



Report and Recommendation of the President to the Board of Directors

Project Number: 42391
November 2011

Proposed Loan and Administration of Grants Republic of Vanuatu: Port Vila Urban Development Project

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 11 October 2011)

Currency Unit	–	vatu (Vt)
Vt1.00	=	\$0.01
\$1.00	=	Vt96.50
A\$1.00	=	\$1.00

ABBREVIATIONS

ADB	–	Asian Development Bank
AusAID	–	Australian Agency for International Development
CDM	–	clean development mechanism
DEPC	–	Department of Environmental Protection and Conservation
EIRR	–	economic internal rate of return
MFEM	–	Ministry of Finance and Economic Management
MIPU	–	Ministry of Infrastructure and Public Utilities
O&M	–	operation and maintenance
PAA	–	Priorities and Action Agenda
PAM	–	project administration manual
PWD	–	Public Works Department
STP	–	sludge treatment plant
VPMU	–	Vanuatu Project Management Unit

NOTE

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

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PROJECT AT A GLANCE

1. Project Name: Port Vila Urban Development Project		2. Project Number: 42391-013	
3. Country: Vanuatu		4. Department/Division: Pacific Department/Urban, Social Development & Public Management Division	
5. Sector Classification:			
		Sectors	Primary
		Water supply and other municipal infrastructure and services	√
		Subsectors	
		Urban sector development	
6. Thematic Classification:			
		Themes	Primary
		Economic growth	√
		Social development	
		Environmental sustainability	
		Capacity development	
		Subthemes	
		Widening access to markets and economic opportunities	
		Disaster risk management	
		Urban environmental improvement	
		Institutional development	
6a. Climate Change Impact		6b. Gender Mainstreaming	
Adaptation		High	
		Gender equity theme (GEN)	
		Effective gender mainstreaming (EGM)	
		Some gender benefits (SGB)	
		No gender elements (NGE)	
7. Targeting Classification:		8. Location Impact:	
		National	
		Rural	
		Urban	
		Medium	
		Low	
		High	
9. Project Risk Categorization: Complex			
10. Safeguards Categorization:			
		Environment	B
		Involuntary resettlement	B
		Indigenous peoples	C
11. ADB Financing:			
		Sovereign/Nonsovereign	Modality
		Sovereign	SDP - Project loan
		Total	Asian Development Fund
			Amount (\$ Million)
			5.0
			5.0
12. Cofinancing:			
		Financier	Category
		Australian Grant	Official-Grant
		ATF - Australian TA Grant	Official-Grant
		Total	Amount (\$ Million)
			25.6
			5.4
			31.0
		Administration Type	
		Full	
		Full	
13. Counterpart Financing:			
		Source	Amount (\$ Million)
		Government	3.1
		Total	3.1
14. Aid Effectiveness:			
No Aid Effectiveness available.			

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan, and (ii) proposed administration of grants to be provided by the Government of Australia, both to the Republic of Vanuatu for the Port Vila Urban Development Project.

2. The proposed Project will improve drainage, roads, and sanitation systems in the greater Port Vila municipality and adjacent urban and periurban areas. The project will implement the recommendations of the drainage and sanitation master plan,¹ which identified priority interventions for improved access and support to affordable, sustainable, and effective sanitation, roads, and storm water drainage services, contributing to climate-resilient urban development in and around Port Vila.²

II. THE PROJECT

A. Rationale

3. Port Vila, with about 44,000 residents, is the largest population center, main commercial center, and seat of government in Vanuatu. It has expanded beyond its originally defined urban boundaries as a result of rapid economic development, rural–urban migration, and proliferation of informal settlements. The estimated population of the resulting Greater Port Vila area in 2009 was 58,000 residents. By 2025, this figure may reach 109,000. This does not take into account the estimated 3,000–4,000 tourists that visit Port Vila at a given time. The tourism sector is the lifeline of the national economy. Urban development and the quality of urban services in Port Vila have significant implications for the tourism led economic growth and overall development of Vanuatu. Significant inadequacies continue to exist in key areas of urban development, particularly in drainage, roads, sanitation, and hygiene services. The poor conditions of these services are adversely affecting public health, economic activities, and the overall quality of life of Port Vila residents and visitors.

4. Major surfaced roads are heavily potholed and deteriorated as a result of deferred maintenance and the absence of a system to drain the storm water resulting from frequent heavy downpours. The runoff from these downpours causes flooding and chaotic conditions for the vehicle and pedestrian traffic of the city, resulting in considerable financial and economic losses. All road debris (such as silt, grit, garbage, waste, and oil) reach the sea, damaging the marine environment. The system for removal and disposal of human waste from households and business premises is environmentally unsatisfactory, as untreated sludge is disposed of in open pits near major waterways, exposing the urban population to waterborne diseases. Communities as well as major public areas of the central business district lack safe and hygienic sanitation facilities. Vanuatu is also extremely vulnerable to natural disasters because of its geographical location in the “ring of fire” and the “cyclone belt” of the Pacific. It is at risk from a wide range of climate-related hazards, such as tropical cyclones and floods that are expected over time to increase in severity and frequency, warranting emphasis on climate resiliency.

5. Sustainable urban development through improved access to basic services, such as sanitation, drainage facilities and urban infrastructure, is an important priority for the government

¹ Asian Development Bank (ADB). 2009. *Technical Assistance to the Republic of Vanuatu for Preparing the Port Vila Urban Development Project*. Manila.

² The design and monitoring framework is in Appendix 1.

under its Priorities and Action Agenda (PAA), 2006–2015³ and a medium-term action program entitled Planning Long, Acting Short Action Program, 2009–2012.⁴ This is one of three core sectors⁵ for support under the country partnership strategy of the Asian Development Bank (ADB) for Vanuatu, 2010–2014.⁶ The Australian Agency for International Development (AusAID), the Japan International Cooperation Agency, and the New Zealand Aid Programme are providing a wide range of support covering urban, rural, and interisland transport and capacity building. ADB and AusAID are expected to assist the government to improve the urban infrastructure and services in Port Vila and its periurban areas. In financing and implementing the PAA, the government's strategy is to maximize grant resources, especially from bilateral sources. The government recognizes that partnership with ADB in conjunction with bilateral partners can result in a higher level of resource flow for PAA, and greater ability to design and implement integrated projects such as this proposal.⁷ The project design took into consideration the potential for user management and public private partnership in the operation of project assets, utilizing experience from the Port Vila water supply system.

6. The proposed project is designed to implement the investment plan to improve drainage and the associated road network as part of the drainage and sanitation master plan for 2011–2025.⁸ For improving sanitation, it will construct a sludge treatment plant that will eventually be the site for a fully piped sanitation system for greater Port Vila. An integrated approach will be used to ensure active involvement of the youth and women in hygiene and health education and awareness activities in the periurban, informal, and rural settlements. Explicit methodology will be developed for public–private partnerships, and community and civil society participation as well as labor-based approaches in the construction, and operation and maintenance (O&M) of roads, drainage, sanitation, and hygiene facilities. Mitigation of adverse environmental impacts and appropriate investment in climate proofing will also be included in the project.

B. Impact and Outcome

7. The expected impact of the project is sustained urban development of Port Vila. The expected outcome is that the government has sustainably improved the hygiene situation and reduced water-based hazards in Port Vila.

C. Outputs

8. **Output 1: The government has improved the road network and drainage system in greater Port Vila.** This output will comprise (i) repair, improvement and/or renewal of roads with kerbs, footpaths, and other essential road features; and (ii) provision of a new storm water drainage system and improvement of existing drains in the highest priority flood-prone areas together with new channels. A total of 7 square kilometers of drainage basins in five catchment areas will be supported for roads and drainage improvements. About 22 kilometers of roads will be rehabilitated within these five catchment areas.⁹ The project will install grease and silt traps but its scope and design will be open to incorporate additional measures that will allow further

³ Government of Vanuatu, Ministry of Finance and Economic Management. 2006. *Priorities and Action Agenda 2006–2015: An Educated, Healthy and Wealthy Vanuatu*. Port Vila.

⁴ The program was developed with support from ADB. 2004. *Technical Assistance to the Republic of Vanuatu for a Medium-Term Strategic Framework*. Manila.

⁵ The two other sectors are transport and energy.

⁶ ADB. 2009. *Country Partnership Strategy: Vanuatu, 2010–2014*. Manila.

⁷ Sector Assessment Summary (accessible from the list of linked documents in Appendix 2).

⁸ ADB. 2010. *Port Vila Urban Development Project Phase 1: Situation Analysis and Master Plan Formulation*. Manila.

⁹ The five areas are (i) Tebakor, (ii) Central Business District, (iii) Lini Highway North, (iv) Seven Stars Ohlen, and (v) Seven Stars Anabrou.

treatment of storm water runoff. During preparation of the detailed design, the extent of environmental impacts will be examined and further appropriate actions will be recommended.

9. Output 2: The government has improved the sanitation system in greater Port Vila.

This output will improve the disposal and treatment of the sludge from domestic and commercial septic tanks by (i) improving the management of the privately operated sludge collection and disposal system, (ii) designing and constructing a sludge treatment plant (STP) and disposal facility, (iii) transferring the sludge disposal site from its current location in Bouffa to a new site for disposal and treatment of sludge (which will also be the site for sewage treatment in the future), and (iv) constructing a biogas plant as a clean development mechanism (CDM)¹⁰ project as an integral part of the STP. The STP will be the first step toward a piped sewerage system. The biogas plant will generate electricity for use by the STP.

10. Output 3: Central area and settlement communities use improved hygiene facilities.

This output will (i) set up a number of multipurpose, multi-user sanitation facilities including toilets, washing, and bathing facilities in villages and periurban settlements, selected on the basis of a demonstrated need and willingness by the community to contribute to the O&M of facilities; (ii) upgrade, rebuild, or refurbish public toilets, principally in the city center and located at major publicly owned sporting facilities; and (iii) involve women in site selection and design of sanitation facilities and maintenance activities.

11. Output 4: Government agencies and community and user organizations have the capacity to manage sanitation, roads, and drainage systems effectively and efficiently.

Training programs will be implemented on (i) planning and policy improvement in hygiene and sanitation, drainage, and road development such as preparation and consultation on the sanitation policy, building code, Public Roads Act, and Traffic Management Act; (ii) O&M, monitoring, and quality control of urban road networks and sanitation and drainage facilities; (iii) property tax administration and contract management under public-private partnership; (iv) hygiene and health education and awareness for community organizations; and (v) household sanitation improvement with direct participation of women and youth. An O&M plan will be developed for the project assets in consultation with other development partners, key government agencies, and the private sector, drawing lessons learned from other projects. Specific training will be provided on (i) gender awareness in hygiene and sanitation for government agencies, and community organizations, and (ii) O&M of communal sanitation facilities for women and youth groups. All training programs will be developed and implemented in close consultation with other development partners' programs, such as the technical and vocational education and training of AusAID. The approach and methodology and conduct of awareness raising, education, and information dissemination on sanitation, and hygiene and health promotion will be coordinated with relevant agencies including NGOs, the domestic private sector, operators of commercial vessels, hotels, and restaurants.

12. Output 5: Efficient project management services are provided.

This output will provide necessary technical support and advisory services to the executing agency and implementing agencies in implementing the project efficiently. Advisory, training, and support services will be provided through the engagement of international and national experts for (i) project administration; (ii) preparation and implementation of a project performance monitoring system; (iii) design, procurement, and contract supervision; (iv) gender mainstreaming in project management; (v) project benefit and monitoring and evaluation system development; and (vi) climate proofing of infrastructure.

¹⁰ The CDM allows emission-reduction projects in developing countries to earn certified emission reduction credits, each equivalent to one ton of carbon dioxide.

D. Investment and Financing Plans

13. The project is estimated to cost \$39.1 million (Table 1). Detailed cost estimates by expenditure category and financier are included in the project administration manual (PAM).¹¹

Table 1: Project Investment Plan

Item	Amount ^a (\$ million)
A. Base Cost^b	
1. Road networks and drainage systems improvement	21.6
2. Sanitation system	5.4
3. Hygiene improvements	0.9
4. Institutional strengthening	1.5
5. Project management	4.7
Subtotal (A)	34.1
B. Contingencies^c	4.9
C. Financing Charges during Implementation^d	0.1
Total (A+B+C)	39.1

^a Includes taxes and duties of about \$2.6 million to be financed by the government.

^b In mid-2011 prices.

^c Physical contingencies at 6.5% for civil works, equipment and materials purchases, surveys, training, and studies. Price contingencies at 0.7% in 2011, 0% in 2012, and 0.5% in 2013 and onward for foreign currency costs; 3.9% in 2011, and 3% in 2012 and onward for local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Interest during construction is computed at 1% per annum.

Sources: Government of Vanuatu and Asian Development Bank estimates

14. The government has requested a loan in various currencies equivalent to SDR 3,174,000 from ADB's Special Funds resources to help finance the project. The loan will have a 32-year term, including a grace period of 8 years; an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; and such other terms and conditions as set forth in the draft loan agreement. The interest during construction on the ADB loan is to be capitalized. Transportation and insurance costs may be financed by loan and grant proceeds.

15. The Government of Australia will provide grant cofinancing of \$31.0 million consisting of \$5.39 million through the Memorandum of Understanding on Channel Financing between the Government of the Commonwealth of Australia and ADB, and around \$25.61 million (equivalent to A\$25.61 million) through a project grant, to be administered by ADB. The government will provide counterpart funding of \$3.10 million of the project costs including taxes, duties, and land for the STP. The financing plan is in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
ADB loan	5.00	12.8
Government of Australia	CFA	5.39
	Project grant ^a	25.61
Government	3.10	7.9
Total	39.10	100.0

ADB = Asian Development Bank, CFA= Memorandum of Understanding on Channel Financing between the Government of the Commonwealth of Australia and ADB (CFA)

^a This 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 Australia.

Sources: Government of Vanuatu and ADB estimates.

¹¹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

E. Implementation Arrangements

16. The executing agency for the project will be the Ministry of Finance and Economic Management (MFEM). The Ministry of Infrastructure and Public Utilities (through its Public Works Department) and the Department of Environmental Protection and Conservation (DEPC) will be the key implementing agencies. The MFEM will establish a Vanuatu Project Management Unit (VPMU) as a dedicated unit for managing large and nationally significant projects, with allocation of budget and core staff. The VPMU will also be responsible for day-to-day project implementation. Consulting services will be provided to assist the VPMU in project implementation. Consulting firms will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2010, as amended from time to time) using quality- and cost-based selection with full technical proposals, except for the project advisor, who will be recruited on an individual selection basis. The VPMU steering committee, representing the MFEM and key implementing agencies, will provide guidance and direction for the project. Implementation arrangements are summarized in Table 3 and described in detail in the PAM.

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	June 2012–May 2017		
Estimated closing date	November 2017		
Management			
(i) Oversight body	VPMU steering committee		
(ii) Executing agency	MFEM		
(iii) Key implementing agencies	MIPU through the PWD and DEPC		
(iv) Implementation unit	Consultants, about 122 person-months international and 479 person-months national; additional consultants will be mobilized as required.		
Procurement	International competitive bidding	3 contracts	\$26.74 million
	National competitive bidding	1 contracts	\$0.88 million
	Shopping	1 contracts	\$0.04 million
Consulting services	QCBS 80:20, FTP	587 person-months	\$4.04 million
	ICS	14 person-months	\$0.45 million
Retroactive financing and/or advance contracting	Advance action for preparation and procurement of first packages of works and for recruitment of consultants for implementation assistance. ^a No retroactive financing is needed.		
Disbursements	The loan and grant (2) proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2007, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank, DEPC = Department of Environmental Protection and Conservation, FTP = full technical proposal, ICS = individual consultant selection, MFEM = Ministry of Finance and Economic Management, MIPU = Ministry of Infrastructure and Public Utilities PWD = Public Works Department, QCBS = quality- and cost-based selection, VPMU = Vanuatu Project Management Unit.

^a All advance action on procurement of works and recruitment of consultants will be financed from ongoing ADB. 2009 *Technical Assistance to the Republic of Vanuatu for Preparing the Port Vila Urban Development Project*. Manila (TA 7345-VAN).

^b For guidance, refer to ADB's *Loan Disbursement Handbook* (2007, as amended from time to time) and *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

17. A master plan for drainage and sanitation assessed the conditions of existing physical facilities and the adequacy of services, along with current and projected demand for drainage and sanitation services. This was followed by planning area studies including site selection, engineering requirements, a detailed investment program, proposed project outputs and activities, implementation arrangements, and project management structure. The technical assessment identified areas most affected by road and drainage problems, which led to the preparation of a plan of action and the proposed project. An environmentally safe methodology for the final disposal of human wastes was also identified, which comprises safe removal and disposal at the project-financed STP and integrated biogas plant to generate electricity for the STP. The potential for developing a CDM project through the STP and biogas plant was also examined. Social studies identified those areas that are in greatest need of improved public and community sanitary facilities. Because of the limited capacity in the domestic industry, most construction will need to be done by international firms. All designs include climate change adaptation strategies, developed in accordance with projections from the Intergovernmental Panel on Climate Change that allow for a 0.2 meter rise in sea level over the next 50 years.

18. To determine the necessary institutional reforms, analyses examined the structure and staffing of the relevant government agencies, existing legislation and regulations, and capacity for public administration. Policy and legislative reforms such as the sanitation policy, public roads act, traffic management act, and national building code were identified to complement the infrastructure and service support scheme that will improve the overall viability of the sector. The project will provide support to the DEPC to (i) initiate policy discussions and dialogues with user groups on available options and associated projects related to waste treatment; (ii) establish strong engagement and partnerships with the business community, comprising commercial and tourist vessels, and hotels and restaurant operators for awareness raising on environmental standards; and (ii) oversee early compliance with appropriate disposal and treatment of wastes.

B. Economic and Financial

19. Economic benefits include (i) improved road access, significant vehicle operating cost savings, and decreased travel time; (ii) flood management and flood damage prevention; (iii) solving sanitation and health problems, resulting from existing open-air dumpsite, via an STP; (iv) improved hygiene from building new and upgrading existing communal public toilets; and (v) strengthened institutional capacity of government agencies and user communities to manage the road, drainage, and sanitation systems.

20. The economic internal rate of return (EIRR) is estimated as 23.4%. The EIRR for the sludge facility includes the economic return from a biogas plant through cogeneration of electricity and carbon credit as a CDM project.¹² Sensitivity analyses for the individual outputs and the overall project indicate the EIRRs are robust. There are also significant nonquantifiable benefits such as improved living conditions and better environment, plus multiplier effects, particularly from the likely increase in the demand for services by tourists and inward investment as core infrastructure and amenities in the capital are improved.

¹² The CDM revenue will accrue to the MFEM.

21. The fiscal impacts and sustainability analysis conducted during the preparation of the project suggest a strong commitment of the government and its policies toward sustainable urban development, particularly on sanitation and hygiene. However, the government's current O&M budget is inadequate to sustain the regular repair and maintenance of the roads and drainage infrastructure.¹³ The government's PAA strategy has identified the provision of commercial, high-quality, efficient, and competitively priced infrastructure, utilities, and services, either through public enterprises or through private sector partnerships and competition. A well-engineered, high quality road and drainage network that is durable and has minimal periodic maintenance requirements is envisioned. Further guidance to the government on different fiscal options for O&M will be provided through the extended phase of the project preparatory technical assistance (footnote 1) and during the early part of project implementation.

22. The MFEM will ensure the financial sustainability of O&M of the road and drainage systems through national budget provisions.¹⁴ The project will support development of a long-term O&M financing plan including (i) the sustainability of the O&M budget and its utilization, (ii) identification of specific outsourcing models, and (iii) capacity building of the domestic private sector. O&M of the STP will be minimal as the facility will be operated through a service contract with the private sector that will collect fees. The government will review the necessary fees to be collected by the private sector. Users' fees for public toilets will be used to support O&M, although the specific O&M arrangements will not be determined until detailed design stage.¹⁵

C. Governance

23. The capacity of the MIPU and PWD to manage finances and undertake procurement activities for large development projects like this project is low. The government plans to establish the VPMU before loan effectiveness as a dedicated unit for managing large and nationally significant projects with allocation of budget and core staff. The VPMU will need significant capacity building in financial management in general, and specifically in applying ADB's disbursement policies and procedures. Institutional and structural reform of the PWD is under way with AusAID assistance, which will improve institutional capacity. The project will engage financial management and accounting experts to support the VPMU. The MFEM will prepare an anticorruption strategy and action plan for the project, and establish a complaint mechanism. The VPMU steering committee will have an oversight role to ensure good governance of the project.

24. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the MFEM, MIPU, and PWD. The specific policy requirements and supplementary measures are described in the PAM (footnote 11).

D. Poverty and Social

25. Vanuatu's United Nations Development Programme human development index rank is 126 out of 177,¹⁶ which is mid-range among its neighboring Pacific island nations. The high urbanization rate of Port Vila at 4.2% indicates a need for increasing quality services, including

¹³ Operation and Maintenance Approach for Port Vila Urban Development Project Assets (accessible from the list of Supplemental Documents in Appendix 2).

¹⁴ The preliminary estimate of O&M expenditure for project roads and drainage infrastructure is \$400,000 based on 2% of investment costs; this will be confirmed during detailed design stage.

¹⁵ An analysis of the estimated expenditure and revenue of the municipality-managed multipurpose, multi-user facilities suggests that these units will realize significant net income, provided the user charge collection system is improved to ensure transparency and plug leakages, if any.

¹⁶ United Nations Development Programme. 2009. *Human Development Report*. New York City.

those associated with public and primary health development, inclusive of sanitation, drainage, and health and hygiene development.

26. The project will contribute to poverty reduction and socioeconomic development in the project area by improving urban infrastructure such as sanitation, roads, drainage, public toilets, and bathing facilities along with associated community hygiene capacity development. The project will improve health status and access to social services for the disadvantaged population, such as people living in settlement communities, women, and people with disabilities in the project area.¹⁷

27. The project is classified effective gender mainstreaming. It will take into account women's preferences for construction of roads and drainage systems and communal sanitation facilities in the urban and periurban settlements, including their administrative role in project implementation. The project will empower women through capacity development activities. A gender action plan has been prepared for this project.¹⁸

E. Safeguards

28. **Environment.** The project is categorized environmental category B. The initial environmental examination was carried out in accordance with ADB's Safeguard Policy Statement (2009).¹⁹ The initial environmental examination found potential impacts to include short-term traffic congestion during construction, damage to beaches and coastal erosion caused by inappropriate sourcing of sand and other construction materials, and increased sediment loading and discharge of pollutants during operation. All required mitigation measures are defined in detail in an environmental management plan, and include adherence to accepted standards in engineering design, following best practices during construction and O&M, and giving due attention to climate change considerations, which will result in the project being climate-proofed. The incremental cost of climate-proofing and mitigating emissions from the STP is about \$2 million. The government's assessment and clearance procedure is compatible with ADB's environmental safeguard requirements.

29. **Involuntary resettlement.** The project is classified category B for involuntary resettlement. A resettlement plan has been prepared for the sludge treatment facility, which requires acquisition of 6.5 hectares of land. The rehabilitation of the road and drainage network is not expected to require acquisition of land. As all works will be undertaken within existing road corridors, a resettlement framework has been prepared to address any impacts that may arise during implementation. The community sanitation facilities will be located on the land of the respective communities and due diligence under the project preparatory technical assistance confirmed that there will be no land acquisition and resettlement issues. The resettlement framework and resettlement plan have been endorsed by the government and posted on the ADB website.²⁰

30. **Indigenous peoples.** The project is classified category C for indigenous peoples. Melanesians comprise the vast majority of Vanuatu's population. The project is not expected to impact any distinct and vulnerable group of indigenous peoples as defined under the Safeguard Policy Statement. It will be ensured that local communities receive culturally appropriate benefits, actively participate in the project, and do not suffer any adverse impacts.

¹⁷ Summary Poverty Reduction and Social Strategy (accessible from the list of linked documents in Appendix 2).

¹⁸ Gender Action Plan (accessible from the list of linked documents in Appendix 2).

¹⁹ Initial Environmental Examination (accessible from the list of linked documents in Appendix 2).

²⁰ Resettlement Framework and Resettlement Plan (accessible from the list of linked documents in Appendix 2).

F. Risks and Mitigating Measures

31. Major risks and proposed mitigating measures are summarized in Table 4.²¹

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Technical (inadequate technical designs, underestimation of infrastructure requirements, land for sludge treatment plant, delay in registering the project with the CDM executive board)	Implementation will follow the prescribed engineering design standards and requirements for registering with CDM executive board to be supervised by an internationally reputed specialist consultant. The government will acquire the land for sludge treatment plant prior to disbursements of financing in respect of outputs 2 (improved sanitation) and 3 (improved hygiene), and in accordance with the resettlement plan. The government will resolve all land related issues.
Financial (inadequate budgetary allocations as a result of underestimated costs or potential cost of defending claims by contractors)	The VPMU will adopt a conservative approach with respect to cost estimates and required resources, and ensure a competitive tender process with the assistance of the international consultant. Improved financial management will be supported by the project. The VPMU will also provide audited annual reports.
Procurement delays (general lack of procurement capacity in Vanuatu and in MIPU and MFEM)	An international consultant prior to and during implementation will support the MFEM in the preparation of bidding documents, evaluation of bids, contract awards, and advanced procurement.
Project management (MFEM and implementing agencies do not have the capacity to manage projects on their own)	The VPMU will be staffed with qualified personnel and trained in construction supervision, contract management, financial management, safeguards monitoring, reporting, and performance monitoring and disbursements.
Institutional reforms and sector restructuring (government not progressing with timely policy and institutional reforms)	Close collaboration and cooperation between development partners and the MFEM that involves regular consultations, review missions, reporting on the progress on implementation of civil service reforms, and performance audit.
Corruption (no effective strategy or action plan)	Preparation of an anticorruption strategy and action plan by the MFEM.
O&M (low institutional capacity of MIPU/PWD and inadequate finances to provide delivery of basic services)	The project will advise the government on (i) improving revenue collection, (ii) project and asset management to improve infrastructure sustainability, and (iii) engaging the private sector in O&M.

MFEM = Ministry of Finance and Economic Management, MIPU = Ministry of Infrastructure and Public Utilities, O&M = Operation and Maintenance, PWD = Public Works Department, VPMU = Vanuatu Project Management Unit.
Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

32. The government has assured ADB that implementation of the project will conform to all applicable ADB policies including those concerning anticorruption, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM, and to be set out in the legal agreements and loan documents. The government will also agree with ADB on specific covenants for the project which will be set out in the legal agreements.

33. The government will assure ADB that sustainable O&M of infrastructure and facilities financed under the project will be ensured by (i) providing sufficient recurrent budgetary resources for O&M, (ii) an efficient and appropriate revenue collection system and continuous improvement of this system, (iii) providing training to the agencies involved in revenue collection, and (iv) maximizing private sector participation in O&M.

²¹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

34. Prior to loan effectiveness, the government shall have (i) established the Vanuatu program management unit at MFEM as described in the PAM; and (ii) appointed at least five permanent staff to key positions within MIPU.
35. Prior to loan effectiveness, the cofinancing agreement with AusAID shall have been executed, and all conditions for effectiveness of the externally financed grant agreement between ADB and the recipient shall have been fulfilled.
36. Within six months of loan effectiveness, the government will establish a project performance monitoring system acceptable to ADB.
37. Within 18 months of loan effectiveness, the government will (i) draft and submit the following legislations to its parliament: the Public Road Act, Traffic Management Act, and Building Standards Control Act; and (ii) cause the office of the Auditor General to undertake a performance audit of PWD.
38. Prior to disbursement of financing in respect of output 2 (improved sanitation), the government will acquire the land for the STP in accordance with the resettlement plan.

V. RECOMMENDATION

39. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve
- (i) the loan in various currencies equivalent to SDR 3,174,000 to the Republic of Vanuatu for the Port Vila Urban Development Project, from ADB's Special Funds resources with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board,
 - (ii) the administration by ADB of the grant not exceeding equivalent of \$5,389,000 to the Republic of Vanuatu for the Port Vila Urban Development Project to be provided by the Government of Australia through the Memorandum of Understanding on Channel Financing between the Government of the Commonwealth of Australia and ADB, and
 - (iii) the administration by ADB of the grant not exceeding the equivalent of \$25,611,000 to the Republic of Vanuatu for the Port Vila Urban Development Project to be provided by the Government of Australia.

Haruhiko Kuroda
President

17 November 2011

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Urban development of Port Vila is sustainable.</p>	<p>By 2020: 50% decrease in damage from floods, to public and private infrastructure and properties, and number of affected people</p> <p>Avoid additional 4,200 tons of CO₂ per annum by end of 2015</p>	<p>Reports of relevant government and nongovernment institutions</p> <p>Designated national agency report on CDM projects</p>	<p>Assumption The government is committed to providing basic urban services</p> <p>Risk The government is unable to provide in its national budget the required costs to provide the delivery of basic services</p>
<p>Outcome The Government of Vanuatu has sustainably improved the hygiene situation and reduced water-based hazards in Port Vila.</p>	<p>The government maintains its initial budget commitment of \$400,000 per annum for maintenance works</p> <p>By mid 2017: 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).</p> <p>Incidence of diarrhea in Port Vila reduced by half from 892 reported cases per 1,000 population (WHO data).</p> <p>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).</p>	<p>Reports of MFEM and MIPU</p> <p>Reports of PVMC, MOH, Statistics Office</p> <p>Reports of PVMC, MOH, WHO data</p> <p>Commuter survey and traffic survey data from MIPU and Statistics Office</p>	<p>Assumptions The government is committed to provide budget for operation and maintenance of project assets</p> <p>Transparent procedures followed in processing maintenance contracts of project assets and in accordance with existing laws</p> <p>The government is fully committed to operate and maintain the drainage and sanitation facilities established by the project.</p> <p>The drainage and sanitation facilities are adequately climate-proofed.</p> <p>Solid wastes are adequately managed.</p> <p>Risk No effective anti-corruption strategy or action plan</p>
<p>Outputs 1. The government has improved the road network and drainage system in greater Port Vila.</p>	<p>By mid 2017:</p> <p>1.1 About 22 km of road rehabilitated</p> <p>1.2 25 km of underground pipe drain installed</p> <p>1.3 8 km of surface drainage open channels; 0.65 km of tunnel; and +/- 7.0 km² area drained in five drainage basins</p> <p>1.4 Number of seasonal</p>	<p>Reports of PWD and PVMC</p> <p>Reports of PWD and PVMC</p> <p>Reports of PWD and PVMC</p> <p>Reports of PWD and</p>	<p>Assumptions Proper coordination among government departments concerned and roles clearly delineated on project implementation</p> <p>Relevant institutions are adequately staffed and equipped with the required expertise on sanitation and</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	flooding problems in the five catchment areas reduced to zero per year	PVMC	drainage.
2. The government has improved the sanitation system in greater Port Vila.	By mid 2017: 2.1 100% of septic tanks desludged at the sludge treatment plant	Reports of PWD and PVMC	The government continues to support the biogas component of the project.
3. Central area and settlement communities use improved hygiene facilities.	3.1 Conditions of 10 public and communal toilets improved in eight rural and periurban areas and in the central business district 3.2 50% of community sanitation facilities are operated by women's groups in the project area (currently none are operated by women's groups). 3.3 About 4,500 households served with improved sanitation (baseline in 2010 is less than 20%)	Reports of PWD, MOH, WHO data, Statistics Office Reports of PVMC, community and user groups Reports of MOH, WHO data, Statistics Office, user survey	Appropriate private entrepreneurs identified and sufficient resources allocated for operation of the biogas component The biogas project will be registered with the CDM executive board under UNFCCC. Risks Infrastructure capital and maintenance costs may not be affordable and the government may not be able to maintain the assets. Lack of progress on policy and institutional reforms
4. Government agencies and communities and user groups have the capacity to manage sanitation, roads, and drainage systems effectively and efficiently.	4.1 Capacities of at least 50 government staff (50% being women) improved to manage and maintain sanitation, roads, and drainage facilities 4.2 Drainage maintenance follows 100% annual maintenance schedule 4.3 100% of community sanitation facilities comply with sanitation standards at any time 4.4 100 women are trained in management of sanitation and hygiene facilities maintenance activities.	Reports of relevant government institutions, community and user groups, and women's and youth groups Reports of PWD, relevant community and user groups, and women's and youth groups User survey, report of MOH, MIPU/PWD Reports of relevant community and user groups, and women's and youth groups, user survey	Weak and fragmented institutional arrangements may lead to poor coordination and follow-up on the government's role in project implementation. The government may not be prepared to implement a system of sustainable financing mechanisms Delay in land acquisition for sludge treatment plant Delay in project being registered with the CDM executive board because of validation issues Delay in procurement due to lack of capacity Insufficient data monitoring and reporting
5. Efficient project management services are provided.	5.1 The project is implemented on time and within budget.	Reports of PVMC	

Activities with Milestones	Inputs
<p>1.1 Implement roads and drainage improvement and maintenance program (by Q1 2017)</p> <p>1.2 Surface and/or reconstruct roads, curbs, intersections, footpaths, and road features, based on the urban road renewal project preliminary design study (by Q1 2017)</p> <p>1.3 Construct new storm water drainage systems in the highest priority flood-prone areas together with new channels (by Q1 2017)</p> <p>2.1 Design and construct a sludge treatment and disposal facility (by Q4 2015)</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 Q2 2015)</p> <p>2.3 Develop operational guidelines based on sustainable drainage systems (SUDS) principles and techniques (by Q4 2016)</p> <p>2.4 Design and construct a biogas plant (by Q4 2015)</p> <p>2.5 Develop a CDM project for carbon credits (by Q4 2015)</p> <p>3.1 Conduct a survey of areas that need improved hygiene facilities (by Q3 2013)</p> <p>3.2 Consult women's groups on site selection and design of sanitation facilities and maintenance activities (by Q3 2013)</p> <p>3.3 Construct 10 multipurpose, multi-user sanitation facilities (toilet, washing, and bathing facilities) in identified villages and periurban settlements (by Q2 2014)</p> <p>3.4 Upgrade, rebuild, or refurbish existing public toilets in the city center and those located at major sporting facilities (by Q2 2014)</p> <p>3.5 Develop approach and methodology on and conduct awareness raising, information dissemination, and education related to health and hygiene (by Q2 2015)</p> <p>4.1 Conduct needs assessment for capacity building programs (by Q4 2012)</p> <p>4.2 Support DEPC to (i) initiate policy discussions and dialogues with user groups with respect to treatment of wastes, (ii) establish strong partnerships with the business community, and (iii) oversee follow through activities to ensure early compliance to appropriate disposal and treatment of wastes (by Q2 2015)</p> <p>4.3 Design a comprehensive training package in contract management, O&M, and roads development including planning and monitoring, and gender mainstreaming in hygiene and sanitation (by Q1, 2017)</p> <p>4.4 Prepare a sanitation and drainage maintenance plan (by Q2 2013)</p> <p>4.5 Develop mechanisms for private sector participation in the O&M of sanitation and hygiene facilities (by Q2 2014)</p> <p>4.6 Develop appropriate fiscal options and revenue collection system for project-established roads, drainage, sanitation, and hygiene facilities (by Q2 2014)</p> <p>5.1 Provide timely progress reports until completion of the project (until 2017)</p> <p>5.2 Develop and implement a project benefit monitoring and evaluation and gender-sensitive project management framework (by Q3 2013)</p> <p>5.3 Provide training and advisory services on project administration (by Q2 2014)</p>	<p>ADB: \$5.00 million</p> <p>Government: \$3.10 million</p> <p>CFA: \$5.39 million</p> <p>Government of Australia project grant: A\$25.61 million</p>

ADB = Asian Development Bank, CDM = clean development mechanism, CFA = Memorandum of Understanding on Channel Financing between Government of the Commonwealth of Australia and ADB, CO₂ = carbon dioxide, DEPC = Department of Environmental Protection and Conservation, km = kilometer, MFEM = Ministry of Finance and Economic Management, MIPU = Ministry of Infrastructure and Public Utilities, MOH = Ministry of Health, O&M = operation and maintenance, PVMC = Port Vila Municipal Council, PWD = Public Works Department, Q = quarter, UNFCCC = United Nations Framework Convention on Climate Change, WHO = World Health Organization.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

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

1. Loan Agreement
2. Sector Assessment (Summary): Urban Development
3. Project Administration Manual
4. Contribution to the ADB Results Framework
5. Development Coordination
6. Economic and Financial Analysis
7. Country Economic Indicators
8. Summary Poverty Reduction and Social Strategy
9. Gender Action Plan
10. Initial Environmental Examination
11. Resettlement Plan
12. Resettlement Framework
13. Risk Assessment and Risk Management Plan

Supplementary Documents

14. Biogas
15. Financial Management Assessment
16. Operation and Maintenance Approach to Port Vila Urban Development Project Assets
17. Procurement Capacity Assessment