bridges include Eton Dry Creek, Eton Beach, La Cressonnaire, Havana, Tanoliu, Sara, Epule, Epau, and Neslep.

restored, and the road pavement protected; and (xi) a 600 m-long concrete longitudinal roadside drain at Klem's hill improved. All the measurements are estimates and are subject to confirmation during topographic and bathymetric (underwater topographic) surveys during implementation. All works will be designed and implemented using the BBB concept, and will strengthen the climate and disaster resilience of roads and bridges. All works will incorporate gender conscious designs, including construction of walkways and provision of laundry facilities in streams alongside the road. The civil works will be considered as a single subproject over the road length.

D. Investment and Financing Plans

14. The project is estimated to cost \$18.50 million (Table1).

Table 1: Project Investment Plan

Item		Amount (\$ million) ^a
Α.	Base Cost ^b	16.03
B.	Contingencies ^c	2.41
C.	Financing Charges During Implementation ^d	0.06
	Total (A+B+C)	18.50

^a Includes \$1.91 million in taxes and duties, including 12.5% value-added tax financed by the government through exemptions, and \$300,000 in audit fees and counterpart staff to be financed in-kind from government resources.

Source: Asian Development Bank estimates.

15. The government has requested loans in various currencies equivalent to SDR708,000 and SDR1,986,000, and grants not exceeding \$7,000,000 and \$2,805,000, each from ADB's Special Funds resources. The loans will have an interest charge at the rate of 1.0% per annum; a term of 40 years, including a grace period of 10 years; repayment of principal at 2.0% per annum for the first 10 years after the grace period and 4.0% per annum thereafter, and such other terms and conditions set forth in the draft financing agreement. The interest during construction will be capitalized under the loans. The GEF will provide grant cofinancing equivalent to \$2,680,000, to be administered by ADB. The government will finance \$1,910,000 in taxes and duties that it will exempt and \$300,000 in-kind for audit fees and counterpart staff.

16. The financing plan is in Table 2.

Table 2: Project Financing Plan

Table 2. Froject i mancing Flan			
Source	Amount (\$ million)	Share of Total (%)	
Asian Development Bank			
Special Funds resources(loan)	1.00	5.41	
Special Funds resources Disaster Response			
Facility (loan)	2.80	15.16	
Special Funds resources (grant)	7.00	37.84	
Special Funds resources Disaster Response			
Facility (grant)	2.81	15.16	
Global Environment Facility (grant) ^a	2.68	14.49	
Government	2.21	11.94	
Total	18.50	100.00	

^a Administered by the Asian Development Bank. Source: Asian Development Bank estimates.

¹⁵ ADB financing (including the GEF grant) may finance local transportation and insurance costs.

b In mid-2015 prices.

^c Physical and price contingencies computed at 15% of the total base cost.

d Applies only to the loan amount.

17. **Cofinancing.** Among the development partners, ADB was the first to prepare the project, and some development partners have expressed interest in participating, including through cofinancing. Under ADB's maximum fund allocation for Vanuatu, only 10 km of the 19 km of damaged road would be rehabilitated, and additional funds from cofinanciers could be leveraged to expand the project scope or the government may request other financiers to finance directly. ADB typically seeks approval from its Board of Directors for administration of loan or grant funds from cofinanciers only when cofinancing commitments are in place. Under the proposed project, discussions are underway and no firm commitments are in place. In light of the need for expediency and efficiency in the response to post-disaster recovery and rehabilitation, Management requests Board approval for the administration of any cofinanced funds obtained from development partners subsequent to the date of Board approval, consistent with the objective, purpose or scope of the project. The administration of such cofinanced funds will be approved by Management and reported to the Board in accordance with standard reporting procedures.

E. Implementation Arrangements

- 18. The PRC will provide overall coordination and administrative oversight of the Strengthening Ni-Vanuatu Resilience for the National Recovery and Economic Strengthening Program. The Ministry of Finance and Economic Management (MFEM) will be the executing agency and the MIPU will be the implementing agency. An infrastructure working group has been established in the MIPU to provide oversight for project implementation. 17 A project management unit (PMU) comprising the DSCs will be established in the MIPU for project design and implementation. The DSCs will include international and national consultants, 30% of whom will be women, and will be integrated within the MIPU's engineering unit. The DSC team leader will manage project activities and coordinate with other development partners to ensure there is no duplication of activities. The DSCs will be responsible for the detailed assessment, feasibility studies, detailed engineering design, cost estimates, tendering, contract management and supervision, and day-to-day implementation, including financial management, monitoring, and evaluation. The PMU will use ADB disbursement procedures and financial management guidelines, and will maintain separate accounts for the project, which will be audited by an independent auditor. The PMU will be responsible for procurement and administration of contracts on behalf of the MIPU. The project will be implemented within 2 years, which is the norm for emergency assistance projects.
- 19. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual (PAM).¹⁸

Table 3: Implementation Arrangements

Aspects	Arrangements	
Implementation period	January 2016–December 2017	
Estimated completion date	December 2017. Loan and grant closing date: June 2018	
Management		
(i) Oversight body	Program Recovery Committee ^b	
(ii) Executing agency	Ministry of Finance and Economic Management	

¹⁶ The government is in discussion with World Bank which has \$50 million earmarked from rehabilitation of the transport infrastructure in the affected provinces.

¹⁸ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

The infrastructure working group comprise the director general of MIPU (chairman), and the Public Works Department director, operations manager, provincial managers, and project engineers.

Aspects	Arrangements		
(iii) Key implementing	Ministry of Infrastructure and Public Utilities		
agencies			
(iv) Implementation unit	Infrastructure Working Group, F	Project Management Unit,	Port Vila,
	Vanuatu, six MIPU staff.		
Procurement ^a	LIB or direct contracting	2 contracts	\$15,000,000
Consulting services	QCBS (90:10)	179.75 person-months	\$2,810,000
Advance contracting	Advance contracting for consulting services recruited by ADB and contract		
	to be signed with the government		
Disbursement	The loan and grant proceeds will be disbursed in accordance with ADB's		
	Loan Disbursement Handbook (2015, as amended from time to time) and		
	detailed arrangements agreed i	upon between the governr	ment and ADB.

ADB = Asian Development Bank, LIB = limited international bidding, QCBS = quality- and cost-based selection.

a In 2013, the ADB Board of Directors approved a blanket waiver of the member country procurement eligibility restrictions applicable to operations financed by the Asian Development Fund and to operations financed from ADB-administered cofinancing resources in all cases. The blanket waiver and universal procurement apply, regardless of whether ADB fully or partially administers the cofinancing resources. The project's procurement classification is accessible from the list of linked documents in Appendix 2.

b Other members of the program recovery committee are director generals of the ministries of finance and economic management, foreign affairs and trade, and infrastructure and public utilities.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

The project supports activities that respond to critical post-TCP recovery and 20. reconstruction priorities in the transport sector, and tourism priorities of the government. The project is coordinated with, and supported by, other development partners and will bolster country ownership and further improve development coordination. The civil works will be selected from a long list of damaged sites, 19 using criteria in the PAM, option analysis, cost estimates, and feasibility studies. The detailed engineering designs will include measures to support the socially vulnerable, including women, children, and the disabled; and adopt a sustainable maintenance strategy, while considering future traffic growth and climate and disaster risks. A climate and disaster risk vulnerability assessment will be prepared, and potential adaptation and disaster risk management measures will be selected based on an analysis of their effectiveness, cost, technical feasibility, and stakeholder acceptance, to ensure that rehabilitation will follow the BBB concept and the standards for resilience to climate change and disaster, but appropriate to the local context. Lessons from the Solomon Islands, supported by geotechnical investigations, will be incorporated in the detailed engineering designs (footnote 11).

B. Economic and Financial

21. Efate ring road serves a rural population of about 29,150 and an urban population of 55,525. It increases access to and improves the quality of the road network, thereby reducing vehicle operating costs and travel times, and improving the reliability of access to social services. The improved road will further assist poverty reduction and increase incomes in rural areas by stimulating economic activity (e.g., tourism, local business development, and agricultural activities). The project will be implemented as a sector project under emergency procedures. ADB's Disaster and Emergency Assistance Policy (2004) provides the flexibility to

¹⁹ Government of Vanuatu. 2015. *Impact Assessment Report on Efate and Epi Islands for Emergency and Recovery Assessment of Damaged Transport Infrastructure*. Port Vila.

conduct the economic analysis after Board approval. The economic analysis of the subprojects will be carried out during the feasibility studies and before detailed engineering designs and implementation, in accordance with ADB guidelines.²⁰ The damaged infrastructure will not be relocated but instead reconstructed within the existing right-of-way but to a higher standard, using BBB principles. The subprojects in the impact assessment report will be selected and prioritized in accordance with the selection criteria, including financial and economic considerations that specify a minimum economic internal rate of return of 12% (footnote 19). The economic due diligence will include demand analysis, cost-benefit analysis, alternatives and least-cost analysis, sensitivity analysis, sustainability analysis, distribution analysis, and risk analysis.²¹ There will be significant unquantified benefits, including (i) improved reliability for short-distance nonmotorized traffic: (ii) improved safety for both vehicles and pedestrians in densely populated areas through footpaths and pedestrian crossings; and bridges with provisions for footpaths, crash barriers, and hand rails; (iii) improved reliability of bridges on the entire length of the ring road, which may induce increased agricultural production, and stimulation and expansion of tourism; and (iv) reduced upstream damming effects through higher-level structures with wider spans, thus reducing flood damage to structures, approach roads, crops, and buildings adjacent to riverbanks.

22. The project outputs are public service goods with no cost recovery, and hence no financial viability assessment is required. Roads and bridges to be constructed using BBB will be maintained from the MIPU's ongoing recurrent budget. The government's commitment to financing routine and periodic maintenance costs will be obtained as a loan and grant assurance. The project output will have BBB features that enhance resilience, which will reduce operation and maintenance funding requirements for the first 2-3 years. Sufficient resources have been allocated to the DSCs to undertake the economic and financial due diligence during implementation.

C. Governance

Financial management. The MIPU has implemented a number of ADB-financed 23. projects through various PMUs.²² The accounting and bookkeeping for these projects has been through various PMUs and was centrally monitored and kept by the Vanuatu Project Management Unit and the MFEM Department of Finance and Treasury. Both the MIPU and the MFEM have been involved in financial management of projects, accounting, financial reporting, and audit, and have gradually built their capacity.²³ A financial management assessment of the executing and implementing agencies was conducted for the projects (footnote 22) and will be updated within 3 months of Board approval. The overall fiduciary risk was rated as moderate and remains manageable and will be further mitigated by the provision of a dedicated full-time qualified accountant to the PMU. The DSCs include a financial management specialist to carry out financial due diligence-including conducting financial analyses of the executing and

²¹ In case it is not possible to undertake an accurate benefit–cost analysis for the subprojects, least-cost analysis will

²³ External financial audit findings are unqualified for the projects in footnote 22.

²⁰ ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

be used to ensure efficient use of project resources.

22 ADB. 1996. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Republic of Vanuatu for the Urban Infrastructure Project. Manila; ADB. 2011. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant to the Republic of Vanuatu for the Interisland Shipping Project. Manila; ADB. 2015. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant for Additional Financing to the Republic of Vanuatu for the Interisland Shipping Project. Manila; and ADB. 2011. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grant to the Republic of Vanuatu for the Port Vila Urban Development Project. Manila.

implementing agencies, and calculating incremental recurrent costs to determine the financial sustainability of the Efate ring road—and to review the proposed cost-recovery and tariff policies, including affordability. An asset management plan will be prepared by the DSCs projecting expenditures over a 5-year period for the sustainability of Efate ring road. The procurement capacity assessment of MIPU conducted for the prior projects (footnote 22) identified a lack of procurement capacity within MIPU. A procurement specialist will be provided through the DSCs to undertake all project procurement and build capacity of MIPU staff.

24. **Anticorruption measures.** ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the MFEM and the MIPU. The specific policy requirements and supplementary measures are described in the PAM (footnote 18).

D. Poverty and Social

- 25. The destruction of critical infrastructure has impacted many people, and vulnerable groups in particular. Such disaster events also create new vulnerabilities by reducing employment and livelihood-generating ability, personal safety, public health and sanitation, household efficiency, and food production. While the destruction of physical assets by the cyclone occurred in March 2015, production losses and associated increased production costs will linger for some time. The negative impact of the disaster on overall socioeconomic conditions in the country will be felt for many years. The project's expected poverty and social benefits and impacts on local communities will be analyzed through a review of previous social and poverty analyses and consultations with stakeholders under ongoing ADB-financed projects. A summary poverty reduction and social strategy has been prepared.²⁴ As highlighted in the post-disaster needs assessment, repairs to roads and bridges are being prioritized to minimize secondary economic impacts, and to restore connectivity to essential services such as hospitals, schools, markets, and main commercial centers in Port Vila. The project will contribute to reconstruction and repair of critical affected transport infrastructure and rebuild transport networks to higher standards of climate and disaster resilience.
- 26. **Gender.** The project is classified as having some gender elements, and details of the gender approach will be developed during implementation. Women will be encouraged to take up employment during project implementation (reconstruction). Men and women engaged in the project will be paid equal wages for equal work. Various training and awareness activities will be undertaken, including training on traffic control at construction sites and safeguards; education awareness on HIV/AIDS and prevention, coordinated with an HIV coordinator from the Ministry of Health, to all construction workers and the majority of roadside inhabitants; and awareness on gender-sensitive transport and road safety issues. A resettlement plan or report will be prepared for any land acquisition or other nonland impacts, and will ensure that equal compensation and assistance will be provided to all TCP-affected people. Gender-specific outputs, targets, and indicators are integrated into the project's design and monitoring framework.

E. Safeguards

27. **Environment.** The project is classified as category B for environment. It is expected to have limited, site-specific, and, in most cases, temporary adverse impacts on the environment, which can be readily mitigated and managed under the environmental management plans included in the environmental assessment of civil works. An environmental assessment and

²⁴ Summary Poverty Reduction and Social Strategy (accessible from the list of linked documents in Appendix 2).

review framework (EARF) has been prepared for the project in accordance with ADB's Safeguard Policy Statement (2009) and posted on ADB's website. 25 The EARF requires screening and assessment, including preparation of an environmental management plan (EMP) for each of the civil works or project segments following the Environment Protection and Conservation Act (as amended) 2010, with any additional elements as required to also comply with ADB's Safeguard Policy Statement. During the road reconstruction, environmental safeguards will follow the system currently being implemented by the government for other ADB or externally funded projects, whereby minor repair works are implemented following environmental management and safety guidelines or a simple EMP, and major works associated with rehabilitation or reconstruction of roads and bridges will be subject to environmental assessment (and an EMP) that will be updated during detailed engineering design, and incorporated in bidding and contract documents to be implemented by contractors and monitored by the implementing agency. Monitoring will be undertaken in line with the monitoring plan included in the EARF. In line with ADB's Public Communications Policy 2011, all relevant safeguards information will be made available in a timely manner and in a form and language understandable to affected people and other stakeholders. ADB and the government will post the monitoring reports on their websites.

- Land acquisition and involuntary resettlement. The project is classified as category B 28. for land acquisition and involuntary settlement. A resettlement framework has been prepared for the project in accordance with ADB's Safeguard Policy Statement. The project is within the existing ring road corridor; temporary access to land outside the corridor will be required during construction. Some small areas of additional land (for coastal protection works) may be required at three or four locations; this will be through negotiated settlement and/or voluntary donation in accordance with the project's resettlement framework. Civil works will require temporary land use or access during reconstruction, and this will be obtained through voluntary donation or land use agreements with landowners or affected people. A resettlement framework has been prepared describing the procedures for (i) screening of land acquisition and resettlement impacts; (ii) social impact assessment and preparation of a resettlement plan, if needed; and (iii) negotiation and agreements (such as memorandums of agreement) for land access with documentation of agreements and verification by a third party confirming that agreements were truly voluntary. 26 The resettlement framework has been discussed with the MIPU and it has endorsed the resettlement framework, which has been posted on ADB's website. A resettlement specialist has been included in the DSC to prepare the resettlement plan, if required, including the due diligence reports and the completion of third party validation.
- 29. **Indigenous peoples.** The project is classified as category C for indigenous peoples. Melanesians are the native people of Vanuatu and comprise the vast majority of the population as well as the project beneficiaries. The project is not expected to impact any distinct and vulnerable groups of indigenous peoples. All project components will be implemented in a culturally appropriate and participatory manner.

F. Risks and Mitigating Measures

30. The overall risk is medium, and the integrated benefits and impacts are expected to outweigh the costs. The main risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.²⁷

²⁷ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

²⁵ Environmental Assessment and Review Framework (accessible from the list of linked documents in Appendix 2).

²⁶ Resettlement Framework (accessible from the list of linked documents in Appendix 2).

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Lack of procurement	A procurement specialist in the PMU will carry out all the project procurement activities and
capacity in the MIPU	will build capacity in MIPU's engineering staff
Weak financial	The financial management assessment will be conducted and updated within 3 months
management	after Board approval. A financial management action plan will be prepared and updated in
capacity	the project administration manual. A qualified accountant will maintain separate project
	accounts and undertake monthly reconciliation and verification of the project account with
	Department of Finance and Treasury.
Low implementation	Extensive support from the DSCs in the PMU will be provided for procurement, financial
capacity	management, disbursement, monitoring and safeguard policies, and procedures. Capacity
(government)	will be built by DSCs into the MIPU's engineering and accounting units.
Low implementing	Contractors will be trained in the civil works through subcontracting by the international
capacity (national	contractors. The DSCs will closely monitor contractor performance and provide support on
contractors)	contract compliance and specifications.
Lack of sustainability	Following completion, the project assets will become the property of the government to be
	maintained by the MIPU. The PMU DSCs will prepare a 5-year routine and periodic
	maintenance plan with expenditure forecast for annual MIPU budgeting. A financial
	management specialist (one of the DSCs) will undertake financial due diligence.

DSC = design and supervision consultant, MIPU = Ministry of Infrastructure and Public Utilities, PMU = project management unit.

Source: Asian Development Bank.

IV. ASSURANCES

31. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and the financing and grant agreements. The government has agreed with ADB on certain covenants for the project which are set forth in the financing and grant agreements.

V. RECOMMENDATION

- 32. I am satisfied that the proposed loans and grants would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve
 - (i) the loans in various currencies equivalent to SDR708,000 and SDR1,986,000 to the Republic of Vanuatu for the Cyclone Pam Road Reconstruction Project, from ADB's Special Funds resources with an interest charge at the rate of 1.0% per annum; for a term of 40 years, including a grace period of 10 years; with a repayment of principal at 2% per annum for the first 10 years after the grace period and 4% per annum thereafter; and such other terms and conditions as are substantially in accordance with those set forth in the draft financing agreement presented to the Board;
 - (ii) the grants not exceeding \$7,000,000 and \$2,805,000 to the Republic of Vanuatu for the Cyclone Pam Road Reconstruction Project, from ADB's Special Funds resources on terms and conditions that are substantially in accordance with those set forth in the draft financing agreement presented to the Board; and
 - (iii) the administration by ADB of the grant not exceeding the equivalent of \$2,680,000 to the Republic of Vanuatu for the Cyclone Pam Road Reconstruction Project, to be provided by the Global Environment Facility.

Takehiko Nakao President

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with:

Accelerated economic and social recovery in Vanuatu's Cyclone Pam-affected provinces (defined by the PDNA)^a

Barrella Obain	Performance Indicators with		Distan
Results Chain	Targets and Baselines	Reporting Mechanisms	Risks
Outcome Socioeconomic activities restored to at least pre-Cyclone Pam levels	By 2018 a. GDP growth projection increased to 3.6% (2015 baseline: 2015 GDP growth is expected to decline to 1.4% from 4.6%)	a. ADB Outlook, Pacific Economic Monitor database, and Vanuatu National Statistics Office	Extreme weather event during reconstruction results in delays
	b. 130 km of road connected for road users to facilitate trade	b. Quarterly progress reports from the MIPU	
Output 1.Transport infrastructure in damaged locations	By 2017 1a. about 10 km of road rehabilitated 1b. About 8 stream	Quarterly progress reports from the MIPU	Delays in implementation caused by MIPU staff
on Efate ring road reconstructed, and climate- and disaster-proofed	crossings and their approach roads, abutments, and piers repaired and protected		occupied in other infrastructure sectors such as reconstruction of public buildings adversely affecting the implementation and effectiveness of the emergency assistance MIPU staff supplemented by international and
	1c. About 9 bridges, box culverts, and causeways repaired for minor damages and debris cleared		
	1d. About 200 m of river channel realigned at upstream and downstream and river training structures constructed		
	1e. About 1,000 m of sealed pavement protected against erosion from storm surges		national consultants
	1f. About 8 km of road side and cross road drainage improved		
	1g. About 6 culvert headwalls reconstructed		
	1h. About 250 m of guard rail reconstructed		
	1i. About 180 m of river banks protected		

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	1j. Landslide at Klems hill (approximately 100 m x 50 m) reinstated		
	1k. Concrete longitudinal roadside drain at Klems hill (about 600-m long) improved		
	1I. 100% of construction workers and at least 80% of roadside inhabitants receive education on gender equality and HIV/AIDS awareness by the end of the project		
	1m. At least 30% of participants in all community consultations are women.		

Key Activities with Milestones

- 1. Project management and supervision
- 1.1 Recruit design supervision consultants (Q4 2015)
- 1.2 Prepare inception report and an implementation plan (Q1 2016)
- 1.3 Prepare and implement communication strategy and communication plan (2016–2017)
- 1.4 Oversee environment management activities (2016–2017)
- 1.5 Prepare project completion report (Q1 2018)
- 2. Reconstruction of damaged infrastructure
- 2.1 Conduct topographical survey of all subprojects (Q1 2016)
- 2.2 Conduct feasibility study of all subprojects (Q1–Q2 2016)
- 2.3 Prepare detailed engineering designs of all subprojects (Q2–Q3 2016)
- 2.4 Prepare bid documents (Q4 2016)
- 2.5 Carry out bidding and bid evaluation (Q1 2017)
- 2.6 Award civil works contracts (Q1 2017)
- 2.7 Reconstruct civil works (Q1-Q4 2017)

Inputs

ADF: \$3,805,000 loan ADF: \$9,805,000 grant

GEF: \$2,680,000 grant (fully administered by ADB)

Government: \$2,210,000 in taxes and duties that the government will exempt and in-kind contribution in the form of audit fees and counterpart staff

Assumptions for Partner Financing

Additional cofinancing may be confirmed and added to the project for additional or expansion of existing performance targets for the output.

ADB = Asian Development Bank, ADF = Asian Development Fund, GDP = gross domestic product, GEF= Global Environment Facility, km = kilometer, m = meter, MIPU = Ministry of Infrastructure and Public Utilities, Q = quarter.

^a Government of Vanuatu. 2015. *Post Disaster Needs Assessment Report*. Port Vila.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://adb.org/Documents/RRPs/?id=49319-001-3

- 1. Financing Agreement
- 2. Grant Agreement: Global Environment Facility
- 3. Summary Assessment of Damage and Needs: Transport Sector
- 4. Project Administration Manual
- 5. Contribution to the ADB Results Framework
- 6. Emergency Assistance Coordination
- 7. Country Economic Indicators
- 8. Summary Poverty Reduction and Social Strategy
- 9. Environmental Assessment and Review Framework
- 10. Resettlement Framework
- 11. Risk Assessment and Risk Management Plan

Supplementary Documents

- 12. Vanuatu: Post-Disaster Needs Assessment Executive Summary
- 13. Procurement Classification