



Major Change in Project

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Vanuatu: Port Vila Urban Development Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 1 December 2016)

Currency unit	–	vatu (Vt)
Vt1.00	=	\$0.009
\$1.00	=	Vt109.06
Currency unit	–	Australian dollar (A\$)
A\$1.00	=	\$0.738
\$1.00	=	A\$1.354

ABBREVIATIONS

ADB	–	Asian Development Bank
DBST	–	double bituminous surface treatment
km	–	kilometer
LDCF	–	Least Developed Countries Fund
SDR	–	special drawing right
US	–	United States
VPMU	–	Vanuatu Project Management Unit

NOTES

- (i) The fiscal year (FY) of the Government of Vanuatu ends on 31 December
- (ii) In this report, "\$" refers to US dollars, unless otherwise stated.

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CONTENTS

	Page
I. PROPOSED MAJOR CHANGE	1
II. BACKGROUND	1
III. IMPLEMENTATION PROGRESS	1
IV. RATIONALE FOR THE PROPOSED CHANGES	2
V. DUE DILIGENCE	4
VI. THE PRESIDENT'S RECOMMENDATION	5

APPENDIXES

1. Revised Design and Monitoring Framework	6
2. List of Linked Documents	10

I. PROPOSED MAJOR CHANGE

1. A major change in scope to the Port Vila Urban Development Project in the Republic of Vanuatu is proposed for Board consideration.¹
2. The major change is a reduction in the project scope to reflect the outputs the project can deliver within the current financing amount. The revised design and monitoring framework is in Appendix 1.

II. BACKGROUND

3. The Asian Development Bank (ADB) approved a loan of SDR3,174,000 (equivalent to \$5 million at the time of loan negotiations) from ADB's Special Funds resources (Asian Development Fund), as well as the administration of grants from the Government of Australia amounting to \$31 million for the project on 13 December 2011. The Australian government grant consists of (i) a grant of \$4.5 million from the ADB-administered Channel Financing Trust Fund, and (ii) a project-specific grant of \$26.5 million. The Government of Vanuatu agreed to provide counterpart financing of \$3.1 million for taxes and duties through exemptions, as well as land acquisition costs through annual budget allocations. The project's financing agreements were signed in Port Vila on 12 December 2012 and the project took effect on 13 February 2013.
4. The project's expected impact is sustained urban development of Port Vila. The expected outcome is that the government has sustainably improved hygiene conditions and reduced water-based hazards in Port Vila. The project has five outputs: (i) improved roads and drainage in greater Port Vila; (ii) improved sanitation in greater Port Vila; (iii) improved hygiene for central area and settlement communities; (iv) improved capacity by government agencies and community and user organizations' to manage sanitation, roads, and drainage systems effectively and efficiently; and (v) efficient project management services. The project executing agency is the Ministry of Finance and Economic Management and the project implementing agencies are the Ministry of Infrastructure and Public Utilities and the Department of Environmental Protection and Conservation. The Vanuatu Project Management Unit (VPMU), which reports to the Office of the Prime Minister, manages the project on behalf of the implementing agencies. The project is scheduled to close on 31 December 2018.²

III. IMPLEMENTATION PROGRESS

5. The project is in its fourth year of implementation. About 50% of the project is complete 62% of the way through the project's elapsed time period.³ Project implementation had been delayed by an estimated 24 months compared with original plans because (i) the project's loan and grant agreements were signed 12 months late; (ii) the design, supervision, and capacity development consultants were recruited 4 months late; and (iii) finalization of the road pavement rehabilitation and stormwater drainage designs were delayed by 8 months. These delays—and lower-than-projected contract awards and disbursements—earned the project a rating of *actual problem* in the fourth quarter of 2015.

¹ Asian Development Bank (ADB). 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Grants to the Republic of Vanuatu for the Port Vila Urban Development Project*. Manila.

² The project was originally expected to close on 31 December 2017. Management approved an extension to the loan closing date on 20 May 2016.

³ The elapsed project period compares the date that project financing agreements were signed (12 December 2012) with the project closing date of 31 December 2018.

6. Finalized designs for the road pavement rehabilitation and stormwater drainage were delayed because (i) alternate technical solutions were needed, and (ii) the scope of road rehabilitation and drainage works was reduced to contain costs within the available financing amount. Project financing was stressed because (i) during detailed engineering design, substantial errors were discovered in the sizes and cost estimates for stormwater drainage infrastructure as described in the Port Vila Stormwater Master Plan, which formed the basis for the project's stormwater drainage components;⁴ and (ii) the United States (US) dollar had strengthened against project currencies since the financing agreements were signed on 12 December 2012. The stronger US dollar reduced overall project financing in US dollar terms by approximately \$6.42 million (or 17.9% of the project's financing) at 18 October 2016 foreign exchange rates. Total donor funding had dropped to \$29.58 million as of October 2016, compared with \$36.00 million when the project was negotiated, because of foreign exchange losses.

7. The project performance is now rated *on track*. This turnaround was achieved as ADB identified risks to project performance in review missions in November 2015 and responded through (i) closer supervision through missions every second month and weekly teleconferences with VPMU, and (ii) active support for the steering committee through drafting papers to facilitate timely decision-making. These actions helped improve project performance. All project construction activities are expected to be completed by 4 December 2017, 10 months behind the schedule at project approval. As of 22 September 2016, 11 contracts amounting to \$22.95 million had been awarded and a total of \$9.30 million had been disbursed. The status of the project's outputs is provided in the performance overview.⁵

8. Additional grant financing of \$2.87 million from the Global Environment Facility's Least Developed Countries Fund (LDCF) approved in December 2016 will support efforts to improve the climate resilience of road and drainage infrastructure and strengthen Vanuatu's capacity to deliver climate- and disaster-resilient infrastructure. The LDCF grant activities are fully aligned with the project's target impact and will reduce the project's financial stress.

IV. RATIONALE FOR THE PROPOSED CHANGES

9. The project faces major challenges, including managing delays during project start-up and design and a reduced financing envelope (paras. 5 and 6). The project outputs cannot be delivered as designed within the available financing envelope including the recently approved additional financing, so the scope of work must be reduced as indicated in Table 1. At approval, the project was expected to (i) rehabilitate 22.00 kilometers (km) of road; (ii) install 25.00 km of drainpipes; (iii) build 8.00 km of surface drains; (iv) build 0.65 km of drainage tunnels; and (v) eliminate seasonal flooding in five catchments. The scope of roads rehabilitated under the project will be reduced to 13.3 km: 9.1km asphalt concrete, 3.9 km covered in double bituminous surface treatment (DBST), and 0.3 km concrete. The scope of the project's drainage works will also be changed to include the rehabilitation of 2.0 km of stormwater pipe drainage and reduce the construction of new stormwater pipe drains and surface drains to 10.0 km and 2.5 km respectively. Drainage tunnels were found to be technically unfeasible during detailed design due to geotechnical and seismic conditions in Port Vila, and construction will be

⁴ The Port Vila Stormwater Master Plan was prepared under TA7345-VAN: *Preparing the Port Vila Urban Development Project*. Errors in the calculation of stormwater discharge resulted in under-estimation of the stormwater infrastructure requirements and consequently under-estimation of project costs.

⁵ Performance overview (accessible from the list of linked documents in Appendix 2).

canceled. Components that cannot be delivered under the project could be considered in the proposed Second Port Vila Urban Development Project (scheduled for preparation in 2017).

Table 1: Project Target Outputs

Description	Target Outputs			Comment
	As Approved	Revised Without AF	Revised With AF	
Roads rehabilitated	22.00 km	13.00 km	13.00 km	68% of upgraded roads will have asphalt concrete pavement.
Stormwater pipe drainage installed	25.00 km	9.00 km	10.00 km	The quantity of new stormwater pipe drains has reduced due to use of SUDS design principles.
Open stormwater drains constructed	8.00 km	2.00 km	2.50 km	Open drains are unsafe for the project area.
Existing stormwater pipe drains rehabilitated	0.00 km	1.50 km	2.00 km	Rehabilitation of existing stormwater pipe drainage is more cost effective than replacement.
Drainage tunnels constructed	0.65 km	0.00 km	0.00 km	Drainage tunnels were found to be technically unfeasible during detailed design
Number of catchments with improved drainage	5	3	3	Drainage improvements were reduced in size because of limits on financing.
Percentage of septic sludge treated at the sludge treatment plant	100%	100%	100%	No change. Conventional sludge treatment facility was chosen.
Public and communal toilets improved	10	10	10	No change.
Proportion of community sanitation facilities operated by women's groups	50	50	50	No change.
Households served with improved sanitation	4,500	4,500	4,500	No change.
Number of government staff (50% women) with improved capacity to manage and maintain sanitation, roads, and drainage facilities	50	50	50	No change.
Proportion of urban drainage maintained annually	100%	100%	100%	No change.
Proportion of community sanitation facilities in greater Port Vila complying with sanitation standards	100%	100%	100%	No change.
Number of women trained in the management of sanitation and hygiene facilities maintenance activities.	100	100	100	No change.

AF = Additional Financing; km = kilometer, SUD = sustainable urban drainage

Source: Asian Development Bank

10. The government has informed ADB that it cannot seek additional loans for the project because of fiscal constraints after Cyclone Pam, which struck Vanuatu in March 2015. The

Government of Australia (Department of Foreign Affairs and Trade) cannot provide additional grant financing given limited resources available for the Vanuatu program.

11. The project remains relevant to Vanuatu's development needs. The project's benefits—including improved roads, less frequent flooding, and improved sanitation, particularly in informal settlements with limited access to sanitation facilities and services—will improve quality of life for residents of the Port Vila area and catalyze economic growth. These benefits are well aligned with the project's target impact of sustainable urban development in Port Vila. However, the project's target outcome, as originally designed and approved in December 2011, does not articulate the benefits of the project's road improvements or reflect the project's substantial road rehabilitation investments.⁶ The project's success will be measured, in part, based on the attainment of the project's target impact and outcome. Amending the project's target outcome statement to reflect the benefits of improved roads and drainage is therefore prudent. The following project outcome statement is proposed: "The government reduces flooding in Port Vila, operates a safer and less congested road network, and improves the health and hygiene of Port Vila residents."

V. DUE DILIGENCE

12. The proposed change in scope will contain project costs within the financing envelope. It will not affect the project implementation arrangements or project safeguard plans, and the effect on procurement arrangements will be minor. The reduction on the quantity of roads to be rehabilitated will reduce the estimated economic internal rate of return to 11.0%, which is below the opportunity cost of capital (12.0%). While Vanuatu is not a fragile state as such, ADB's Pacific Approach considers small isolated Pacific states, including Vanuatu, as fragile. Elements of ADB's approach to fragile states, including the relaxation of expected economic rates of return, therefore apply here. The project's estimated economic internal rate of return at approval was 23.4%.

13. Government budget will be needed to maintain the project's upgraded roads and drainage. Historically, budgets for road maintenance have been barely adequate and the Public Works Department's capacity to fully utilize road maintenance budgets has been limited. As a result, Vanuatu's road maintenance has been reactive and poor in quality. However, since 2014 the government has successfully outsourced some road maintenance to the private sector and community groups. Frameworks for communities to operate and maintain community sanitation facilities delivered by the project, including charges for recovery of operations and maintenance costs, have been established and implemented when the facilities are completed. A tariff framework for the recovery of the project's septage treatment facility operations and maintenance costs is currently being prepared and will be completed in February 2017. The government is currently exploring alternate funding mechanisms for road and drainage operations and maintenance costs, and it plans to further outsource road maintenance.⁷ Additional grant financing under the project will improve the durability of roads and drainage to climate change impacts in Port Vila, lowering road and drainage maintenance costs. The project has established mechanisms to recover operation and maintenance costs for the project's sanitation and hygiene components. The project's financial management risk assessment was reviewed and updated. Most of the mitigation measures proposed in the project's original risk

⁶ The target outcome, as stated in the approved project's design and monitoring framework is "*The Government of Vanuatu has sustainably improved the hygiene situation and reduced water-based hazards in Port Vila*". The project's road and drainage component costs comprise 62.6% of the project's current total cost estimate.

⁷ Funding mechanisms being explored through World Bank assistance include the establishment of a road maintenance fund.

assessment have been implemented; therefore, the project's risk rating remains *moderate*. VPMU has established financial management procedures to meet the requirements of Vanuatu's Public Finance and Economic Management Act, 1998 (amended in 2000, 2009, 2011, and 2012) and donor requirements and is generally managing project funds effectively.

14. Processing and payment of contractor claims are well within the contractual limits, and audited project accounts were submitted within the time frames stipulated in the project's financing agreements, with the exception of FY2015. The FY2013 and FY2014 audited project accounts are unqualified and state that no material weaknesses were identified in the VPMU accounting and internal control systems. Processing of some contractor claims and the preparation of documentation for the audit of the project's FY2015 project accounts was delayed due to an increase in the number of transactions as VPMU-managed projects moved from the design to the construction phase. The VPMU plans to recruit a second financial management assistant by the end of 2016 to improve its financial management capacity. The project administration manual has been updated to reflect the revised project cost estimates, the revised loan and grant allocations and financing percentages, the updated procurement plan, and the project financing arrangements with the proposed LDCF grant financing.⁸

VI. THE PRESIDENT'S RECOMMENDATION

15. The President recommends that the Board approve the major changes to the Port Vila Urban Development Project in Vanuatu as described in para. 9.

⁸ The Revised Project Administration Manual (accessible from the list of linked documents in Appendix 2). The revised loan and grant allocations and financing percentages will apply to all withdrawal applications prepared on or after the date on which ADB approves the administration of the LDCF grant.

REVISED DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with			
Sustainable development of Port Vila achieved (Vanuatu Priorities and Action Agenda) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Safer and less congested roads, reduced flooding and improved health and hygiene in Port Vila reduced	The government maintains its initial budget commitment of \$400,000 per annum for maintenance works (2010 baseline: \$200,000). By 2019: 75% of households within the urban and periurban areas in Port Vila have access to improved sanitation (2009 baseline: less than 50% of 10,000 households). Incidence of diarrhea in Port Vila reduced by half from 892 reported cases per 1,000 population (WHO data). At least 20% decrease in travel time (2010 baseline is 2 minutes per km), and 0.5% decrease in vehicle operations costs (2010 baseline is \$0.20 per km).	Annual MFEM and MIPU reports Reports of PVMC, MOH, Statistics Office Reports of PVMC, MOH, WHO data Commuter survey and traffic survey data from MIPU and Statistics Office	Operations and maintenance budgets are inadequate. Coordination among government agencies deteriorates.
Outputs 1. Road and drainage network in Port Vila improved	By 2019: 1.a. 13.3km of urban roads rehabilitated by 2019 (baseline: July 2016, 0km)	Project monitoring reports. Ministry of Infrastructure and Public Utilities annual reports.	Policy and institutional reforms not acted upon by government

^a Aligned with Vanuatu's policy objective for infrastructure and utilities of ensuring economic infrastructure and support services are available to other sectors (Government of the Republic of Vanuatu. 2006. Priorities and Action Agenda 2006 – 2015. Port Vila).

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>2. The government has improved the sanitation system in greater Port Vila.</p> <p>3. Central area and settlement communities use improved hygiene facilities.</p>	<p>1.b. 14.5 km of urban drainage constructed or rehabilitated by 31 December 2018 (baseline: July 2016, 0km)</p> <p>By 2019:</p> <p>2.a. All (domestic & commercial) sludge in Port Vila is treated and disposed by (baseline: July 2016, 0%).</p> <p>By 2019</p> <p>3.. Four new multipurpose community sanitation & hygiene facilities at 2 informal settlements in greater Port Vila constructed and operational with the majority operated by women's groups (baseline: July 2016, 0).</p> <p>3.b. 4 existing multipurpose community sanitation & hygiene facilities at 3 informal settlements in greater Port Vila refurbished with the majority operated by women's groups (baseline: July 2016, 0).</p> <p>3.c. 3 new public toilet facilities with access for women, children & the disabled .in the greater Port Vila constructed and operational (baseline: July 2016, 0).</p>	<p>Ministry of Infrastructure and Public Utilities annual reports. Project monitoring reports.</p> <p>Reports of Port Vila Municipal Council Annual Reports</p> <p>World Vision / Wan Smolbag KAP surveys. Project monitoring reports.</p> <p>World Vision / Wan Smolbag KAP surveys.</p> <p>Port Vila Municipal Council Annual Reports.</p>	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>4. Government agencies and communities and user groups have the capacity to manage sanitation, roads, and drainage systems effectively and efficiently.</p> <p>5. Efficient project management services are provided.</p>	<p>3.d. 1 4 existing public toilet facility in greater Port Vila refurbished, including special provisions for women, children & the disabled, (baseline: July 2016,0)</p> <p>4.a Capacities of at least 50 government staff (50% being women) improved to manage and maintain sanitation, roads, and drainage facilities</p> <p>4.b Drainage maintenance follows 100% annual maintenance schedule</p> <p>4.c. 100% of community sanitation facilities comply with sanitation standards at any time</p> <p>4.d. 100 women are trained in management of sanitation and hygiene facilities maintenance activities.</p> <p>5.1 The project is implemented on time and within budget.</p>	<p>Port Vila Municipal Council Annual Reports</p> <p>Reports of relevant government institutions, community and user groups, and women's and youth groups</p> <p>Reports of PWD, relevant community and user groups, and women's and youth groups</p> <p>User survey, report of MOH, MIPU/PWD</p> <p>Reports of relevant community and user groups, and women's and youth groups, user survey</p> <p>Reports of PVMC</p>	
Key Activities with Milestones <p>1.1 Rehabilitate 13.3km of selected roads by 31 December 2018.</p> <p>1.2 Upgrade stormwater drainage systems within 3 catchments in Port Vila by 31 December 2018.</p> <p>1.3 Finalize Greater Port Vila Traffic and Pedestrian Management Plan by 31 December 2014.</p> <p>2.1 Design and construct a sludge treatment and disposal facility by 31 December 2018.</p> <p>2.2 Draft operational procedures in the removal, transport, and treatment of sludge from septic tanks to the sludge treatment and disposal facility by 31 December 2017.</p> <p>2.3 Develop operational guidelines based on sustainable drainage systems principles and techniques by 31 December 2017.</p> <p>2.4 Construct new public toilet and associated wastewater treatment facilities by 31 December 2017.</p> <p>3.1 Consult women's groups on site selection and design of sanitation facilities and maintenance activities by 31 December 2014.</p> <p>3.2 Construct 10 multipurpose, multi-user sanitation facilities (toilet, washing and bathing facilities) in identified villages and periurban settlements by 31 December 2017.</p> <p>3.3 Develop approach and methodology on awareness raising, information dissemination, and education related to health and hygiene via NGOs by 31 December 2017.</p>			

3.4	Conduct health and hygiene awareness and education program by 31 December 2017.
4.1	Design and deliver formal and in-service training in road, drainage and sanitation system maintenance, outsourcing and contract management for government stakeholders by 31 December 2017.
4.2	Implement training for civil society in in hygiene and sanitation construction, management and maintenance of household and communal sanitation facilities by 31 December 2017.
Inputs (\$, million)	
ADB	
	Loan
	\$4.43
Government of Australia	
	Grant
	\$25.15
Global Environment Facility	
	Grant
	\$2.87
Government	
	\$3.06
Assumptions for Partner Financing	
Not Applicable	

^a = Based on US\$-A\$ and US\$-SDR current exchange rates prevailing on 22 September 2016.

^b = Amount includes ADB's administration fee, audit cost, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant contribution by the Government of the Commonwealth of Australia.

KAP = knowledge, attitudes, practices; MFEM = Ministry of Finance and Economic Management; MIPU = Ministry of Infrastructure and Public Utilities; MOH = Ministry of Health; PVMC = Port Vila Municipal Council; NGO = non-governmental organization; PWD = Public Works Department (a division of MIPU); WHO = World Health Organization

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/MC/?id=42391-013-3>

1. Performance Overview
2. Revised Project Administration Manual

Supplementary Documents

3. Updated Risk Assessment