VANUATU ROADS FOR DEVELOPMENT PHASE TWO

INVESTMENT DESIGN DOCUMENT

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Abbreviations

ADB	Asian Development Bank
AHC	Australian High Commission,
AIIC	Vanuatu
APPR	Aid Program Performance Report
AQC	Aid Quality Checks
AusAID	Australian Agency for Internat-
	ional Development (now DFAT)
CBC	Community Based Contract
CPO	Community Partnership Officers
CSU	Corporate Services Unit (in MIPU)
CTB	Central Tender Board
DAC	Development Assistance Committee
DFA	Direct Funding Arrangement
DFT	Department of Finance and
	Treasury (in MFEM)
DSPPAC	Department of Strategic Policy
	Planning and Aid Coordination
	(in PMO)
EoPO	End-of- Program Outcome
FA	Force Account
GDP	Gross Domestic Product
GESI	Gender equity and social inclusion
GfG	Governance for Growth Program
GoA	Government of Australia
GoV	Government of Vanuatu
GST	Goods and Services Tax
HIV/AIDS	Human Immuno-Deficiency Virus
	/Acquired Immuno-Deficiency
	Syndrome
IBC	Island Based Contractor
IDA	International Development Association (part of the WBG)
IDD	Investment Design Document
IE	Independent Evaluation (of the
1	R4D program)
IMF	International Monetary Fund
ISP	Implementation Service Provider
JICA	Japan International Cooperation
	Agency
M&E	Monitoring and evaluation
MCC	Millennium Challenge Corporation
MDB	Multi-lateral development bank
MDG	Millennium Development Goals
MFAT	(New Zealand) Ministry of Foreign
	Affairs and Trade
MFEM	Ministry of Finance and Economic
MIDU	Management
MIPU	Ministry of Infrastructure and Public Utilities
MIS	Management information system
NII J	management information system

MWG	Management Working Group
NC	National contractor
NMT	Non-motorized travel
NSDP	National Sustainable
0.014	Development Plan
0&M	Operations and maintenance
ODA	Official Development Assistance
PFM	Public financial management
PMO	Prime Minister's Office
PRIF	Pacific Region Infrastructure Facility
PSC	Public Service Commission/-
F30	Program Steering Committee
PVUDP	Port Vila Urban Development
	Project
PWD	Public Works Department (in
	MIPU)
R4D	Roads for Development Program
	(Phase 1)
R4D2	(Proposed) Roads for
	Development Program (Phase 2)
RAMS	Road Asset Management System
RIMS	Road Information Management
RMP	System Bick Management Blan
RRAP	Risk Management Plan Rural Roads Access Policy
SOR	Statement of Requirements
TA	Technical Assistance
TOR	Terms of Reference
TVET	Technical and Vocational
1.4	Education and Training
UNFCCC	United Nations Framework
	Convention on Climate Change
VAIP	Vanuatu Aviation Investment
	Project
VAT	Value Added Tax
VBC	Vanuatu Based Contractor
VIRIP	Vanuatu Infrastructure
	Reconstruction and Improvement
VISIP	Project
VISIF	Vanuatu Infrastructure Strategic Investment Plan
VNSO	Vanuatu National Statistics Office
VPMU	Vanuatu Project Management
VI INC	Unit
VUV	Vanuatu Vatu
VTIP	Vanuatu Transport Infrastructure
	Program
VTSSP	Vanuatu Transport Sector
	Support Program
WBG	World Bank Group

1. EXECUTIVE SUMMARY

Context

Building resilient infrastructure and an environment for economic opportunity is one of the strategic objectives of the Government of Australia's (GoA's) Vanuatu aid program. Australia's major infrastructure investment, the Roads for Development Program (R4D) and its predecessor, the Vanuatu Transport Sector Support Program (VTSSP) have supported improved economic growth and service delivery in rural areas through increased access to a better-maintained, affordable and integrated transport network. An independent evaluation in 2017 found that R4D had improved the capacity of the Government of Vanuatu's (GoV's) Public Works Department (PWD).

Australia also co-funds the Port Vila Urban Development Project (PVUDP) with the Asian Development Bank (ADB). The Governance for Growth Program provides regulatory reform and policy support to GoV.

Improving the national road network is a high priority for the GoV, with 2,100 km of national roads providing Vanuatu's predominantly rural population access to schools, medical facilities, and commercial and transport hubs. The new Vanuatu National Sustainable Development Plan 2016-2030 (NSDP) articulates this priority under the economic pillar. Seventy-six per cent of ni-Vanuatu live in rural areas, villages and small towns. Their social and economic well-being – and their resilience to natural disasters and climate change – depend greatly on accessibility; which means the road network. Maintaining and rehabilitating Vanuatu's rural arterial roads is a high-return investment opportunity for Australia.

There is a clear rationale for Australia to continue supporting Vanuatu's transport sector in light of its strategic value and effectiveness. Australia's support is highly valued, highly visible and provides an opportunity to engage in strategic discussions. The changing geopolitical context and entry of a range of donors and multilateral development banks in the infrastructure space, however, provides an opportunity for Australia to recalibrate our support in line with the Foreign Policy White Paper (Commonwealth of Australia 2017). Australia's 'stepped up' engagement in the Pacific aims to develop stronger partnerships for economic growth, stronger partnerships for security and stronger people-to-people links. In line with this, Australia will rebalance the emphasis on providing direct financial assistance for infrastructure works in the Pacific and provide more support to leverage increased financing from other sources, such as the multilateral banks. This will be complemented by more flexibility to invest in infrastructure projects of high strategic value to the Australia and Vanuatu Governments.

This shift is opportune as WBG, ADB, New Zealand, Japan and China are investing in economic infrastructure in Vanuatu on an unprecedented scale. Around US\$385 million of works are either ongoing or are committed for the next five years, with most in the transport sector. However, most of this will be capital investments in upgraded and renewed major assets. There is no programmed support for road maintenance.

In its current fiscal state, the GoV is able to budget and spend approximately 25-30 per cent of what is required to maintain its road network in 'good' to 'fair' condition. Moreover, GoV invests only a small fraction of what is required to bring its roads up to a 'maintainable' condition. A funding gap will continue; however Australian support can help reduce it.

Program Goal and Outcomes

The Vanuatu and Australian Governments agree that Roads for Development Program Phase 2 (R4D2) should help Vanuatu achieve the following two NSDP goals:

- A dynamic public sector with good governance principles and strong institutions delivering support and services to all citizens of Vanuatu.
- Sustainable and well-maintained infrastructure and services for all, through inclusive and effective partnerships.

The investment aims to achieve the following end-of-program (EOP) outcome:

 Ministry of Infrastructure and Public Utilities (MIPU)-PWD positively influences road funding outcomes and uses enhanced institutional capacity to manage the road network of Vanuatu more effectively and efficiently.

The EOP outcome addresses the road subsector's three overriding development constraints: (i) inadequate finance; (ii) limited capacity of organisations; and (iii) restrictive rules and regulations (refer analysis of development problems and issues, pages 4-5). Supporting the roads subsector on these three fronts will contribute directly to the target NSDP goals.

R4D2 will help PWD within MIPU influence both the supply and the demand for road subsector finance, and how efficiently the finance is used. The overall result will be a smaller funding gap.

Alongside this, R4D2 will help MIPU-PWD complete the transition from a traditional public works department to a modern-style road network manager, delivering on network performance targets rather that delivering road works. Reformed rules and regulations will give PWD room to innovate.

Investment success

A successful investment will see MIPU-PWD engaging with the Prime Minister's Office (PMO) and the Ministry of Finance and Economic Management (MFEM), and with development partners to increase road funding and to maximise economic and social benefits from road expenditure. National road policy and strategies will be setting realistic expectations and guiding the allocation of resources. PWD will be structured and staffed as a modern-style road network manager. Supportive government rules and regulations will be helping MIPU-PWD institute budgeting, financial management, and procurement reforms. Its managers and staff will be meeting agreed performance standards. Australian aid will have supported infrastructure innovation, good practice, and high impact investments.

Investment Description

R4D2 will be delivered under three 'streams' of outputs and activities:

Stream A: Road Network Operations

Output A1: Increased and sustainable year-round rural access:

Stream A support will be directed to PWD's road operations in the field and to PWD's divisional managers, staff, and contractors who deliver the operations. R4D2 will help PWD deliver GoV's national rural road access targets as set in the Rural Roads Access Framework (RRAF –policy and strategy that R4D helped prepare). The targets are clear and definitive, articulated as time-bound 'Rural Access Index' percentages, for each Province and for the whole of Vanuatu. GoV is currently reviewing its RRAF and will likely prescribe economic access targets as well as basic rural access targets, which R4D2 will align with if they become government policy.

- **Direct funding**: Through R4D2, Australia will add to PWD's annual road operations budget. The financing will procure road maintenance, road 'spot' improvements, and road rehabilitation (together, road 'operations') contracts.
- Advisers: Its is expected that the R4D2 Contractor will provide up to approximately three road operations engineers (ROEs), to work with PWD Divisional managers, staff, and contractors on delivering PWD annual operations work plans. The ROEs will rotate around PWD's six Divisions, guiding and mentoring, usually as technical peer reviewers, and providing construction advice, checking the quality of works, and helping PWD engineers certify completed works. ROEs and other technical experts will help Divisions roll-out innovations and demonstration projects. Technical experts will help contractors and communities meet gender equity and social inclusion (GESI) and environmental protection standards, with enhanced attention to climate and disaster risks, and help deliver training in the provinces. Stream A will deliver formal training to complement in-field mentoring and guidance.

Stream B: Sector Finance and Road Network Management

Output B1: Reduced road sub-sector funding gap

Stream B support will help MIPU-PWD and GoV close the roads funding gap, on three fronts:

- Supply-side: Help MIPU-PWD increase funding for road operations by:
 - Strengthening the case for larger national budget allocations through: (i) clear national road policy and targets; (ii) the achievement of targets; and (ii) positioning MIPU-PWD as a well-managed, effective and efficient road network manager that meets targets and achieves good value-for-money.
 - Negotiating larger road subsector support from the Asian Development Bank (ADB), World Bank Group (WBG), and other partners. Attracting partners to a sub-sector with good national policy and targets, and a good implementing agency.
 - Locking in medium-term funding expectations through a GoV roads medium-term expenditure framework.
- **Demand-side**: Help MIPU-PWD contain its road budget requirements:
 - Encourage a more affordable national road policy with targets focused on arterial roads, as per the Public Roads Act (2014) the core road network.
 - Help provincial administrations work with communities and others to keep feeder roads trafficable.
- **Efficiency**: Help MIPU-PWD prepare sound road operations annual plans and execute them as efficiently as possible (see Output B3 below for complementary reforms).

Output B2: Strong PWD road network management competencies and systems

GoV is preparing a Vanuatu Transport Plan 2030, which will include modernised institutional arrangements across the transport sector. These broader institutional reforms will not affect PWD's transition from a traditional public works agency to a modern-style road network manager, of both urban and rural roads. Stream B support will help PWD complete this transition. MIPU-PWD is committed, and earlier Australian support successfully started the process. R4D2 will build on this success and momentum in the following specific areas:

- Road operations annual work plans. Refining and institutionalising processes developed under R4D.
- **Organisational arrangements**. Matching PWD's structure and staffing to its road network manager function.
- **Corporate management**. Strengthen corporate and performance processes to provide a clearer, simpler focus for MIPU-PWD management.
- Road management and associated systems. Implementing supporting technical systems, including: (i) road inventory/asset management system; (ii) management information system (MIS); (iii) procurement and contract management system (integrated with the MIS); (iv) road operations progress reporting; and (v) financial management.
- **People management.** Improving people management, including: (i) a strategic people management plan, consistent with the transition to road network manager; (ii) improved human resource management system, integrated with the MIS; (iii) other people management processes; (iv) gender and other inclusivity awareness and actions programs; and (v) targeted capacity building programs for PWD staff and others with a stake in road management.
- Gender equality and social inclusion: Renew the emphasis on GESI across road operations, guided by a GESI plan.
- Other: Including: (i) reviewing, refining, and expansion (to cover urban arterial roads) of the GoV's RRAF; (ii) continually reviewing and updating PWD's roads and bridges design guides, standards and specifications; (iii) developing road operations innovations; (iv) ongoing review and improvement of other road operations approaches, including, for instance, the use of community-based contracting and multiyear, performance-based maintenance contracts; (v) developing ways to boost private sector involvement and financing; and (vi) helping PWD link with regional and other programs/players, for instance the Pacific Regional Infrastructure Facility (PRIF).

Output B3: Supportive reform and policy conditions:

R4D2 will help MIPU-PWD work with central agencies on the following reform and policy areas:

- **Budgeting and expenditure:** R4D2, with support from the Governance for Growth (GfG) program, will help MIPU-PWD advocate for a GoV three-year rolling roads medium-term expenditure framework.
- **Procurement:** R4D2 will help MIPU-PWD work with central agencies (principally, the PMO, MFEM, and the Central Tenders Board) on two procurement reform areas: (i) multi-year road maintenance contracts; and (ii) streamlined procurement processes and approval limits.
- **Reorganisation and civil service**: R4D2 will help PWD work with central agencies (principally, the Public Service Commission and the PMO) to reorganise and staff the department in line with its transition to road network manager.

Stream C: Transformational Partnerships and Investments

Output C1: High Impact Australian Aid investments; Greater resilience; Better prepared and executed development partner investments; Leveraged development outcomes:

Stream C will enable Australia to make high impact, catalytic economic and social infrastructure investments as opportunities arise. It will provide a window for Australian aid to focus on leveraging and facilitating access to increased multi-lateral development bank (MDB) and private finance for Pacific governments and businesses, as may be requested by GoV. Stream C will be available to finance activities in four areas:

- **High impact direct investments:** High impact project investment opportunities will become available from time-to-time. Australia may consider a project 'high impact' because: (i) of high economic and social rates of return; (ii) it sits within a strategic niche; (iii) it catalyses positive change; and (iv) it has a high public diplomacy payback.
- **Resilience**: R4D2 will allow for immediate access to funding for a rapid response to a natural disaster, supported by the contractor embedded within PWD. Having an *in-situ* technical team and established funding arrangements, will streamline Australia's disaster response.
- Better investments: If requested by GoV, technical assistance will be available to ADB, WBG and other development partners to conceptualise, prepare, and execute better infrastructure investments. GoV take-up of MDB financing will largely determine the volume of this support.
- Leveraged investments: If requested by GoV, technical assistance will be available to help GoV maximise benefits from MDB and other partner infrastructure investments. Australian-financed technical assistance will focus on building the capacity of GoV implementing agencies to manage their new and upgraded infrastructure assets. GoV take-up of MDB financing will largely determine the volume of this support.

Mutual accountabilities

The success of R4D2 depends on GoA and GoV commitments or 'mutual accountabilities'. Australia commits to provide advisers, support and direct funding, and to work within a context of Vanuatu ownership. GoV commits to lead and to own solutions relating to transport sector policy and reform, and to GoV resourcing of the sector. GoA and GoV will monitor context and commitments annually and at mid-term. The findings may require GoA and GoV to revisit the design of R4D2, including the size and configuration of GoA assistance. Important context and commitment 'benchmarks' will be agreed during the inception phase.

Timeframe

R4D2 will be a five year program with approximately AUD20million to be managed by a Contractor. Additional funding will be provided directly to the Government of Vanuatu.

Management and Governance

The R4D2 program will involve: (i) MIPU-PWD as the GoV implementing agency; and (ii) the AHC in Port Vila, Vanuatu as the GoA implementing unit. The governance arrangements for the program will include:

- Program Steering Committee (PSC). The PSC will provide strategic oversight and resolve constraints to the successful progress of R4D2. It will meet three times each year. Given the essential role of other key GoV agencies in securing program outcomes, the PSC will comprise the Director General of MIPU (as Chair), the Director of PWD plus representatives of the PMO, MFEM and the AHC.
- Management Working Group (MWG). The MWG will meet monthly to consider the contractor's monthly byexception reports and review quarterly progress reports prior to forwarding them to the PSC. The MWG will comprise the Director of PWD (as Chair), the AHC and the Team Leader for R4D2.

In addition to regular program management activities, two significant reviews will occur: (i) a mid-term review in the third year of the program to examine program progress and impacts, in particular progress towards the mid-term milestones, leading to a determination of resolute remedial actions in the event of unsatisfactory progress; and (ii) an end-of-program review, including an examination of the fourteen-year program of assistance to PWD to identify achievements and lessons, followed by workshops and other means to disseminate the results to a broad range of interested people and organisations.

Delivery Approach and Key Partnerships

R4D2 builds on the R4D delivery approach. It will involve: (i) specialists embedded within the structure of MIPU-PWD; (ii) funding for works (Stream A) provided through a direct funding agreement and disbursed using GoV systems; (iii) Stream B activities and technical assistance for Stream A activities implemented through a contractor engaged by the GoA; (iv) procurement of Stream C activities to be undertaken by either PWD or the contractor as appropriate; and (v) approved annual work plans, monthly management meetings, and other reporting and auditing to ensure appropriate expenditure of GoA funds. This arrangement reinforces GoV systems and MIPU-PWD technical and administrative capacity.

The design of R4D2 incorporates linkages between its activities and other GoA support programs, including GfG and the Vanuatu Skills Partnership Program. Activities will also support the partnerships between MDBs and PWD. The program will draw on the services of the Climate Change Support Unit under the new Australia Pacific Climate Change Action Program to access climate information and expertise to enable integration of climate change and disaster projections and risks to develop upgraded standards and capabilities for road design, construction and maintenance.

A contractor will be engaged to work with MIPU-PWD to deliver R4D2. It is expected that the contractor will be engaged under a three plus two-year contract to allow flexibility following the findings of the mid-term review.

Monitoring, Evaluation and Learning

A monitoring and evaluation (M&E) strategy and approach, together with an indicative performance assessment framework, have been prepared drawing on monitoring systems and learning from M&E undertaken in R4D. With some necessary enhancements, most of the key features and methodological approaches in the current R4D M&E system will be retained. However, there will be an increased focus on ensuring equity of participation and benefits for women and disadvantaged groups in R4D2 activities and areas of influence, and on ensuring integration of climate and disaster risks and resilience. Systems and approaches that have recently worked well in R4D include activity-level monitoring and higher-level outcome related monitoring involving independent research, evaluation and learning studies. As a result, there is good time series data available that can be drawn upon, and added to, as a basis for ongoing measurements of progress towards target outcomes and assessing overall impact.

The introduction of mid-term milestones, and intermediate progressive milestones, provides a foundation for assessing adequacy of progress. Because this relies on other public and private sector organisations (e.g. MFEM and island-based contractors) performance indicators measuring how PWD engages with other GoV agencies are included in the performance assessment framework. Similarly, ongoing monitoring and performance reporting is

designed to assess the extent to which MIPU-PWD and development partners such as MDBs identify and develop a pipeline of on-going infrastructure investments. The mid-term review will enable a timely assessment of progress towards intermediate outcome targets and provide the opportunity for intervention and/or refinement in time for the end-of-program final evaluation.

Risks and Risk Management

An indicative risk assessment has considered potential risk events, sources, impacts and mitigation measures and determined that the overall risk rating for R4D2 is moderate. The program builds on the prior VTSSP/R4D programs that have demonstrated the low level of risk associated with program activities and which have developed systems to reduce the likelihood of risks eventuating. The risk management plan (RMP) currently used for the R4D program will be updated as part of R4D2 inception activities, with the plan then updated as needed (at least annually) during the remainder of the program. The RMP will be integrated with the R4D2 M&E Plan.

Safeguards

R4D2 will use, and upgrade if necessary, R4D documents that address social, environment, climate change and anti-corruption safeguards. These documents have been prepared to meet standards set by the GoA and the GoV. R4D2 will continue to implement standards for incorporating and managing climate and disaster risks that were developed through R4D. Social safeguards encompass gender equality, inclusion, child protection and labour, HIV, road/transport accessibility for the disabled, and disaster preparedness. Other direction includes: a guide for social and environmental safeguards facilitators and a guide for community based contractors task and safety (both in English and Bislama); workplace health and safety management; and environmental management. Ongoing R4D2 implementation and capacity building activities will maintain a focus on reinforcing awareness and accommodation of safeguard requirements.

2. ANALYSIS AND STRATEGIC CONTEXT

The Government of Australia (GoA) has supported rural road maintenance and improvement and associated development of Government of Vanuatu (GoV) capacity for the management of rural roads since 2009, currently through the Roads for Development (R4D) program. This Investment Design Document (IDD) addresses a proposed third phase of this work - the Roads for Development Program Phase 2 (R4D2) – with an additional component to enable high impact or catalytic investments.

Country, Regional and Sector Issues

Vanuatu is a small and relatively isolated archipelagic nation with a total population of 272,000 people. The ease and cost of movement into and around the country greatly affects Vanuatu's development outcomes. Vanuatu's economy is modest in scale, with gross domestic product (GDP) of US\$2,870 per capita in 2016 (2010 prices) little changed from the average of US\$2,800 for the period 2000-15. Over the period 2011-15 average annual Official Development Assistance was equal to 12 per cent of gross national income. Australia was the largest donor, providing 60 per cent of net bilateral aid from Development Assistance Committee donors.

Vanuatu has made considerable use of loans and other finance from multi-lateral development banks (MDBs), primarily the Asian Development Bank (ADB) and the World Bank Group (WBG). The Government of Vanuatu (GoV) has also secured loans through bilateral agreements with the China Export-Import Bank (China EXIM Bank) and the Japan International Cooperation Agency (JICA). In its most recent assessment of public finance in Vanuatu in 2018, the International Monetary Fund (IMF 2018) concluded that Vanuatu's public debt is now at the higher end compared to other Pacific Island Countries. Vanuatu's stock of public and public guaranteed debt increased sharply from 28.7 percent of GDP in 2014 to 48.8 percent in 2016. This was mainly due to disbursements for infrastructure and reconstruction activities, though the IMF noted that new external borrowing was highly concessional.

The development policy of the GoV is set out in its National Sustainable Development Plan (NSDP) 2016-2030 (GoV 2016). Goals in the NSDP that are most relevant to R4D2 are set out in Box 1. The current NSDP notes the

importance of transport sector development, as have previous plans. A complementary monitoring and evaluation (M&E) plan (GoV 2017b) provides a framework within which M&E for the proposed R4D2 can sit so that it supports both program and GoV needs.

The Rural Road Access Policy (RRAP) that was developed with support from R4D (PWD 2016 and GoV 2017c) describes the GoV's approach to the development and management of rural roads. The policy sets out how the GoV prioritises expenditure on maintenance, rehabilitation and improvement of the country's rural road network and establishes targets, specifically that 82 per cent of all rural ni-Vanuatu will have basic road access by 2030, all impassable roads will be upgraded to passable and all roads will be maintained to their defined standards and levels-of-service. There is no similar policy for urban roads.

The Public Works Department (PWD) in the Ministry of Infrastructure and Public Utilities (MIPU) is responsible for roads in Vanuatu. PWD has six Works Divisions, one for each province. Physical works are undertaken through these divisional offices, mostly through contracts with communities and small private companies. Human resource management for PWD is provided by the corporate support unit (CSU) in MIPU.

Other GoV agencies that have a significant influence on MIPU-PWD routine activities are: (i) the Department of Finance and Treasury (DTF) in the Ministry of Finance and Economic Management (MFEM) through budget setting and its financial payments system; (ii) the Central Tender Board (CTB, also located within MFEM), which reviews contracts with a value of more than VUV 5 million (with this amount set in 1998); (iii) the Public Service Commission (PSC), which approves organisational structures and staff

Box 1: National Sustainable Development Plan

Goals in the GoV's NSDP relevant to the design of R4D2 are:

- A dynamic public sector with good governance principles and strong institutions delivering the support and services expected by all citizens of Vanuatu
- An inclusive society which upholds human dignity and where the rights of all Ni-Vanuatu including women, youth, the elderly and vulnerable groups are supported, protected and promoted in our legislation and institutions
- A strong and resilient nation in the face of climate change and disaster risks posed by natural and man-made hazard
- A nation committed to ensuring the conservation and sustainable management of our biodiversity and ecosystems
- Sustainable and well-maintained infrastructure and services for all, through inclusive and effective partnerships
- A strong rural economy that creates opportunities, enables the development of rural communities and increasingly contributes to national prosperity
- An enabling business environment, creating opportunities and employment for entrepreneurs throughout Vanuatu

employment. MIPU-PWD also interacts significantly with the Vanuatu Project Management Unit (VPMU) and the Department of Strategic Policy, Planning and Aid Coordination (DSPPAC) in the Prime Minister's Office (PMO).

Australian Government Assistance - Previous investments

Consistent with the GoV's identified needs and priorities, *building resilient infrastructure and an environment for economic opportunity* is one of the strategic objectives of the Government of Australia's (GoA's) Vanuatu aid program that is delivered through the Department of Foreign Affairs and Trade (DFAT). The Vanuatu Transport Sector Support Program (VTSSP) commenced in 2009, with a successor program, initially called VTSSP 2 commencing in July 2013 and renamed Roads for Development Program (R4D) later that year. R4D finished at the end of June 2018.

Other relevant Australian-funded support in Vanuatu has included the Port Vila Urban Development Project (PVUDP) which is due to finish at the end of 2018 and Governance for Growth (GfG), which provides regulatory reform and policy support.

The VTSSP/R4D programs have supported improved economic growth and service delivery in rural areas through increased access to a better-maintained, affordable and integrated transport network. The programs have been implemented by PWD. Key activities have included road maintenance and improvement, supply of equipment, human resource capacity building, and financial management and procurement reform. Physical works were initially located on three islands, and were subsequently expanded to support maintenance activities throughout the country. The programs have financed an average of around 45 per cent of spending on the maintenance and improvement of rural roads in Vanuatu over the last four years.

The VTSSP/R4D programs have facilitated considerable change, with notable achievements being to:

- introduce simple systems that have aided PWD's planning, budgeting, management, progress monitoring and reporting of rural road maintenance and improvement works and PWD financial management;
- encourage a shift from substantial use of force account to increased outsourcing of works to private sector island-based contractors (IBCs) and national contractors (NCs) and community-based contracts (CBCs), with a complementary albeit largely incomplete shift in PWD's role to that of road network manager¹;
- promote the development of a private sector, island-based road contracting industry. Around 25 IBCs now
 operate, where virtually none previously existed. These contractors have reduced the cost of undertaking
 road maintenance and improvement, and have accumulated competence and equipment since their
 inception;
- support the use of CBCs for grass cutting and other minor works. Communities value the contracts, and have used the revenue from them in a range of positive ways, including enhancing personal incomes, developing community facilities and participating in other activities that benefit the communities.

Australian Government Assistance - Future directions

GoA set out its future intended role in the Pacific in the Foreign Policy White Paper (Commonwealth of Australia 2017). Australia's 'stepped up' engagement in the Pacific aims to develop stronger partnerships for economic growth, stronger partnerships for security and stronger people-to-people links. Australia will rebalance its emphasis on providing direct financial assistance for infrastructure works in the Pacific and provide more support for increased financing of works by others. This includes using Australian aid to help Vanuatu and its development bank partners prepare and deliver high quality investments.

This is opportune since WBG, ADB, New Zealand, Japan and China are investing in economic infrastructure in Vanuatu on an unprecedented scale. Around US\$385 million of works are either ongoing or are committed for the next five years, with most in the transport sector. However, most of this will be capital investments in upgraded and renewed major assets (see below). There is no programmed support for road maintenance.

There is a clear rationale for Australia to continue supporting Vanuatu's transport sector in the short to medium term in light of its high strategic value and effectiveness. In the longer term, Australia will support GoV to secure other financing, such as private sector and development banks, in keeping with our broader strategic objectives in the Pacific (more under *Rationale for Australian Engagement* starting on page 14). Australia will also retain flexibility to invest in new, high impact infrastructure.

Assistance from Other Development Partners

The GoV receives assistance from other development partners, with major infrastructure elements being:

• Asian Development Bank (ADB). Concessional loans for: (i) Port Vila Urban Development Project (PVUDP), with substantial grant co-financing from DFAT; (ii) Cyclone Pam Road Reconstruction Project (on Efate island); and (iii) Inter-Island Shipping Development with grant co-financing from the Ministry of Foreign Affairs and Trade of New Zealand (MFAT).

¹As a road network manager, PWD will focus on meeting targets for the standard, availability and quality of the whole network. Its reporting will thus emphasise improved network functionality achieved by its maintenance strategies rather than, as occurs at present, a focus on the number of contracts successfully completed and the amount of money spent.

- World Bank Group (WBG). Combination of concessional loans and grants for: (i) Vanuatu Aviation Investment Project (VAIP); and (ii) Vanuatu Infrastructure Reconstruction and Improvement Project (VIRIP).
- **Export-Import Bank of China**. Loans for: (i) Vanuatu Road Rehabilitation Project (Malekula and Tanna); (ii) Vanuatu Port Luganville Main Wharf Rehabilitation and Extension; and (iii) E GoV Broadband Network.
- Japan International Cooperation Agency (JICA). Concessional loan for the Port Vila Lapetasi International Multi-Purpose Wharf Phases I & II.
- New Zealand MFAT. Grant for development of the Port Vila Seafront.

These projects are either complete or will be completed within the next two years, other than VIRIP which should be completed in 2022. In addition, the ADB has recently commenced assistance to the GoV to develop a *Transport Plan 2030* to complement the NSDP. The work, which will be completed around September 2018, will review institutional arrangements for the planning and delivery of transport, and prepare a five-year investment plan and twenty-year investment framework.

A number of potential new transport sector projects are described in the short/medium term pipelines of the MDBs. They include:

- ADB. Its *Country Operations Business Plan* for 2017-2019 (ADB 2016) includes: (i) Luganville Urban Development Project (with planning to commence in 2017 and a potential cost of US\$12 million, one-third of which will be sought from co-financing; (ii) Port Vila Urban Development Project Phase 2 with planning to commence in 2018 and a potential cost of US\$12 million, again with one-third to be co-financed; and (iii) an Integrated Outer-island Transport Project with planning to commence in 2018 and a potential cost of US\$10 million. The ADB will complete a portfolio review in 2018.
- WBG. The *Regional Partnership Framework* for the period to 2021 (WBG 2017) includes: (i) an aviation project, which could be a second stage of VAIP, starting in 2020 with a budget of US\$25 million; and (ii) upgrading of the Espiritu Santo Road starting in 2020 for US\$8-10 million. The framework, which also identifies 2 'policy' loans of US\$7.5 million each in 2018 and in 2020, noted that International Development Association (IDA) support to the Pacific Island countries was rising to unprecedented levels with an expected tripling of available funds to the countries.

While the outlined programs do not cover the full period of R4D2, it can be anticipated that additional projects will emerge as future programs are developed, for example through the *Transport Plan 2030* that can also be expected to draw on the *Vanuatu Infrastructure Strategic Investment Plan 2015–2024* (VISIP) prepared with assistance from the Pacific Region Infrastructure Facility (PRIF). With enhanced capacity, PWD could take the lead in identifying and prioritising road infrastructure projects for consideration by financing agencies.

There is thus a continuing, and potentially rising, level of support by MDBs for investment in the transport sector in Vanuatu. The extent to which it occurs in practice will depend on the GoV's capacity and willingness to borrow and the availability of co-financing, in particular grant co-financing, to reduce the effective cost of projects to the GoV.

Analysis of Development Problems and Issues

Inadequate finance, the limited capacity of its organisations, and restrictive rules and regulations are critical constraints affecting Vanuatu's road sub-sector. VTSSP/R4D support targeted these constraints for nine years. R4D2 will continue this work, building on successes; and adjusting to changing circumstances and the changing nature of Australian support for infrastructure. The treatment of gender equality and social inclusion, safety and environmental protection also needs to be enhanced.

Finance

GoV spends – from all sources – substantially less than what is required to maintain Vanuatu's road network in 'good' to 'fair'² condition. Moreover, the Government invests only a small fraction of what is required to bring its roads up to a 'maintainable' condition in the first place. A funding gap will continue, however R4D2 can help reduce it.

GoV's macro fiscal situation is the major financing constraint. GoV will have limited fiscal headroom to increase national budget allocations for road operations³ through to the end of R4D2. The International Monetary Fund (IMF 2018) estimated that GoV's fiscal deficit would start improving, decreasing from 8 per cent of GDP in 2018 to 4.3 per cent in 2019. The improvement assumes the implementation of the tax administration and income tax

² Terms like 'good' and 'fair' condition, and 'maintainable' are defined in GoV's Rural Roads Access Framework (RRAF).

³ PWD manages two streams of road works: (i) Operations; and (ii) Projects. Operations include road maintenance, spot improvements, and rehabilitation. Projects are larger capital works to upgrade existing roads, mostly sealing of gravel surfaces.

bills in 2018. The impact on road funding of a possible future Transport Infrastructure Maintenance Fund4 is too uncertain to factor in.

Against these fiscal headwinds, GoV has managed to stabilise and marginally increase its annual road operations budget in recent years. The Government continues to meet its Millennium Challenge Compact obligations⁵ and the GoA has been partly financing GoV's annual road operations, through VTSSP and R4D. PWD's GoV-funded 2017 budget expenditure was its highest yet -- Vt.1,107 million, most of it on road operations. R4D direct funding of road operations evened out at approximately Vt.400 million per annum before falling back to approximately Vt.150 million per annum in 2016-17.

With Vanuatu's fiscal 'pie' likely to grow only slowly, additional funding would need to come from an increase in the national budget proportion allocated to road operations.

Financing road projects is subject to different opportunities and constraints. Projects are predominantly funded by loans and concessional loan-grant blends from development banks (China EXIM Bank, the World Bank Group, and the Asian Development Bank). There were no roads projects funded by other partners for many years, until the MCA-funded Vanuatu Road Development Project and – followed by a five year gap – the start of the current China, WBG, and ADB financed Projects. Again, Vanuatu's fiscal situation may limit its ability to finance major road projects going forward. In 2018, the IMF retained Vanuatu debt sustainability rating as 'moderate', consistent with the 2016 assessment. IMF further noted that debt service pressure would be on the rise over the medium term. (2018 Article VI Staff Report, page 9).

In this challenging context, Australia plans to progressively reduce its rebalance operations funding support during R4D2. More support will be provided to help MIPU engage with central agencies and development partners to increase road funding, including investment from the Asian Development Bank and World Bank.

Institutional structure and capacity

WBG's 1992 review noted there were few ni-Vanuatu in transport sector management, professional and technical positions, there were few local counterpart staff available to work with externally-funded experts, and there were few functional technical and management systems. The situation is now better. All senior and middle management positions, and all senior technical and professional positions in MIPU-PWD are held by Vanuatu nationals. There are ample technical counterparts for external experts in PWD Divisions. There is a temporary shortage of managers and senior staff in the MIPU-PWD central offices, but the positions exist can be substantively filled through formal recruitment processes. VTSSP/R4D helped MIPU-PWD develop and institutionalise important systems and processes across road operations, financial management, procurement, and performance management. However, MIPU-PWD can be strengthened further.

While the GoV has accepted the principle of PWD being a network manager, associated changes in the structure of the organisation have not yet occurred. A number of positions are vacant and several positions are filled on an acting basis. Women, mostly in lower-level administrative roles, occupy only 17 per cent of positions. No women hold a managerial level position out of ten such positions, and there is only one woman engineer (out of ten engineering positions). There is a need to revise the structure of PWD, complete the capacity building program so that PWD can undertake its work using improved systems alone following completion of R4D2, and increase the employment of women in the organisation, both generally and in senior positions. This should include sustained changes in gender-related behaviours, to achieve more desirable working conditions for men and women.

Asset management, programming and financial management systems VTSSP/R4D helped PWD develop need to be strengthened and adapted to be fully fit-for-purpose. They also need to be integrated under the umbrella of a management information system (MIS) to improve management understanding and oversight. These systems, which need to be complemented by ni-Vanuatu staff who can use and sustain them, provide an essential framework to guide technical work, allow best use to be made of limited resources and facilitate management of PWD activities. There is also inadequate attention to the risks posed by increasingly severe disasters, particularly cyclones and floods, which are a major contributor to road damage.

IBCs are still fragile businesses that depend on negotiated, input-based contracts and still need help building their technical and business capacity. Moreover, new IBCs will be needed, to cope with PWDs expanding road operations. With an expected 210 annual community based contracts (CBCs) in 2017 valued at an average \$5,000 each, there is a recognised need to refine the community-based system to reduce administrative costs and to increase the value that CBCs contribute to sustaining rural roads. Lastly, PWD could markedly reduce the costs of road maintenance if it had greater procurement flexibility, to avoid delays and other constraints (see below).

⁴ GoV's Council of Minister's (COM) endorsed in principle the establishment of a Vanuatu Transport Infrastructure Maintenance Fund (TIMF). The initiative is the subject of further technical and financial analysis.

⁵ The Millennium Challenge Compact between GoV and the US Government's Millennium Challenge Corporation, for the Vanuatu Road Development Project, states that MCC funding is contingent on GoV allocating 'about' US\$5.7 million (equivalent) per annum for road maintenance (Annex 1, Schedule 1-5).

Government rules and regulations

Key legislative and regulatory restrictions limit PWD's 'room to move', including for instance: (i) slow and inefficient procurement approval processes; (ii) prohibition on multi-year budgeting and multi-year contracting; and (iii) inflexible and restrictive public service regulations. These impede PWD's ability to transition to a modern-style road network manager.

R4D2 will respond to the above constraints as follows:

- Finance. R4D2 will work on three fronts to help GoV mitigate against the shortage of money for road operations:
 - Supply-side: Help MIPU-PWD increase funding for road operations.
 - Demand-side: Help MIPU-PWD contain road budget requirements.
 - Efficiency: Help MIPU-PWD prepare sound road operations annual plans and execute them as efficiently as possible (which depends on successes in the other two areas).
- Institutional structure and capacity. R4D2 will continue Australia's capacity development support, but more narrowly focused on helping PWD transition to a modern-style network manager.
- Government rules and regulations. Working with GfG, R4D2 will help MIPU-PWD develop and 'voice' its case for reform.

In addition to the above, R4D2 will continue and intensify the focus on ensuring equity of participation and benefits for women and vulnerable groups (people with a disability, children, elderly, remote location). R4D2 will track, assess and report the impact the program is having in areas that include leadership roles, training and skilled employment opportunities, equal access to labouring jobs on construction sites, and having a voice in annual work planning. Employment opportunities for youth will also be a focus of R4D2.

R4D helped PWD prepare and implement its roads and bridges rural design guide incorporating climate resilient design which will prolong the life of road infrastructure and reduce damage and maintenance costs caused by floods and cyclones. R4D2 will continue to build local capacity and apply these guidelines.

Lessons Learned

An independent evaluation (IE) of the R4D program was commissioned by DFAT in 2016 as part of its standard end-of-program review. The IE identified the following success factors that it considered should be carried forward into the design of R4D2:

- Improving and maintaining rural access. The IE noted that: (i) the focus of R4D on PWD and rural roads alone had improved its focus; (ii) opening the program to all PWD Divisions had strengthened the partnership; (iii) integration of the PWD and R4D funds into one jointly-determined works program was beneficial; and (iv) PWD engineers had developed the competencies to manage delivery of physical works; and
- Institutional development. The IE noted that: (i) PWD had accepted the concept of becoming a network manager and had commenced necessary activities, including outsourcing of maintenance works; (ii) PWD staff had demonstrated they could manage operational financial, procurement, social safeguards, environmental management, and engineering aspects of physical works delivery; (iii) a mainstreaming approach had been adopted for crosscutting issues and safeguards, including gender, disability, child protection, HIV/AIDS, work health and safety and environmental protection; and (iv) enhanced environmental management and climate change mitigation measures were being adopted.

The IE also noted that the two main components of *Institutional Development* and *Service Delivery* that have been present throughout the VTSSP/R4D programs should be maintained as part of a possible next round of support, in particular to: (i) strengthen support for MIPU-PWD to transition from a works organisation to a network manager; (ii) improve and sustain rural access; (iii) integrate formal consultation as part of the planning process; (iv) upgrade effectiveness, efficiency and value for money of service delivery; and (v) improve program governance. The IE noted that the pre-conditions necessary for DFAT to move from an implementation service provider (ISP) model of program delivery to a budget support model were not yet in place in MIPU-PWD and so the current R4D support delivery model should be maintained, with some small refinements.

Finally, the IE identified M&E as an area for improvement. It noted that there had been three separate statements on M&E over the duration of VTSSP/R4D, with significant differences of Goals, Outcomes and Outputs between them. The M&E program at the time contained few indictors and was of limited use in providing an understanding of the program's progress and in answering the questions the IE was required to address.

DFAT's response to the IE (DFAT c2017:5) noted that "the evaluation provides a sound basis for the Australian Government (GoA) and Government of Vanuatu (GoV) to consider continuing Australian development assistance in Vanuatu's rural roads subsector. The evaluation identifies important 'success' factors to carry through into a possible new round of roads support; and while the suggested changes and enhancements are mostly already underway, the evaluation is a useful articulation and reminder of opportunities to improve on what we are doing.

We agree with most of its findings, conclusions and recommendations and see it as a useful basis for reflection and further discussion." Amongst the improvements that have been adopted is enhanced M&E.

The design of R4D2 has taken account of these lessons and has built on the successful aspects of R4D. It differs from the above recommendations of the IE only with regard to the continued use of an ISP model of program delivery (see Chapter E for further discussion of this matter). It has also taken account of the risk of silo forms of implementation of the large number of development assistance programs in Vanuatu, and identified potential synergies between R4D2 activities and other programs to secure enhanced impacts from R4D2.

Rationale for Australian Engagement

GoA development assistance policy

R4D2 is consistent with Australia's Foreign Policy White Paper (Commonwealth of Australia 2017) and with Australia's 'stepped up' engagement in the Pacific (see under *Future directions* on page 3). The investment will transition Australia away from directly funding (mainly) road works to helping Vanuatu and her partners prepare and implement high quality infrastructure investments. Meanwhile, Australia will remain Vanuatu's lead partner in strengthening land transport institutions and supporting reform efforts.

GoV development policy

R4D2 is consistent with GoV's National Sustainable Development Plan (NSDP). The investment will support two key goals, relating to strong government institutions and good infrastructure and services.

The importance of rural roads

Development literature documents a strong link between the availability and quality of road access and development outcomes in low-income rural areas⁶. Remoteness and isolation are critical components of poverty⁷. This is particularly relevant in Vanuatu where 76 per cent⁸ of the population lives in rural areas, villages and small towns. Most rural families rely on roads to access basic social services; and their rural produce moves to local markets and ports on these same roads. Reliable year-round access also increases the resilience of rural communities to national disasters. Investing in rural roads – spot improvements and maintenance to keep them open year-round, and upgrades to reduce economic transport costs – yields a high rate-of-return in Vanuatu.

Moreover, the roads subsector is highly dependent on public funding. Urban and town power, water supply, and telecommunications markets are mostly privatised in Vanuatu; and bilateral and multilateral development banks are already investing heavily in maritime and aviation infrastructure, and in repairing and upgrading selected core roads. Only Australia helps the Government of Vanuatu expand and maintain basic rural road access.

Vanuatu's large ongoing and proposed partner-funded economic infrastructure investments do not include rural road rehabilitation or maintenance; and only limited possible support for urban road rehabilitation, but not maintenance (see page 3).

Because of our long term engagement in the sub-sector, Australia is best-positioned to continue supporting rehabilitation, improvement and maintenance of Vanuatu's national road network, particularly rural arterial roads. It is a high-return investment opportunity for Australia.

Building on VTSSP and R4D successes

R4D2 will protect and consolidate gains made through VTSSP and R4D. The program supports a number of desirable development outcomes, including: (i) economic growth through the provision of better maintained and connected roads; (ii) poverty reduction by improving access for people living in rural areas to markets and health and education; and (iii) improved delivery of government services by enhancing the capacity of PWD to identify, prioritise and deliver road infrastructure working together with key development partners.

Three other factors have influenced the design of R4D2. Firstly, it is not expected that GoA funding will be available for works following completion of R4D2. Second, while continuing technical assistance could be available, it is not explicit at the current time and hence cannot be built into R4D2. Third, there is merit in allowing some flexibility in R4D2 so that it can incentivise government support for the program and respond to emerging infrastructure priorities, opportunities for innovation and increased resilience and for continuity in the development of the sector after completion of the program.

This context has provided clear directions for R4D2, with key matters thus being:

- The current R4D program is generally performing well and can be built on.
- Even so, a considerably greater sense of urgency and commitment is needed by:
 - PWD and other key GoV agencies to make the changes needed for PWD to become an effective and efficient manager of the road network in Vanuatu; and

⁶ Including, Van de Walle, Dominique. 2008. *Impact evaluation of rural road projects*. Washington, DC: World Bank.

⁷ Hettige, Hemamala. 2006. When do rural roads benefit the poor and how? Manila, Philippines: Asian Development Bank.

⁸ Vanuatu National Statistics Office. 2016.

- PWD to take advantage of the support provided through R4D2 to build its capacity to undertake its work alone following completion of the program.
- Measures to incentivise the GoV to provide the necessary support are required, but they need to be used with care to avoid uncertainty and risk to the success of the program.
- R4D2 needs to help PWD develop its capacity to work with other financiers of road infrastructure investment in Vanuatu to secure continued, and desirably enhanced, support after completion of the program.
- Support for physical works should continue to prioritise rural roads.
- The treatment of gender equality and social inclusion, safety and environmental protection needs to be enhanced.
- Reforms and activities to be undertaken must be capable of being completed within its term.
- The program needs to take a phased and managed approach to minimize end-of-program disruption to PWD and contractors from the decline in GoA funding for road maintenance and technical support.

Innovation and Private Sector Engagement

R4D2 will continue to refine the innovative use of communities for road maintenance activities, and will maintain support for the development of small private sector, island-based contractors. The program will also require the achievement of key outputs and intermediate outcomes and will use a major mid-term review to re-assess activities to be undertaken during its last two years based on prior actual performance. The program will allow some flexibility so that advantage can be taken of emerging priorities and transformational opportunities to promote innovation, resilience and continuity.

3. INVESTMENT DESCRIPTION

Rationale and Purpose

R4D2 will be the third phase of a long-term GoA program to support the development of the road subsector in Vanuatu, plus selective innovative and catalytic economic infrastructure support. The Government of Vanuatu (GoV) and the Government of Australia (GoA) agree that the investment should explicitly help Vanuatu achieve the following two NSDP goals:

- A dynamic public sector with good governance principles and strong institutions delivering the support and services expected by all citizens of Vanuatu.
- Sustainable and well-maintained infrastructure and services for all, through inclusive and effective partnerships.

End-of Program Outcome

The investment aims to achieve the following end-of-program (EOP) outcome:

• MIPU-PWD positively influences road funding outcomes and uses enhanced institutional capacity to manage the road network of Vanuatu more efficiently and effectively.

The EOP outcome addresses the road subsector's three overriding development constraints: (i) inadequate finance; (ii) limited capacity of organisations; and (iii) restrictive rules and regulations. Supporting the roads subsector on these three fronts will contribute directly to the target NSDP goals.

The investment will help MIPU-PWD influence both the supply and the demand for road subsector finance, and how efficiently the finance is used. The overall result will be a smaller funding gap.

Alongside this, the investment will help MIPU-PWD transition from a traditional public works department to a modern-style road network manager, delivering on network performance targets rather that delivering road works. Reformed rules and regulations will enable PWD to innovate.

Program Logic and Indications of Success

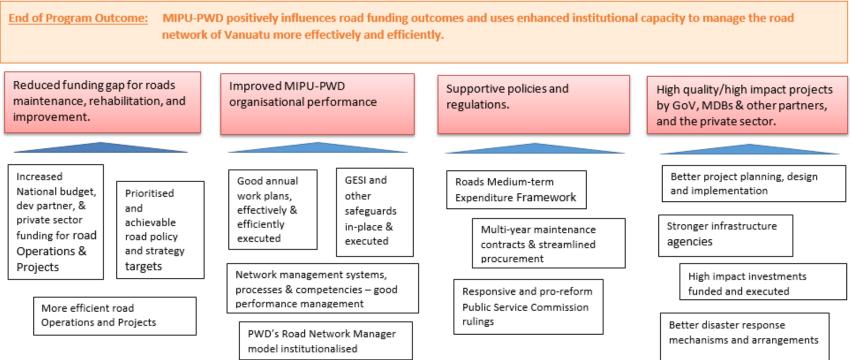
A program logic (see Figure 1) sets out: (i) the strategic intent of the program; (ii) the broad causal relationships between activities, outputs and outcomes; (iii) intermediate outcomes that allow progress to be monitored; (iv) outputs to be delivered to secure the outcomes; (v) cross-cutting issues; and (vi) the scope of the program and the principles that will underpin its implementation. The M&E system described in the next section of this IDD identifies means by which delivery of R4D2 results can be measured and adequacy of progress towards it assessed.

Investment success will be indicated by:

- MIPU-PWD engaging effectively with PMO and MFEM and with external development partners to ensure: (i) GoV national budget allocations for road operations are as large as can reasonably be justified; (ii) development banks continue funding major road improvements; and (iii) road improvements reduce network maintenance costs and optimise network functionality;
- MIPU-PWD prepares and executes annual road operations work plans aimed at maximising Vanuatu's rural access index (RAI) and at matching the standard and condition of roads with their economic importance. MIPU-PWD executes the Public Roads Act 2014, including declaring 'arterial' roads, which it administers;
- reformed GoV rules and regulations enabling MIPU-PWD to innovate and improve performance;
- PWD functioning as a modern-style road network manager;
- MIPU-PWD is fully staffed and practices good performance management of units and staff;
- Australian aid supports infrastructure innovation, good practice, and catalytic investments.

Program Logic

<u>NSDP Economic Goal 2</u>: Sustainable and well-maintained infrastructure and services for all, through inclusive and effective partnerships. <u>NSDP Social Goal 6</u>: A dynamic public sector with good governance principles and strong institutions delivering the support and services expected by all citizens of Vanuatu.



R4D2 Support

Multi-year roads funding analysis & advocacy - Roads annual planning and budget preparation support - Sector policy and funding dialog with MDBs & other partners - Arterial Roads Policy & Strategy update - Helping Provinces and communities manage local roads - Direct funding for road Operations - Building PWD Divisions' capacity to execute annual work plans - Backstopping and mentoring Divisional Managers and technical staff - Helping Divisions enforce GESI, safety, and environmental safeguards - Strengthening PWD road network management systems and competencies - Helping MIPU-PWD roll-out other corporate reforms - Helping MIPU-PWD managers improve performance management - Strengthening gender equality, social inclusion, and environmental management policies, systems and competencies - Improved PWD's Roads and Bridges Design Guides, Standards, and Specification, including climate change & disaster resilience considerations - Help prepare procurement and contract reform submissions - Help PWD engage with Central agencies - Funding project planning, preparation, and implementation consultants, on GoV and MDB-supported projects - Co-finance MDB infrastructure projects - Directly funding high impact investments - Establish a Cyclone Response Plan and improved response mechanisms and arrangements

Description of Outputs and Activities

The investment will deliver three streams of support (Figure 1)⁹

- Stream A: Road Network Operations
- Stream B: Sector Finance and Road Network Management
- Stream C: Transformational Partnerships and Investments

Stream A: Road Network Operations

OUTPUT: A1: Increased and sustainable year-round rural access.

Stream A will provide direct funding and technical assistance (TA) to help PWD achieve higher annual road operations targets. Road operations include: (i) routine and periodic maintenance; (ii) spot improvements; and (iii) rehabilitation¹⁰.

Stream A continues and adapts R4D's successful service delivery outcome.

PWD's key road operations performance metric is the Rural Access Index (RAI). The direct funding and TA will help PWD achieve RAI targets prescribed in the Government's Rural Road Access Framework (RRAF – a national policy and strategy package). RAI is expressed as a percentage, representing the proportion of an area's population that has year-round vehicular access to the area's services, commercial and transport hub. R4D2 will help achieve the following RAI targets:

Province	2015	2020	2025	2030	
Malampa	61 per cent	67 per cent	74 per cent	80 per cent	
Penama	60 per cent	69 per cent	78 per cent	88 per cent	
Sanma	67 per cent	68 per cent	69 per cent	70&	
Shefa	85 per cent	87 per cent	88 per cent	90 per cent	
Tafea	79 per cent	81 per cent	84 per cent	86 per cent	
Torba	60 per cent	60 per cent	60 per cent	60 per cent	
Total for Vanuatu	70 per cent	74 per cent	78 per cent	82 per cent	

Table 1. RRAF RAI Targets

GoV is currently reviewing its RRAF and will likely prescribe economic access targets as well as basic rural access targets, which R4D2 will align with if they become government policy.

Direct funding

Australian direct funding will finance a portion of PWD's road operations works contracts. PWD currently outsources about 80 per cent of its road operations to private contractors and communities. Australian direct funding (see Table 2) will allow PWD to procure more contracts to achieve more maintenance, spot improvements, and rehabilitation. It will also finance innovative field trials and demonstrations. Direct funding will reduce in years four and five, consistent with the program's phasing-out of direct infrastructure support.

Technical assistance

The investment will continue R4D's successful capacity building and quality control support in the field. PWD's six works Divisions execute the department's annual operations works program. A small team of R4D2-funded road operations engineers (ROEs) will rotate around the divisional offices, guiding and mentoring PWD technical staff and operators. PWD divisional managers and divisional engineers will call in ROEs when they see the need, usually as technical peer reviewers, providing construction advice, checking the quality of works, and helping PWD engineers certify completed works. The support comes at any point of the project 'cycle', wherever the divisional manager and the engineer see the need: (i) engineering design and cost estimation; (ii) contract preparation; (iii) contractor mobilisation and construction; (iv) certification of completed works; (v) defects liability period; and (vi) contract administration.

R4D2 ROEs and other technical experts will help Divisions role out innovations developed through Stream A. These may include, for instance: (i) larger, multi-year, performance-based maintenance contracts; (ii) more efficient community-based maintenance contracts and expanding their range of work; (iii) trialling innovative construction techniques, equipment, and materials; (iv) trialling technology to improve the efficiency of construction supervision

⁹ Supporting reasoning for the program activities is presented in Appendix A (Road Sector), Appendix B (Social Dimensions) and Appendix C (Organisational Development).

¹⁰ Routine road maintenance includes grass cutting and vegetation clearance on road verges, patching potholes and ruts, clearing debris from drainage structures, and most importantly, grading/re-shaping of gravel roads. **Periodic maintenance** includes re-gravelling/re-shaping of gravel roads, re-sheeting of bitumen sealed roads, re-shaping side drains, and repair and replacement of signs, safety barriers and other road furniture. **Rehabilitation** is similar to periodic maintenance, but it also involves re-forming the road base and re-profiling side drains first. These works in Vanuatu use a mix of equipment, road plant and manual labour.

and road condition monitoring; and (iv) more competitive small works procurement. ROEs will help contractors and communities meet GESI, safety, and environmental protection standards in the field.

R4D2 ROEs will also help deliver formal training, from time-to-time. PWD engineers expressed a strong desire for continuing professional development through R4D2. Training will be structured, and training materials, including videos, will be available to PWD for future use.

Stream A will deliver formal training, focused on improving GESI, safety and environmental outcomes in the field. Trainees will include PWD Divisional managers, technical staff, and operators, private contractors, communities, and Provincial government staff, and others with a stake in road operations. There will be significant repeat and reinforcement training, followed up by on-the-job mentoring. This is vital for changing knowledge, attitudes and practices, particularly amongst NCs and IBCs.

The cost of this technical assistance is included in Stream A costs to provide a clearer indication of the cost of the services that are to be provided by a contractor.

Stream B: Sector Finance and Road Network Management

OUTPUTS: B1: Reduced road sub-sector funding gap; B2: Stronger PWD road network management competencies and systems; and B3: Supportive reform and policy conditions.

Stream B technical assistance (TA) tackles Vanuatu's three overriding road sub-sector development constraints – inadequate finance, organisational performance, and restrictive rules and regulations.

B1: Reducing the funding gap:

R4D2 TA will help MIPU-PWD tackle the funding gap on three fronts:

- Supply-side. Help MIPU-PWD increase funding for road operations by:
 - Strengthening the case for larger national budget allocations through: (i) clear national road policy and targets; (ii) the achievement of targets; and (iii) enhancing MIPU-PWD's reputation as a well-managed, effective and efficient road network manager that meets targets and achieves good value-for-money.
 - Attracting greater road subsector support from the ADB, WBG and other partners with good national policy and targets, and a good implementing agency.
 - Locking in medium-term funding expectations through a GoV roads medium-term expenditure framework.
- Demand-side. Help MIPU-PWD contain its road budget requirements:
 - Encourage a more affordable national road policy with targets focused on arterial roads, as per the Public Roads Act (2014) the core road network.
 - Help provincial administrations work with communities and others to keep feeder roads trafficable.
- Efficiency. Help MIPU-PWD prepare sound road operations annual plans and execute them as efficiently as possible.

B.2: Strengthening PWD's road network management competencies and systems

GoV is preparing a Vanuatu Transport Plan 2030, which will include modernised institutional arrangements across the transport sector. These broader institutional reforms will not affect PWD's transition from a traditional public works agency to a modern-style network manager, of both urban and rural roads. R4D2 will help PWD complete this transition. Being an effective and efficient manager of Vanuatu's national rural and urban road network requires that PWD is able to: (i) prepare high quality annual work plans and oversee them to ensure plan targets are achieved; (ii) use enhanced and integrated asset, finance, management, and people management systems to enhance efficiency and effectiveness; and (iii) develop good relationships and coordination with other GoV agencies and with development partners. Some elements of the work need to be undertaken through the central support unit (CSU) in MIPU, and hence will assist MIPU more generally. Similarly, some activities undertaken to support PWD may be used more widely in MIPU, e.g. enhanced accounting. Account is taken of expected progress with R4D activities during the remainder of its term. Specific activities will include:

• Road operations annual work plans. R4D2 will follow-up on R4D's annual work planning success. PWD's annual work planning process is working well, but it needs additional and ongoing TA to: (i) Set annual work planning within a medium-term expenditure framework (see below), when available; (ii) ensure work plans fully utilise efficiencies offered by medium-term expenditure management, when available; (iii) ensure work plans are explicitly linked to RRAF targets; (iv) ensure work planning makes best use of PWD's Road Inventory Management System and its possible successor Road Asset Management System; (v) refine current monitoring of work and financial progress and integrate the information with the new MIS, when available; and (vi) provide continuous professional development for PWD staff preparing annual work plans.

- Organisational arrangements. Activities to better equip PWD to fulfil its functions should build on current R4D activities, in particular the implementation plan to transition PWD to be a more effective road network manager. Actions include: (i) identify and address any legislative issues that may affect PWD's transition to become a network manager; (ii) develop a new organisational structure for PWD oriented to its role as a network manager; (iii) update previous workforce planning and prepare updated PWD position descriptions; and (iv) work with the Public Service Commission to implement a new organisational structure that and fill positions in PWD on a substantive rather than acting basis (see also <u>B3: Supportive reform and policy conditions</u>)
- **Corporate management.** Concomitant with the requirement for refinement of PWD's organisational structure is a need to develop corporate processes to provide a clearer focus for management and direction of PWD activities. Activities should build on the current R4D activities, and include: (i) implement refined corporate planning processes with an associated performance management framework; and (ii) implement a fit-for-purpose digitalisation and automation strategy to improve information management and automate key business and work processes.
- Infrastructure management and associated systems. Systems are needed for PWD to fulfil its road management function. The systems provide an essential framework to guide technical work, allow best use to be made of limited resources and facilitate management of PWD activities, (Conversely, poor or absent systems result in erratic technical work, a greater need for judgement in an environment with limited technical expertise and decision-making that is based on inferior data.) There is a need to: (i) develop the current emerging rural road inventory system into a computerised asset management system for all roads for which PWD is responsible with a commitment to sustain collection of the data needed for the system; (ii) draw on initial work undertaken during R4D to develop a corporate management information system (MIS) that draws on other systems to provide key information related to road management that allows senior management in PWD and MIPU to oversee programs and respond to issues; (iii) use roadwork progress reports to inform the MIS and update the asset management system; (iv) replace the current multiple spreadsheet based financial system with a computerised database-centred accounting system and integrate it with the MIS, ensuring that it is also linked with the Department of Finance and Treasury's (DFT's) SmartStream system and developed with advice from DFT so that it might be of broader use to GoV agencies. The systems need to be fit-for-purpose, be accompanied by associated manuals, each have at least two PWD staff who have high level of competence in use of the systems and who can train others in their use, and to have a commitment to maintenance of them.
- People management. Developing the capacity of PWD requires continuing enhancement of its staff including : (i) developing a Strategic People Management Plan with specific actions to support PWD's transition to a network manager; (ii) implement a computerised human resource management information system that can be integrated with the corporate MIS; (iii) implement other key people management processes, which are generally absent at present; (iv) implement gender and other inclusivity awareness and action programs for PWD staff and contractors; and (v) implement capacity building programs that address both staff and contractor capacity, focusing on the core competencies required to implement the network manager model.
- Gender equality and social inclusion. Renewed emphasis will be given to GESI in all R4D2 activities. The actions described elsewhere in this section will be based on a Gender Equality and Social Inclusion Plan to be prepared in the inception phase of the program. A strategy for increasing employment opportunities for youth will also be developed during the program's inception phase. PWD's Divisions will be guided on gender and social inclusion priorities and responses by their counterpart Provincial government Technical Advisory Committees (TACs).
- Climate and disaster resilience. Extreme weather (especially cyclones) and flooding is projected to become increasingly severe across the country and represents a high risk to the integrity and life of the road network. R4D2 will continue to support PWD to implement the Roads and Bridges Rural Design Guide Incorporating Climate Resilient Design, developed through R4D, which will prolong the life of road infrastructure and reduce damage and maintenance costs caused by floods and cyclones.
- Other. Assist PWD to undertake other work that will enhance its performance such as: (i) complement the current *Rural Roads Access Framework* by developing a framework for the management of urban roads; (ii) review standards and guidance to ensure they remain appropriate with regard to engineering matters, resilience to climate change, gender equity and social inclusion, and safety and environmental protection; (iii) examine means to reduce road provision costs, for example innovative technical practices and consideration of alternate strategies for road maintenance and improvement that could reduce life-cycle costs; (iv) periodically review the CBC and IBC delivery approaches to identify means for streamlining administration, reducing costs and improving outcomes; and (v) assisting PWD to develop the means to draw on private sector consultants to undertake specific tasks as the quantity of R4D2 technical specialist support declines. R4D will also help PWD link with, and draw on, relevant regional activities (e.g. PRIF's pavement engineering study).

B3: Supportive reform and policy conditions:

MIPU-PWD function within a broader institutional environment that influences its development potential and performance. Budgeting and expenditure, financial management, procurement, and civil service rules, in particular, limit PWD's ability to transition to a modern-style road network management function. R4D2 will help MIPU-PWD work with central agencies on the following reform and policy areas:

- Budgeting and expenditure: R4D2, with support from the GfG program, will help MIPU-PWD advocate for GoV three-year rolling roads medium-term expenditure framework. MIPU-PWD will work closely with the Department of Finance and Treasury (DFT) on this reform. A roads medium-term expenditure framework will deliver two key benefits: (i) It will allow medium-term road operations work planning, which is better suited to the management of a road network; and (ii) it is a prerequisite for multi-year maintenance contracts, which will boost road operations efficiency.
- **Procurement:** R4D2 will help MIPU-PWD work with central agencies (principally, PMO, DFT, and the Central Tenders Board) on two procurement reform areas: (i) Multi-year road maintenance contracts (see above); and (ii) streamlined procurement processes and approval limits.
- **Reorganisation and civil service:** R4D will help PWD work with central agencies (principally, the Public Service Commission and PMO) to reorganise and staff the Department in line with its transition to road network manager. Streamlined processes are needed to fill staff positions.

Streams A and B are inter-related, and activities will be harmonised by ensuring: (i) Stream B respond to issues that emerge from roadwork activities undertaken in Stream A; and (ii) findings of relevant Stream B activities are incorporated in Stream A activities.

Stream B activities related to institutional arrangements will need to be responsive to any changes to the structure of MIPU that might emerge as a result of GoV decisions in response to proposals in the *Transport Plan 2030*. To facilitate this, systems and competencies developed through Stream B activities will be scalable and adaptable to accommodate any such change. More generally, R4D2 will maintain an understanding of the proposals in *Transport Plan 2030* and GoV responses to them, knowledge of pipeline projects of development partners and other potential GoV decisions that could have a bearing on R4D2 activities.

Cross-cutting issues to be addressed in all program activities described above include: (i) program oversight through informed and responsive management; (ii) a focus on capacity building using enhanced systems, mentoring and training; (iii) gender equity and social inclusion to be implemented through awareness raising, mentoring and training; (iv) climate change, environment and safety, which will be incorporated in road planning, design delivery and maintenance; (v) maximising the benefits of infrastructure spending by developing the capacity of PWD staff and contractors as well as improving road quality; and (vi) phasing the program to minimize end-of-program disruption to PWD and its contractors.

Stream C: Transformational Partnerships and Investments

OUTPUT: C1: Better prepared and executed development partner investments; Leveraged development outcomes; High impact Australian Aid investments; Greater resilience.

'Transformational partnerships' is a key emerging theme, consistent with Australia's '*Pacific Step Up*' approach and Australia's 2017 '*Foreign Policy White Paper'*. Stream C will be a window for Australian aid to focus on leveraging and facilitating access to increasing MDB and private finance for Pacific governments and businesses, as may be requested by GoV. It will also enable Australia to make high impact, catalytic economic and social infrastructure investments as opportunities arise. Activities under this stream will require specific approval from the AHC in Port Vila. Stream C will be available to finance activities in four areas:

- **High impact direct investments:** High impact project investment opportunities will become available from time-to-time. Australia may consider a project 'high impact' because: (i) of high economic and social rates of return; (ii) it sits within a strategic niche; (iii) it catalyses positive change, for instance by demonstrating innovations; and (iv) it has a high public diplomacy payback. The R4D2 contractor would typically manage project preparation and implementation, with the asset-owning agency.
- **Resilience**: R4D2 will allow for immediate access to funding for a rapid response to a natural disaster, supported by the contractor embedded within PWD. Having an *in-situ* technical team and established funding arrangements, will streamline Australia's disaster response. Development of a crisis response plan that sets out procedures and activities for MIPU-PWD will enable it to be better prepared.
- Better investments: If requested by GoV, technical assistance will be available to ADB, WBG and other development partners to conceptualise, prepare, and execute better infrastructure investments. R4D2 will consider requests to finance consultants at any stage of the project 'cycle'. Consultant services could include: (i) sector analysis and planning; (ii) feasibility studies; (iii) detailed engineering design and documentation; (iv) construction supervision; and (v) monitoring and evaluation. GoV's takeup of MDB

financing will largely determine the size and timing of this support; as will the availability of the MDBs' own TA resources. If successful, it will help Australia gradually reduce direct financing of infrastructure works in Vanuatu in favour of providing support for increased financing of works by others.

• Leveraged investments: If requested by GoV, R4D2 will be able to finance technical assistance aimed at helping GoV maximise benefits from MDB and other partner infrastructure investments. Australian-financed technical assistance will focus on building the capacity of GoV implementing agencies to manage their new and upgraded infrastructure assets. This will encourage MDBs to invest. Moreover, those investments -- blended grant-loan packages -- can be used wholly for physical works, knowing that Australia is supporting capacity development. GoV's takeup of MDB financing will largely determine the size and timing of this support.

Performance Assessment

Intermediate Outcomes of Program Activities

Intermediate outcomes (see Figure 1) and related milestones are steps towards the EoPO that provide practical means to allow the progress of R4D2 to be monitored. They are central to the monitoring and evaluation program (that is discussed in more detail on page 29). They are provided for each of the three streams of activities:

Stream A - Road Network Operations: In addition to monitoring time-bound milestones (see mid-term milestones below), the program will evaluate:

- Execution of work plans: The extent to which approved annual operations work plans are executed conversely, the level of deviation of 'actual' from 'planned'. Small and reducing deviations will indicate positive progress.
- **Self-reliance**: The extent to which PWD Divisions successfully execute road operations, unsupported by R4D2 TA. Small and reducing reliance on R4D2 TA will indicate positive progress.
- **Contract compliance**: Contractor and community compliance with contract provisions. High and increasing compliance will indicate positive progress.
- **Efficiency**: Operational efficiencies, informed by a range of indicators relating to rates of production, unit costs, equipment utilisation rates, on-time production, and so on.
- **Safeguards**; The extent to which executed road operations comply with GESI and environmental safeguards.

Stream B - Sector Finance and Road Network Management: Stream B tackles the more challenging and complex areas of organisational performance, institutional settings, and relationships. Progress relies on people – particularly leaders and decision-makers, managers and senior staff – accepting the need for change, taking up and committing to change, and institutionalising change. Evaluative enquiry will be crucial for assessing progress towards the EoP Outcome. The program will evaluate:

- Reducing the funding gap:
 - The extent to which MIPU-PWD engage with central agencies and the quality of road funding advocacy and budget submissions.
 - The extent to which MIPU-PWD influences development partner investment decisions.
 - The extent to which GoV and MIPU-PWD commit to road policy and strategies that prioritise and contain access targets, consistent with fiscal forecasts.
- **Road network management capacity**: The extent to which MIPU-PWD roll out and institutionalises its *Transitioning to Road Network Manager Strategy and Plan.*
- **Reform and policy conditions**: The extent to which MIPU-PWD engage with central agencies and advocate for reform and policy changes conducive to sound road network management. GoV's commitment to reform and supportive policies.

Stream C - Transformational Partnerships and Investments: Stream C intermediate progress will look at:

- High impact investments: The availability and take-up of high impact investment opportunities.
- **Resilience**: The extent to which the program's disaster response mechanism is activated and utilised.
- Better investments: The level of TA take-up by MDBs and other development partners. It will be too soon to assess the impact on project quality.
- Leveraged investments: The level and take-up of suitable co-financing opportunities.

Mutual accountabilities

The success of the R4D2 partnership will depend on GoV and GoA commitments or 'mutual accountabilities'. Each partner is accountable for program success.

GoA accountabilities centre on the provision of technical assistance and direct funding, and commitments to use GoV systems and processes, to support GoV development priorities, and to work within a context of Vanuatu 'ownership'.

A successful R4D2 requires GoV to lead and to own solutions. Effective development assistance helps good leaders achieve success. So for R4D2, Vanuatu's political, organisational, and technical leaders will need to own their transport sector policy and reform initiatives, and ensure GoV funding, staffing, and resourcing is sufficient to make best use of Australian assistance.

The Australian-Vanuatu Aid Partnership Arrangement enunciates broader GoA and GoV commitments.

Through the course of R4D2, GoV and GoA will monitor and, if necessary, respond to any demonstrated changes in commitment to the program's shared outcomes.

For example, MIPU-PWD's commitment to its rural road access policy, to evidence-based annual operations workplanning, to a more efficient balance of outsourcing and 'force-account' works, and to transparent procurement and contract administration has encouraged a third round of Australian support. These commitments are essential for R4D2 success going forward.

R4D2 success will also depend on MIPU-PWD clearing its staff recruitment backlog – including senior substantive appointments – and overcoming performance management deficiencies.

GoV and GoA will monitor context and commitments annually and at mid-term. We will analyse how they are affecting the achievement of intermediate outcomes (Section D. Measuring Progress). What we find jointly may require us to revisit the design of R4D2, including the size and configuration of GoA assistance.

GoV and GoA will agree during the inception phase what will be the key context and commitment 'benchmarks' to monitor and assess.

Mid-Term Milestones

In addition to evaluating outcome-level progress, R4D2, MIPU-PWD, and AHC will agree mid-term milestone targets. Milestones are typically metric or 'yes/no' based. Partners will agree the milestone targets during the program's inception phase. Outcome-level progress and the achievement of milestone targets will help partners make mid-term adjustments (refer Section E).

Agreed mid-term milestones may include the following:

- Stream A. Road network operations:
 - 2020 RRAF RAI targets are achieved (refer Table 1, or as amended by GoV).
 - 2020 RRAF road condition targets are achieved (refer RRAF, or as amended by GoV).
- Stream B. Sector Finance and Road Network Operations:
 - Reducing the funding gap, including: (i) an agreed target for the GoV FY2021 national budget allocation for road operations; and (ii) an agreed target for MDB funding commitments to road Projects, based on MDB loan and grant investment 'pipelines'¹¹.
 - Improving network operations, including: (i) MIPU-PWD will update RRAF and the GoV will approve it; (ii) MIPU-PWD will prepare and the GoV will approve a new *Urban Roads Policy and Strategy*; and (iii) MIPU-PWD will consolidate both into a *Vanuatu Arterial Roads Policy and Strategy¹²* by end-2019, noting that this is a finance milestone because the Policy and Strategy will be the principal mechanism for prioritising and containing access targets to match expected fiscal outcomes.
- Road network management capacity:
 - Installation and operation of the road inventory management system, and consolidated management information system (integrated with the procurement and contract administration system) by end-2019, with PWD staff to be fully responsible for them by mid-2020.
 - Road conditions survey system fully operational by mid-2019.

 $^{^{11}}$ MDB country program pipelines contain a proportion of 'indicative'-only investments. And an investment's value may change as it is processed.

⁴ A new consolidated *Vanuatu Arterial Roads Policy and Strategy* will be consistent with the Public Roads Act (2014), which makes MIPU-PWD responsible for administering declared 'Arterial' roads only.

- Force account deployment strategy implemented by mid-2020.
- At least three consolidated maintenance community-based contracts (CBC) procured by end-2019.
- At least three performance-based road maintenance contracts procured by end 2020 multi-year if possible (see below).
- Reform and policy conditions:
 - a road sub-sector medium-term expenditure framework concept agreed by MIPU and central agencies by end-2019, and a medium-term expenditure framework for the period 2020-22 agreed by end 2019;
 - revised PWD organisational structure approved by PSC by mid-2019 and staffing positions filled by mid-2020;
 - road maintenance multi-year road maintenance contracts become legally possible by end-2020;
 - procurement rules and regulations streamlined by mid-2019.

These outcomes are judged to be achievable. None requires legislative change, but changes to regulations might be needed. In general, most involve improved inter-agency cooperation to move forward complemented by support from R4D2. In the case of procurement, for example, the GfG program will provide assistance to the CTB in 2018 to review and enhance GoV procurement, which provides an opportunity to review current practices and pursue potential reform.

A schedule for achieving the mid-term milestones is: (i) installation and operation of the asset, finance and management information systems by the end of December 2019, with PWD staff to become fully responsible for them by the end of June 2020; (ii) a medium-term expenditure framework concept agreed by the end of December 2018, and a medium-term expenditure framework for the period 2020-22 agreed by the end of December 2019 and updated annually thereafter; (iii) revised PWD organisation structure approved by the end of June 2019 and staffing positions filled by the end of June 2020; (iv) greater flexibility for PWD procurement secured by the end of June 2019; and (v) domestic funding for road maintenance restored to its former level by June 2021.

The benefits of R4D2 will be reduced if the matters set out above are not accomplished. Hence, it is proposed that a failure to achieve them is sufficiently serious that it should have a major bearing on the findings of the mid-term review of R4D2 (that is discussed in Section E).

Delivery Approach

The delivery model for the current R4D program works well and should be continued. This involves specialist advisors being embedded within the structure of MIPU (for centralised human resource activities) and PWD (for other activities). DFAT will continue to engage directly with MIPU executives for policy and strategy discussions. Funding for works should be provided through a direct funding agreement and disbursed using GoV systems. This arrangement reinforces GoV systems and technical and administrative capacity. Approved annual work plans, monthly management meetings, other reporting and auditing ensure appropriate expenditure of GoA funds. The system has worked well during the R4D program and there is no need for change. It is also consistent with the recommendations of the IE and the purpose of R4D2. Implementation matters are addressed in more detail in Section E of this document.

Resources

Support for DFAT/AHC program oversight will also include an independent short term advisor to support the technical advisers (TA) embedded in PWD. The role of this adviser will be to strengthen the transfer of skills from TA to local counterparts.

4. IMPLEMENTATION ARRANGEMENTS

Governance

R4D2 will be authorised through: (i) MIPU-PWD as the GoV implementing agency; and (ii) the AHC in Port Vila, Vanuatu as the GoA implementing unit.

The governance arrangements for the program will include (see Figure 2):

- Program Steering Committee. The PSC will provide strategic oversight and resolve constraints to the successful progress of R4D2. Given the frequency of the meetings of the Management Working Group (see below), it is proposed that the PSC meet three times each year: one meeting to consider and approve the R4D2 Annual Work Program Report (for the forthcoming year); one to review the R4D2 Annual Progress Report; and the third to consider accumulated R4D2 Quarterly Progress Reports and other issues. Given the essential role of other key GoV agencies in securing program outcomes, the PSC should comprise the Director-General of MIPU (as Chair), Director PWD, plus representatives of the PMO, MFEM and the AHC.
- **Management Working Group.** The MWG should meet monthly to consider the contractor's monthly byexception reports and review Quarterly Progress Reports prior to forwarding them to the PSC. The MWG should comprise the Director of PWD (as Chair), the AHC and the Team Leader for R4D2.

Governance and operational practices for the channelling of GoA funds for R4D are operating satisfactorily, and it is proposed that they be continued for R4D2.

Management

A contractor will be engaged to work with MIPU-PWD to deliver R4D2. This approach is recommended because: (i) the services to be provided can be clearly specified; (ii) the R4D program has established sound operational and management practices; (iii) activities need to be coordinated between team members which is best achieved under the jurisdiction of the contractor; and (iv) the approach minimises the demands on the small complement of staff in the AHC.

Responsibilities for entities involved in overseeing and implementing R4D2 are summarised in Table 2.

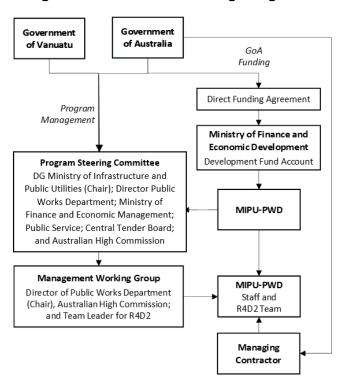


Figure 2: Governance and Financing Arrangements

Entity	Responsibilities
Government Agenc	pies
AHC (Vanuatu)	Staff from the AHC will be responsible for fulfilling DFAT's responsibilities regarding R4D2, including
	• setting strategic direction for R4D2 and engaging in policy dialogue with the GoV on priority issues for the program;
	being a member of the Program Coordination Committee;
	overseeing the performance of the contractor;
	• ensuring the contractor networks with complementary regional Pacific programs and other Pacific Island transport programs with similar objectives;
	managing the contract with the contractor;
	 engaging independent technical specialist advice to support its oversight of R4D2; using monitoring and results measurement information from R4D2 to support public diplomacy and policy dialogue as well as preparation of Aid Quality Checks (AQC) and Aid Program Performance Reports (APPR)
	 assisting with coordination of other complementary development assistance programs and providing advice on changes in GoA policy; and
	• communicating the outcomes and results of M&E of R4D2 to a broader audience.
MIPU-PWD	MIPU-PWD will be the GoV implementing agency, It will:
	• chair the Program Coordination Committee (MIPU) and the Management Working Group (PWD);
	facilitate access to its staff and to other GoV agencies;
	 work with the contractor to develop annual work plans;
	• support implementation of R4D2 activities, including institutional reform and capacity building and contribute to the achievement of mid-term milestones; and
	enhance its working relationships with other key GoV agencies.
Committees	
Program	The PMC will:
Management Committee (PMC)	 comprise a representative from each of MIPU, PMO, DTF and the AHC, with the range of GoV agencies reflecting the need for broad-based support to secure change and progress; make strategic and management decisions, using monitoring and results measurement information from R4D2;
	 approve and guide program activities, and review program performance and effectiveness; and
	 meet at least three times per year (and out-of-session, as required).
Managamont	The MWG will:
Management Working Group	 comprise a representative from PWD, the AHC and the contractor;
(MWG)	 review monthly and other reports, provide guidance on program technical activities and ensure coordination of R4D2 with other relevant development programs; and
	 make tactical and management decisions, using monitoring and results measurement information from R4D2;
	meet monthly.
Contracted Agents	
Contractor	The contractor will:
Contractor	• provide staff for R4D2;
	• support the PSC and the MWG and cooperate with the AHC and its agents;
	develop, initiate and manage R4D2 activities;
	• secure contracts with technical specialists, sub-contractors and suppliers as needed to undertake specific activities and deliver supplies and services;
	ensure probity in procurement and payment systems;
	develop and implement an effective monitoring and results measurement system;
	 provide tactical and management advice to the MWG, drawing on monitoring and results measurement information;
	provide information to support DFAT prepare AQC for R4D2
	ensure gender equality and social inclusion are embedded in all R4D2 activities;
	ensure appropriate standards are applied and capacities built to manage disaster and climate risks
	draft communication products for the AHC on project activities and outcomes;
	administer R4D2, including management, financial and other compliance reporting; and
	 be a source of trusted and timely advice to MIPU-PWD management.

Table 2: Entity Responsibilities

Entity	Responsibilities
AHC Independent	The independent technical specialists directly engaged by AHC will:
Technical	 provide advice to AHC on technical issues as needed;
Specialists	 report on the quality of M&E activities and results;
	 assist with annual reviews as needed and conduct the mid-term review; and
	 conduct end-of-program studies and help disseminate findings.

Reviews

In addition to regular program monitoring and results measurement activities, two evaluative reviews are planned (to DFAT's Aid Quality Checks – AQC - M&E Standards 4, 5 and 6):

- mid-term review. This review should be conducted in the middle of the third year of R4D2 so that its
 recommendations can be implemented in the final two years of the program. The Review will: (i) examine
 program progress and impacts with regard to intermediate outcomes; (ii) review progress towards the
 milestones set out for the program; and (iii) taking account of these and other indicators of performance
 and achievement, including the results of the Partner Performance Assessment, determine remedial
 actions in the event of unsatisfactory progress.
- end-of-program activities. Two actions are proposed at the end of R4D2: (i) examine the fourteen-year program of assistance to PWD to identify achievements and lessons that can assist in the development of future similar programs; and (ii) use workshops and other means to disseminate the results to a broad range of interested people and organisations.

Performance Reporting

Routine performance reporting for R4D2 will align with DFAT M&E Standards 2 and 3, and include:

- an Inception Report to be submitted one month after mobilisation that describes initial activities and planned activities for the first year of the program;
- monthly by-exception reports;
- three Quarterly Progress Reports per annum (to DFAT M&E Standard 3);
- a semi-annual strategic review of the Vanuatu infrastructure development context;
- an Annual Report each year (to DFAT M&E Standard 3);
- an Annual Work Plan and Budget Report two months prior to the end of each Australian financial year that sets out proposed work and expenditures for the next year, including within- and end-of-year milestones that provide a pathway to eventual achievement of mid-term milestones and end-of-program outcomes;
- periodic field monitoring reports (to DFAT M&E Standard 7);
- briefing reports for meetings of the PSC and the MWG; and
- an M&E Plan, Gender Equality and Social Inclusion Plan, Risk Management Plan and Stakeholder Engagement and Communication Plan to be submitted progressively between two and four months after mobilisation.

A schedule for preparation and submission of these reports (and other reports that are to be provided by the contractor) is included in the Statement of Requirements (see Appendix J).

Implementation Plan

Contractor

A contractor for R4D2 will be engaged. This will occur through competitive tendering. The contract for the contractor will be in the form of a three-plus-two-year contract to allow flexibility following the findings of the mid-term review.

R4D2 is scheduled to commence in the first half of 2019. Initial work requires that the contractor to: (i) review the Handover Report and other materials provided by the outgoing contractor for the R4D program; (ii) familiarise themselves with R4D activities and MIPU-PWD working relationships; (iii) identify, assemble and review the status of the latest version of all technical documents and systems developed by the R4D program: (iv) identify and review ongoing activities in which R4D was involved; and (v) develop an initial work plan. This work should be completed within two months of mobilisation. The contractor should proceed to implement the work plan following its approval.

The specialist personnel provided by the contractor for R4D2 will be embedded within PWD, as currently occurs with R4D. In doing this, the personnel should be aware of the need to: (i) transition over the first three years of R4D2 from full-time support for implementation of activities to training and less direct operational help and, over the last

two years of the program, to primarily provide intermittent reinforcing support to PWD staff; and (ii) to minimise the extent to which they are drawn into non-program activities of MIPU-PWD.

The personnel will need to have skills in the broad areas of program management, monitoring and evaluation, works planning and programming, works delivery, financial management, organisational and human resource development, gender equality and social inclusion, safety and environmental protection. To allow for innovation and to allow best advantage to be taken of the skills of individual people, specific personnel are not specified other than the Team Leader. Instead, descriptions are provided in the SOR for areas of expertise. Companies submitting tenders should identify individual specialists who can, in aggregate, meet the requirements of each area of expertise.

Program Procurement Arrangements

Funding for physical works and associated equipment in Stream A will continue in the same manner as has occurred under the R4D program, i.e. through a Direct Funding Arrangement (DFA) between the GoA and the GoV (see Figure 2), with biennial tranche payments made into GoV's development fund account and with expenditure of these funds overseen by the contractor. Similarly, GoA funds for these activities will be fully integrated with PWD's budget and disbursed through PWD systems. The DFA will maintain the "*No objection*" requirement for disbursements in the DFA that will continue to be authorised by the contractor in Port Vila.

The GoA will directly fund Stream A activities, involving the procurement of the contractor and their procurement of related goods and subsidiary services. Initiatives under Stream C need individual approval from the AHC. This is required because it is not possible at this stage to identify specific proposals or define in sufficient detail technical criteria that would enable decision-making to occur in MIPU-PWD. Procurement could be undertaken by either PWD using GoV procurement systems or the contractor as appropriate and approved by the AHC. In the event of a disaster, any potential GoA response could be implemented through Stream C activities and any additional funding for relief works directed through the funding facility established for physical works in R4D2.

Financial audits for R4D2 will be undertaken annually.

Monitoring and Results Measurement

The monitoring and evaluation (M&E) strategy and approach, together with an initial results framework, are outlined in Appendix E. Based on this framing and learning from M&E undertaken in R4D, an M&E specialist will prepare an M&E Plan (to DFAT M&E Standard 2) within three months of mobilisation of the R4D2 team. This will involve the R4D2 team, MIPU-PWD and DFAT to ensure a common understanding, agreement and partner ownership. The M&E Plan will describe the full content of the M&E program, agreed targets, procedures and responsibilities for implementing the Plan, reviews and analysis to be undertaken, M&E outputs ('products') to be produced and costs associated with implementing the Plan.

With some necessary enhancements (e.g. semi-annual assessment of the Vanuatu infrastructure development context), most of the key features and methodological approaches in the current R4D M&E system can be retained. However, there will be an increased focus on measuring, wherever useful, equity of participation and benefits for women, disadvantaged groups, and youth across the range of R4D2 activities and areas of influence. The R4D2 M&E system will continue to adhere to DFAT's M&E Standards and Joint Committee on Standards for Educational Evaluation (JCSEE) Program Evaluation Standards. It will be focused at three levels: (i) activity level reporting; (ii) program reporting; and (iii) internal/external evaluation activities.

The M&E Plan will reflect a rigorous yet flexible approach building on systems and approaches that have recently worked well for R4D. These feature activity level monitoring and higher-level outcome related monitoring involving independent research, evaluation and learning studies. As a result, there is now good baseline data available (quantitative and qualitative) and these should be drawn upon, and added to, as a basis for ongoing measurements of progress towards target outcomes and assessing overall impact.

Use of road condition surveys, physical works/technical specification monitoring, traffic counts, and the Rural Accessibility Index (developed in conjunction with the RRAP) will remain essential performance monitoring tools. There is scope for new approaches, and innovation is encouraged. As priorities emerge, evaluative studies could focus on causal mechanisms critical to the performance of an individual intervention or a thematic area of interest (e.g. women in leadership, new employment opportunities, and CBCs and IBCs). With the strong focus on organisational and individual performance in R4D2, the *longitudinal organisational case study* and *tracer study* methodologies should continue, targeting relevant cohorts (current and/or new) to document progress over an extended period.

Given the introduction of mid-term milestones, relevant performance indicators on how well PWD engages on strategic and budget matters with other GoV agencies (e.g. MFEM-DFT, PSC and CTB) will need to be carefully monitored and reported. This could be done in partnership with the Governance for Growth Program. Similarly, the extent to which MIPU-PWD and key development partners (especially MDBs) identify and develop future infrastructure investments will require ongoing monitoring, assessment and reporting.

The scheduled mid-term review will enable an assessment of adequacy of progress towards intermediate outcomes and explain why any variance from plan has occurred, and provide the opportunity for intervention and/or refinement in time for the end-of-program final evaluation.

Sustainability

The R4D2 design includes measures to maximise the sustainability of program activities. Firstly, the program includes a transition from full-time support for implementation of activities to training and then less direct operational help. The graduated withdrawal of specialist support to MIPU-PWD will involve a transition in the final two years of the program to primarily provide intermittent reinforcing support to PWD staff so that the sustainability of enhanced institutional capacity can be tested, and extra support provided where weaknesses are evident. This will require close monitoring.

A second key aspect is a gradual decline in grant funding for road maintenance and improvement in the last two years of the program. This will allow GoV time to increase its funding allocation, which will be supported by: (i) developing a medium-term expenditure framework process to improve medium-term budgeting and works programming; (ii) enhancing MUIPU-PWD's capacity to make its case for funding; and (iii) seeking GoV commitment to increase its domestic funding for road maintenance. Lastly, the program will develop the planning and implementation capacity for MIPU-PWD to seek and effectively use the funding that is available from MDBs.

The design includes measures to address climate and disaster risks; a major threat to sustainability of program activities.

Gender Equality and Social Inclusion

R4D2 will advance gender equality and promote the empowerment of women by adopting a gender-responsive and socially-inclusive approach through: (i) recruitment and deployment of a gender specialist to guide and provide onthe-job training for staff of MIPU and the central and divisional offices of PWD in comprehensive gender mainstreaming; (ii) continuing consultation with all groups in communities to ensure they understand the intended role of CBCs in promoting gender equality and an inclusive role for all members of communities, including youth and the disabled; (iii) ensuring that women's concerns about issues such as road safety and personal security are voiced and acted upon; (iv) use of sex-disaggregated data for project design, implementation and monitoring as well as data disaggregated by disability and age; (v) consultation with IBCs and NCs to ensure equal opportunities for male, female, youth and disabled members of the community to participate in roadworks contracts; (vi) mechanisms such as separate sex groups and quotas to ensure women's equal representation and participation in community decision-making related to CBCs; (vii) mentoring and professional development of female staff in MIPU-PWD to develop leadership skills and role models for women's empowerment; (viii) helping MIPU-PWD achieve gender targets in its human resources strategy relating to employing more women, including at senior levels and employing women candidates where scored equally with male candidates for positions; and (ix) feeding back evidence-based information into ongoing program activities. GESI specialists will work with other specialists to ensure GESI is built into all R4D2 activities and to identify measures of progress for the M&E program.

In addition to activities included above to support disadvantaged groups such as the disabled and youth, other actions will include: (i) including specific advice and direction to guide on-the-job training and support for staff in MIPU and PWD on disability inclusion, as well as leading and supporting disability inclusion within implementation and monitoring and evaluation of project activities; and (ii) developing an overall understanding of the behaviour and concerns of people with disabilities and how their needs can be better met through re-design of program activities.

A Gender Equality and Social Inclusion Plan will be prepared within 3 months of mobilisation of the R4D2 team. It will describe the strategy for ensuring that the needs of women, children and youth and disadvantaged people are able to participate in all aspects of the program and that any emerging issues are identified and incorporated in adjustments to program implementation. These measures will need to be explored further during the inception phase of the program with refined plans and activities subsequently developed. With PWD and R4D support, IBCs have provided construction training and mentoring to hundreds of young men and women across rural Vanuatu since 2009. R4D2 will prepare a strategy with PWD during the inception phase, to build on this success and to maximise employment opportunities for youth.

Private Sector

R4D2 will continue engagement with, and support for, the private sector in Vanuatu. Its predecessor programs assisted PWD to mostly outsource the maintenance and improvement of rural roads. This approach has reduced the cost of these works compared with the previous use of force account and created a private sector, island-based road contracting industry. It has also allowed PWD to focus on its core role of ensuring the provision of an effective and efficient rural road system rather than seeking also to provide construction services. The IBCs are still generally small, fragile businesses in need of increased technical and business capacity, and which are vulnerable to fluctuating budgets for roadworks and delays and other procurement inefficiencies. R4D2 will address these matters. R4D2 will also help PWD 'recruit' and develop new IBCs.

In addition, there currently is only a very limited domestic private sector consulting industry. In the longer term there will be a need for this resource that PWD can draw on to undertake specific tasks, particularly as the quantity of R4D2 technical specialist support declines. R4D2 will examine means to support the development of this industry. While not generally categorised as private sector, the engagement of communities through CBCs uses the non-government sector to support rural road maintenance.

Stakeholder Engagement and Communication Plan

A stakeholder engagement and communication framework will be developed to identify and engage with stakeholders, including the Government of Vanuatu (GoV), project team members, private sector suppliers, communities groups, contractors and consultants, other donors, NGOs and other members of civil society and the media. The framework and its implementation will adhere to Australian Government branding requirements. An appropriate level of funding will be assigned to communications and stakeholder engagement activities.

Risk Management Plan

An initial risk assessment has considered potential risk events, sources, impacts and mitigation measures and assigned a current rating (see Appendix G). The risks are judged to be: (i) *High* with regard to: (a) the operating environment, and (b) safeguard matters; and (ii) *Moderate* with regard to: (a) program results, (b) fraud/fiduciary, (c) reputation, and (d) partner relations. The overall risk rating is *Medium*. However, these risks are all at the lower end of the respective scales, and careful management of them that also draws on the experience with R4D will ensure the overall project remains at the low end of the *Medium* rating if not in the *Low* category. The greatest risk to the success of R4D2 is judged to be that of other GoV agencies not responding adequately to the need for increased funding and reform for PWD. Milestones set in R4D2 will better enable these risks to be managed.

During the inception phase of R4D2, the incoming team will be to develop a risk management plan (RMP) drawing on the experience with the R4D program and the initial risk assessment presented in Appendix G. This should be done through a workshop with MIPU-PWD, DFAT-AHC and the R4D2 team conducted within 6 weeks of mobilisation to ensure a common understanding of risk, agreement on the key risks, prioritisation of them, how best to manage them and responsibilities (ownership) negotiated and assigned. Once in place, the R4D2 Team Leader will ensure that the risks are carefully monitored, and issues identified in the monthly report to the MWG or directly to the AHC if urgent. The RMP will be updated as needed and at least annually, and included as an annex to the Annual Work Plan.

Safeguards

R4D2 involves maintenance of rural roads including upgrading and some reconstruction of existing roads as well as institutional capacity building. The program will use, and upgrade if necessary, documents prepared and used in R4D that address social, environmental and climate change and anti-corruption safeguards. During the inception phase of R4D2, the incoming team will identify which documents and standards require updating. These documents have been prepared to meet standards set by the GoA and the GoV. The social safeguards guidance covers gender equality, inclusion, child protection and labour, HIV, road/transport accessibility for the disabled, and disaster preparedness. Other similar documents include: (i) a guide for social and environmental safeguards facilitators and a guide for community-based contractors task and safety (both in English and Bislama); (ii) workplace health and safety management; and (iii) environmental management. A set of modules related to social and environmental safeguards addresses crosscutting issues for the safety of communities and other contractors and protection of the environment during work that has been designed as a training programme for PWD to implement internally and with its broader stakeholders.

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX A – SECTOR REVIEW

A. INTRODUCTION

This appendix provides supporting information on Vanuatu's transport sector to complement the main text. After an overview of Vanuatu's geography and economy, it highlights the country's development challenges and priorities, and the potential role the transport system can play in addressing them. This leads to an assessment of the sector's shortcomings and a discussion of the activities and achievements of the current Roads for Development (R4D) program and other development-partner programs in relation to these. From this, conclusions are drawn about priority areas for continuing Department of Foreign Affairs and Trade (DFAT) assistance under the proposed second phase to the R4D program (R4D2). These are taken up in the description of program activities in the main body of the design document.

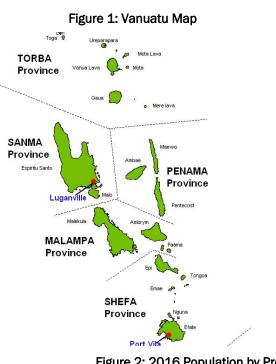
B. BACKGROUND

Geography and Population

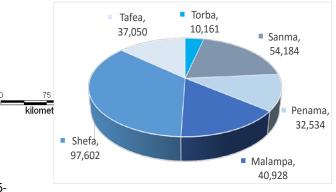
Vanuatu is a small and relatively isolated archipelagic nation. It consists of approximately 82 islands with a total land area of around 4,700 square km spread over 1,300 km from north to south. Most islands are small, with only 14 having a surface area of more than 100 square km (see Figure 1). The 2016 Mini Census put the population at 272,459, of which 67,749 lived in urban and 204,710 in rural areas. Figure 2 shows the distribution by province. The two major urban centres - the capital, Port Vila, on Efate (Shefa province) and Luganville on Espiritu Santo (Sanma province) - have been growing rapidly due to migration from the outer islands.

Average population growth since 2000 has been 2.2 per cent per annum, though rising urbanisation is evident with the growth in urban population (of 3.4 per cent per annum) being almost twice the growth in rural population (1.8 per cent per annum). Even so, 75 per cent of the population is classified as rural.

Drawing on the most recent data (generally 2015 or 2016), the population gender balance is 1.03 males per female, close to the international norm. Girls are slightly more likely to attend primary school than boys (88 per cent compared with 86 per cent). Women are less involved in employment (participation rates for women and men are 62 per cent and 81 per cent respectively), though the gap is less in the case of people aged 15-







24 years (51 per cent and 63 per cent respectively). Modelling by the International Labour Organisation indicates the unemployment rate for young people aged 15-24 years to be moderate (at 12 per cent and 10 per cent respectively of the available labour-force for female and males), though observation suggests underemployment is high.

The ease and cost of movement into and around the country affects Vanuatu's development outcomes. Like all small Pacific economies, it is heavily export and import oriented, with international tourism and agricultural commodities exported, and manufactured and specialist services imported. Internally, air and sea services link

islands, and around 2,100 km of non-urban roads provide Vanuatu's predominantly rural population with access to schools, medical facilities, and commercial and transport hubs.

Vanuatu is on the Pacific "Rim of Fire", a region prone to earthquakes, tsunamis and volcanic eruptions. Its economy is still recovering from the effects of Cyclone Pam, a Category 5 cyclone that hit in March 2015, killing 11 people, displacing 65,000, and severely damaging buildings and infrastructure. Losses were estimated at US\$450 million, or 64 per cent of annual GDP¹³. Agriculture and tourism were badly hit, the impacts made worse by the loss of transport infrastructure (14 per cent of all losses) in many of the agriculture-producing areas of Malampa, Penama, Shefa, and Tafea. Cyclone Pam's destruction of crops impacted the livelihoods of at least 80 per cent of the rural population¹⁴.

Further discussion of demographic and social dimensions is presented in Appendix B.

Economy and Public Finance

The following is taken from the International Monetary Fund (IMF) 2018 Article IV Staff Report. The IMF characterises Vanuatu as a small island developing state and a low-income country. Vanuatu's income per capital is about US\$3,000, with tourism and agriculture being the key drivers of economic activity. Gross domestic product (GDP) growth stagnated to average 1.5 per cent from 2010 to 2015, from 5.7 per cent over the previous 5-year period. Following Cyclone Pam, growth has rebounded to around 4 per cent on the back of substantial public investment and the recovery in tourism and agriculture. The IMF expects GDP growth of around 4 per cent to continue through 2018.

The IMF expected inflation to have picked up to 3.1 per cent in 2017 driven by domestic demand. The IMF expects inflation to rise further to 4.8 per cent in 2018 mainly due to a value-added tax increase from 12.5 per cent to 15 per cent, before gradually reverting to modest levels in the medium term. The IMF also expects the current account deficit to widen to around 9 per cent of GDP in 2017 and 2018, due to the high import content of the projects to scale-up infrastructure. This deficit is expected to remain high at around 7 per cent to 8 per cent of GDP in 2017 and 2018 reflecting reconstruction and infrastructure expenditure.

The Government of Vanuatu's (GoV's) fiscal deficit deteriorated from 6.1 per cent of GDP in 2016 to 7.5 per cent in 2017. The IMF expects the deficit to widen further to 8.0 per cent of GDP in 2018 owing to an increase (7–8 per cent on average) in the government wage bill, despite the increase in the value-added tax rate. The government will likely present the tax administration bill to Parliament in mid-2018 followed by the income tax bill later in the year. The IMF 2018 Staff Report states that the implementation of these bills in early 2019 combined with lower committed capital spending owing to the completion of large infrastructure projects, is expected to reduce the deficit to 4.3 per cent in 2019.

Vanuatu's small economy is described in Table 1. Average annual Official Development Assistance (ODA) was a substantial US\$450 per capita (in nominal prices) over the period 2011-15, with total ODA being equal to 12.3 per cent of gross national income over the period. Australia was the largest donor, providing 60 per cent of net bilateral aid from Development Assistance Committee donors over the period, followed by New Zealand (18 per cent) and countries in Asia (11 per cent), Europe (8 per cent) and North America (3 per cent).

GoV has taken considerable grants and loans from multi-lateral development banks (MDBs), primarily the World Bank Group (WBG) and the Asian Development Bank (ADB), but also including the European Investment Bank. MDB debt currently accounts for 25 per cent of Vanuatu's total external debt. Multi-lateral debt service accounts for 64 per cent of public and publicly-guaranteed debt service over the last 5 years (see Table 1). The GoV has also secured development loans through the Japan International Cooperation Agency (JICA) and the Chinal Export Import Bank (China EXIM). GoV's 2018 budget papers update this debt picture (Figure 1 on page 5).

¹³ Source: http://www.worldbank.org/en/news/press-release/2016/06/17/50-million-to-improve-roads-schools-and-buildings in Vanuatu.

 $^{^{14}}$ Vanuatu Post Disaster Needs Assessment, Tropical Cyclone Pam, March 2015, GoV.

	2000	2005	2010	2011	2012	2013	2014	2015	2016
Economy									
GDP per capita (constant 2010 US\$)	2,840	2,625	2,966	2,933	2,917	2,908	2,910	2,824	2,874
GDP per capita, PPP (constant 2011 international \$)	2,823	2,610	2,948	2,915	2,899	2,890	2,892	2,807	2,856
Consumer price index (2010 = 100)	75.1	83.9	100.0	100.9	102.2	103.7	104.5	107.1	108.0
Aid									
Net bilateral aid flows from DAC donors (current US\$m)									
Australia	8.7	19.1	56.0	61.8	67.5	51.9	55.3	90.0	
New Zealand	4.2	5.0	12.9	13.6	15.3	14.9	25.3	26.9	
Europe)	14.6	9.6	5.7	4.2	7.4	8.0	4.4	19.2	
North America	0.6	2.1	19.3	4.6	2.2	2.8	3.0	5.3	
Asia	6.4	3.3	15.6	7.5	10.3	13.6	9.6	18.9	
Total)	34.5	39.0	109.5	91.7	102.6	91.1	97.6	160.3	
Net ODA received (% of central government expense)			69.2	52.2					
Net ODA received (% of GNI)	17.7	10.8	16.0	11.8	13.9	11.5	12.3		
Net ODA received per capita (current US\$)	247	191	456	377	412	361	388	705	
Average grant share for new external debt, official (%)	44	0	0	0	79	0	0	81	80
Public Debt									
Commitments (current US\$m)									
IBRD	0	0	0	0	0	0	0	0	0
IDA	0	0	0	0	0	0	0	61	35
Total Public and publicly guaranteed	4.6	0.0	0.0	0.0	77.1	0.0	0.0	116.5	38.4
Multilateral debt (% of total external debt)	57.1	67.2	38.7	37.8	17.1	24.3	21.8	21.9	25.2
Multilateral debt service (% of public and publicly guaranteed debt service)	66.1	72.3	82.6	79.6	69.0	63.8	63.3	59.9	
Public Debt (% GDP)*				20.7	21.7	20.6	19.3	25.6	33.5
Government Income and Expenditure									
Revenue & grants (% of GDP)*				22.3	21.8	21.4	23.5	32.1	29.1
Expenditure (% of GDP)*				24.2	23.4	21.7	22.7	24.9	39.7
Fiscal balance (% of GDP)*				-2.1	-1.6	-0.2	0.8	7.2	-10.6

Table 1: Vanuatu Economy and Public Finance (excluding bilateral development bank loans)

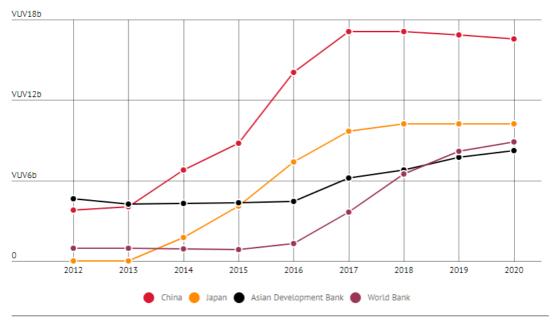
Source: World Bank Development Indicators: * = IMF (2016) with data estimated for 2015 and projected for 2016.

The IMF points out that Vanuatu's public debt is now at the higher end, compared to other Pacific island countries. The Fund's updated Debt Sustainability Analysis suggests that the risk of external debt distress in Vanuatu remains moderate, consistent with its 2016 assessment, but that the debt service pressure would be on the rise over the medium term.

Figure 1: GoV development bank debt

How much Vanuatu owes

Government debt, billion vatu, by lender (1bn vatu = AUD 11,904,497.16)



Source: Vanuatu 2018 Budget Papers

Government of Vanuatu Development Priorities

The GoV has set out its development priorities in the National Sustainable Development Plan (NSDP) 2016 to 2030, drawn up in the aftermath of Cyclone Pam. A more immediate response to Cyclone Pam comes from a National Recovery and Economic Strengthening Program (NRESP), which estimated recovery and reconstruction costs at US\$316m, to which the Government of Australia (GOA), WBG, ADB and other emergency programs have contributed (see later). While infrastructure is estimated to require only 18 per cent of this recovery spending, and transport 11 per cent, the rehabilitation of roads, bridges, ports, wharves, airstrips and transport fleets, and the re-establishment of transport services, remain – even now, three years later – critical to the immediate and longer-term recovery of most economic and social sectors.

The goals in the NSDP most directly related to R4D2 are set out in Table 2 and relate to good infrastructure, governance, and the management of infrastructure to support the economy, the environment and creating employment opportunities and support for entrepreneurs. The first listed Society pillar and first listed Economic pillar (in blue font) are the two primary goals of R4D2. The NSDP sets out more specific policy objectives for each of these goals, which are also shown in the table. Also shown are potential ways in which R4D2 could contribute to the NSDP Goals and Policies. These opportunities are considered further in this appendix and also Appendices B (Social Dimensions) and Appendix C (Institutional Review).

Complementing the NSDP is a monitoring and evaluation (M&E) plan (GoV 2017b). In addition to indicating a GoV commitment to maintaining oversight of the NSDP, this document provides clarity on the outcomes sought by the government regarding individual objectives. While generally expressed in broad terms, the M&E plan provides a framework within which M&E for R4D2 can sit so that it supports both program and GoV needs.

Table 2: Role of R4D2 Regarding GoV National Sustainable Development Plan 2030	2
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NSDP Goal	NSDP Policy	Potential R4D2 Activities	Role of R4D2		
			Central	Support	
Society Pillar		1		1	
A dynamic public sector with good governance principles and strong institutions delivering the support and services expected by all citizens of	Enhance the capacity and accountability of public officials, and ensure the impartiality and effectiveness of performance management systems.	Develop management information and related systems.	~		
expected by all citizens of Vanuatu	 Strengthen national institutions to ensure they are cost-effective and well-resourced to deliver quality public services. 	1			
	 Strengthen local authorities and municipal institutions to enable decentralised service delivery. 	Develop capacity of staff in PWD Divisional Offices		~	
	 Strengthen physical planning and management to meet the service delivery needs of a growing population. 	Implement asset management system	1		
	 Guarantee the public's right to information. 	Ensure transparent systems and availability of information		*	
	 Coordinate donor resources to align with national objectives. 	Enhance PWD capacity to identify and develop projects		*	
	 Strengthen research, data and statistics for accountability and decision-making. 	Improve data collection and M&E	~		
An inclusive society which upholds human dignity	 Implement gender responsive planning and budgeting processes 	Incorporate gender equality and social inclusiveness	✓		
and where the rights of all Ni-Vanuatu including women, youth, the elderly and vulnerable groups are supported, protected and	 Prevent and eliminate all forms of violence and discrimination against women, children and vulnerable groups 	into all program activities both within PWD and in the delivery of roadworks	✓		
promoted in our legislation and	 Empower and support people with disabilities 	port people with			
institutions	 Provide opportunities, support and protection services for youth and children as valued members of society 		✓		
Environment Pillar					
A strong and resilient nation in the face of climate change and	 Institutionalise climate change and disaster risk governance, and build institutional capacity and awareness 	Ensure an under-standing of the implications of climate change and responses	1		
disaster risks posed by natural and man-made hazards	 Strengthen post-disaster systems in planning, preparedness, response and recovery 	Develop disaster response plans and provide a means to deliver recovery funding	✓		
	 Promote and ensure strengthened resilience and adaptive capacity to climate related, natural and man- made hazards 	Build climate change resilience into road design and construction standards	1		
A nation committed to ensuring the conservation and sustainable management of our	 Increase awareness on biodiversity conservation and environmental protection issues across government and publicly 	Build measures to protect the environment into design and construction standards and planning processes	~		
biodiversity and ecosystems	 Enhance environmental monitoring, evaluation and research with relevant, open and transparent data sharing among relevant agencies 	Ensure monitoring and evaluation activities address environmental issues	✓		

NSDP Goal	NSDP Policy	Potential R4D2 Activities	Role of R4D2		
			Central	Support	
Sustainable and well- maintained infrastructure and services for all, through inclusive and	 Enact clear infrastructure governance, legislative frameworks and standards for resilient infrastructure and maintenance. 	Implement asset management system	~		
effective partnerships	 Improve partnerships and the cost- effective use of resources to ensure sustainable asset management and maintenance. 	Implement asset management system	~		
	 Provide equitable and affordable access to efficient transport in rural and urban areas. 	Maintain and improve rural roads to enhance access and to reduce vehicle operating costs	*		
	Establish effective partnerships that facilitate the development of the private sector and rural communities as service suppliers in the provision of transport and the infrastructure sector.	Outsource road maintenance and improvement to private contractors and communities	✓		
	 Increase use of and access to information and communications technologies (ICT), including on-line government services. 	Develop ICT-systems for financial, asset and human recourse management	V		
A strong rural economy that creates opportunities, enables the	 Improve access to markets through quality infrastructure, utilities, storage and processing facilities in rural areas 	Support maintenance and improvement of rural roads and improve the	✓		
development of rural communities and increasingly contributes to national prosperity	 Improve the provision of government services in rural areas 	effectiveness and efficiency of works		*	
An enabling business environment, creating opportunities and employment for entrepreneurs throughout Vanuatu	 Create an improved business environment with a stable regulatory framework, which promotes competition, protects consumers, attracts investment, and reduces the costs of doing business 	Support the domestic road construction industry, particularly continued development of island- based contractors		*	
	 Increase the number of decent, productive employment opportunities, particularly for young women and men and people with disabilities 	Promote the participation of vulnerable groups in road maintenance and improvement activities	1		

Source: GoV (2016) for NSDP Goals and Policies. Design team for matters related to R4D2.

Political Economy

Understanding Vanuatu's political economy is crucial to program design. A recent assessment (ADB 2015) concluded that factors to be taken into account were: "(i) having a thorough understanding of context, including culture and politics; (ii) building universal ownership for development results; (iii) requiring participation in project design and implementation, not just consultation; (iv) ensuring institutions and planning structures effectively support change; (v) proving that change can work, through reinforcement and practical application; and (vi) continually communicating well to support understanding of all stakeholders."

The long involvement of the Vanuatu Transport Sector Support Program (VTSSP)/Roads for Development (R4D) programs has helped develop an understanding of how to address these matters with contextual and cultural sensitivity. The lessons have been incorporated and developed in the design of R4D2. Examples include: (i) having the program embedded in the Public Works Department (PWD) to facilitate participation and ownership in activities; (ii) engaging communities in participatory activities; (iii) pressing for institutional change and capacity enhancement to allow the GoV to better meet the needs of the community; (iv) examining alternative approaches to achieving outcomes to identify those that work best; and (v) assisting PWD to better make its case to other parts of government and development partners.

A further aspect of political economy, common also in other countries, is the role of political choice in identifying projects to be included in infrastructure investment programs. Politicians have the final responsibility for making decisions on such matters and for justifying them to their communities, and hence

this role cannot be avoided. However, technicians can also determine the way available funds can best be used to maximise community and road user benefits and minimise the long-term cost to the government. R4D2 will continue to assist PWD staff develop this technical capacity and to communicate the results so that political decisions can be as well-informed as possible.

C. THE TRANSPORT SECTOR

The Role of Transport

Transport plays a critical role in linking people with social and government services and income-earning opportunities, agricultural and other producing areas with domestic and international markets, consumers with goods and materials, and tourists with Vanuatu's many attractions. These links are more critical to the livelihoods of people in isolated communities and vulnerable groups. Transport services – most of which mainly benefit the less disadvantaged – are provided through:

- on land, just over 2,000 km of roads, of which only 10 per cent are sealed;
- 26 domestic civil airports and three international gateways, served by Air Vanuatu and several other airlines;
- shipping services between 22 domestic ports and two international seaports; and
- in urban areas, public passenger transport provided by unsubsidised, privately-owned Public Service Vehicles (PSVs), or minibuses.

No recent data exists on the relative importance of each in terms of demand, but maritime transport is the main mode for inter-island and international trade and for low-cost inter-island passenger journeys, aviation for more time-sensitive domestic and international passenger travel, and road transport for most intra-island freight and passenger movements, except for those between communities isolated from the road network.

Maritime Transport and Civil Aviation

Maritime infrastructure includes 22 public ports and wharves¹⁵, countless informal landing places, and international ports at Port Vila and Luganville. The last two are being expanded to accommodate containers and larger vessels and, in Port Vila, cruise ships. An ADB-supported Vanuatu Inter-Island Shipping Support Project (VISSP) is helping to rehabilitate and upgrade other port infrastructure. Slipways operate in Port Vila, Aore and Luganville. A 27-vessel fleet in relatively poor condition provides regular services to ports in Sanma, Malampa, Penama and Shefa, but remote islands are not welly served. An Office of the Maritime Regulator (OMR), established recently with ADB and New Zealand (NZ) support, provides independent oversight of all regulatory matters related to domestic shipping, seafarer licensing, ports, port facilities and port-related services¹⁶.

In the air transport sector, three international airports – Bauerfield (Efate), Pekoa (Santo) and Whitegrass (Tanna) – are operated by Airports Vanuatu Limited (AVL), which is self-funding from service charges. All three are being upgraded under the World Bank Vanuatu Aviation Investment Project (VAIP), Bauerfield following a disruptive period of closure due to its poor condition. Another 26 domestic airports are managed by the Civil Aviation Authority (CAA), located in the Ministry of Infrastructure and Public Utilities (MIPU). GoV-owned Air Vanuatu provides international code-share air services to Australia and New Zealand; other airlines operate services to Australia, Fiji, New Caledonia, the Solomon Islands and Papua New Guinea. Air Vanuatu is the sole operator of scheduled domestic services, with charter airlines also providing passenger services.

Land Transport and Roads

Some 1,000 new motor vehicles are registered in Port Vila and Luganville each year (ADB 2017). The total private and commercial fleet is unknown, but the Land Transport Authority (LTA) has stated that there are about 2,500 bus permits, 680 taxi permits and 410 PSV permits in operation on Efate Island. It also estimates that PSVs were involved in 113 accidents on Efate in 2015, and 143 in 2016.

Vanuatu's Public Roads Act (2015) introduced three statutory road classifications: arterial (including urban and rural); feeder (local rural roads); urban (local urban roads). Only two arterial roads, in Port Vila, have yet been classified under the Act. Prior to classification, the Director General of MIPU is the *ex-officio* road administrator for all public roads. The responsibility for managing roads across the network will remain unclear until roads are classified, which R4D is helping with and R4D2 will continue. In the meantime, PWD continues preparing its operations annual work plans based on an assumed arterial road network, which comprises national roads – to be managed by PWD. Urban and feeder roads are *de facto* the responsibility of the two municipal and the

¹⁵ At the national level, responsibility for these falls to the Department of Ports and Harbours (DPH), under the Ministry of Infrastructure and Public Utilities (MIPU), but it is poorly resourced and relies also on provincial governments. Five of the 22 – Lenakel (on Tanna), Loltong (Pentecost), Sola (Vanua Lava), Anelcauhat (Aneityum) and Litslits (Malekula) – are officially open to international shipping but do not yet receive services.

¹⁶ The independent OMR has taken over these responsibilities from MIPU's DPH, which had been assigned them after the 2007 disbanding of the Vanuatu Maritime Authority (VMA) due to political interference.

six provincial governments. In reality, only PWD is capable of working on these roads; they are mostly neglected.

The notional arterial road network totals approximately 2,100 km – the length is refined as PWD rolls out its road inventory management system (RMIS). Table 3 shows road lengths by province and type of pavement as at mid-2017. Sealed and gravel (i.e. engineered) roads make up less than half (47 per cent) of the total length. Over 80 per cent of the network in Sanma (the largest provincial network) and Torba are engineered, but less than a quarter in Penama and Tafea. Except for a stretch of 300m in Tafea (Tanna), sealed roads are limited to Sanma (Santo) and Shefa (Efate)¹⁷. Up-to-date information on traffic and the condition of the network is still being assembled with R4D assistance¹⁸, but most lower-order roads are in poor condition and sometimes impassable, and many links require some rehabilitation to bring them back to a maintainable state.

Province	Sealed (S)	Gravel (G)	Earth (E)	Total	% Total	S+G Kms	S+G %
Malampa	0.0	150.1	256.8	406.9	20.0%	150.1	36.9%
Penama	0.0	74.3	280.9	355.2	17.4%	74.3	20.9%
Sanma	68.0	353.9	101.5	523.4	25.7%	421.9	80.6%
Shefa	130.1	61.5	164.5	356.0	17.5%	191.6	53.8%
Tafea	0.3	81.7	261.5	343.5	16.9%	82.0	23.9%
Torba	0.0	42.2	9.4	51.6	2.5%	42.2	81.8%
Total	198.4	763.7	1,074.6	2,036.7	100.0%	962.1	47.2%

Table 3: Vanuatu Road Network, 2017 (kms)

Source: R4D and PWD

Maintenance is planned and budgeted annually¹⁹ based on initial provincial allocations by the Ministry of Finance and Economic Management (MFEM). For rural roads, PWD allocates these provincial totals over the network based on average work quantities, frequencies and unit costs for periodic and routine maintenance, with additional provision for some network development (upgrading or extension), limited works on earth roads (to keep them open), and the supply and stockpiling of materials. Table 4 shows the budget for 2017. Apart from the small amount for corrective works, the maintenance budget is evenly split between routine and periodic maintenance, with both at around VUV 174 million for 2017. According to R4D, this is not enough to prevent further deterioration of the network.

Annual Work Plans (AWPs) result from this process. These are managed by PWD's five Divisions (one in each of four provinces, with Torba managed under the Sanma Divisional Office) through a mix of force account (FA), agreements with National Contractors (NCs) and Island-Based Contractors (IBCs), and Community-Based Contracts (CBCs) with roadside communities, the last mainly covering labour-intensive vegetation control. FA, CBC and, to a lesser extent, IBC contracts sometimes involve PWD equipment or, when not available, plant supplied by equipment hire contractors (EHCs). IBC and NC contractors generally provide their own equipment. Table 5 shows a breakdown of PWD's 2017 maintenance budget by planned type of work and delivery option. CBCs are the most common for routine maintenance, IBCs for more complex maintenance tasks, and a mix of FA and NC outsourcing for periodic maintenance. The proportions differ from province to province (and island to island), however, depending on the availability of contractors and equipment.

FA was expected to deliver 14.6 per cent by value of the maintenance works planned for 2017. This is well down from the 63 per cent it delivered in 2013, reflecting a policy of increased outsourcing. According to analysis by R4D, periodic maintenance of gravel roads by FA (which accounts for 84 per cent of FA activity) is more expensive than by contract: on average, 28 per cent more than by IBC and 45 per cent more than by NC²⁰. This has underpinned a shift from FA to the use of contractors to deliver services. R4D has helped prepare a plan for rationalising the remaining FA resources to concentrate on areas where contractor capability does not exist. Table 4, Table 5 and

Table 6 summarise the composition of the 2017 Work Plan.

¹⁷ Port Vila and Luganville account for most sealed roads, with Efate's Ring Road and Santo's East Coast Road the first significant sealed roads outside the two main towns.

 $^{^{18}}$ Comprehensive traffic data for major islands was started to be collected for the first time in 2016. No trends are available yet for forecasting.

¹⁹ Current procurement rules do not permit multi-year contracts. This includes multi-year contracts that only set rates for future years without a commitment to actual expenditure.

²⁰ This is because the indirect costs of delivering by FA (the costs of divisional support staff, office support, repairs, and depreciation of plant and equipment) outweigh any small advantage in direct costs alone. Indirect overheads make up 44 per cent of total FA costs, but only 5 per cent of costs by NC. Source: Contractor 2017b.

Table 4: Maintenance Budgets for Rural Roads for 2017

Province		Maintenance and Improvement Works Materials					ce and Improvement Works				Materials Total			al		
	Corre	ctive	Rout	tine	Perio	odic	Improve	ements	All W	/orks	Stock	piling	Material	s Supply	Budg	et
	V mln	%	V mln	%	V mln	%	V mln	%	V mln	%	V mln	%	V mln	%	V mln	%
Malampa	3.21	2.9%	27.11	24.8%	34.87	32.0%	23.75	21.8%	88.94	81.5%	13.96	12.8%	6.18	5.7%	109.09	16.9%
Penama	3.51	4.0%	13.41	15.1%	30.44	34.3%	22.83	25.7%	70.20	79.0%	12.69	14.3%	5.94	6.7%	88.83	13.8%
Sanma	1.27	0.8%	76.18	48.3%	44.85	28.5%	16.44	10.4%	138.74	88.0%	14.60	9.3%	4.28	2.7%	157.62	24.4%
Shefa	2.06	1.8%	34.58	30.7%	30.51	27.0%	25.64	22.7%	92.79	82.2%	13.37	11.9%	6.67	5.9%	112.84	17.5%
Tafea	3.27	3.6%	14.80	16.1%	29.43	32.0%	24.93	27.1%	72.43	78.8%	12.95	14.1%	6.49	7.1%	91.87	14.2%
Torba	0.12	0.1%	7.62	9.0%	4.42	5.2%	47.74	56.3%	59.90	70.7%	12.42	14.7%	12.43	14.7%	84.75	13.1%
Total	13.43	2.1%	173.70	26.9%	174.52	27.1%	161.35	25.0%	523.00	81.1%	80.00	12.4%	42.00	6.5%	645.00	100.0%
% of all works		2.6%		33.2%		33.4%		30.9%		100.0%						
% of maint'ce	wks	3.7%		48.0%		48.3%										

Source: R4D, PWD

Table 5: Total Value of Rural Works by Delivery Option, 2017

Delivery	Rout	tine	Perio	odic	Improv	Improvement		rials	Tot	al
	V mln	%	V mln	%	V mln	%	V mln	%	V mln	%
CBC	85.97	55.8%	0.00	0.0%	2.10	1.0%	0.00	0.0%	88.63	14.4%
IBC	9.44	6.1%	12.20	7.0%	197.62	94.4%	11.50	14.8%	231.84	37.5%
RFQ	15.04	9.8%	22.56	13.0%	0.00	0.0%	24.34	31.3%	62.17	10.1%
RFT	41.38	26.9%	63.84	36.8%	8.70	4.2%	30.31	39.0%	144.91	23.5%
FA	2.15	1.4%	74.82	43.1%	1.01	0.5%	11.55	14.9%	89.97	14.6%
Total	153.98	100.0%	173.42	100.0%	209.43	100.0%	77.70	100.0%	617.52	100.0%
%	24.9%		28.1%		33.9%		12.6%		100.0%	
Note:	CBC = Community-Based Contract, IBC = Island-Based Contract, FA = Force Account						nt			

 CBC = Community-Based Contract, IBC = Island-Based Contract, FA = Force Account RFQ = Request for Quotation, RFT = Request for Tender (for projects over VUV 5 million)

	2016 (actual)	2017 (expected
Island-based contracts		
No. of contracts	62	69
Total value of contracts (VUV million)	230	256
Average value of contract (VUV million)	3.7	3.7
Community-based contracts		
No. of contracts	153	210
Total value of contracts (VUV million)	65	84
Average value of contract (VUV million)	0.43	0.40
No. of Island-Based Contractors in Vanuatu	30	28

Table 6: Number and Value of IBC and CBC Contracts

Source: R4D

Work under CBCs and IBCs is not competitively tendered: works are allocated among community groups (for CBCs) or local companies or business groups (for IBCs) depending largely on the availability and suitability of the latter. This provides continuity of work and maintains relationships between PWD and local service suppliers.

Table 6 shows the large number and small value of IBC and CBC contracts that PWD must manage. Its work plan for 2017 envisaged the five divisions administering a total of just under 400 individual contracts or work assignments on the rural network: 210 CBCs (the number has increased dramatically since 2015), 69 IBC agreements, 27 with NCs and 15 FA team assignments. This is likely to test their capacity to ensure quality and compliance. R4D has suggested that the number could be reduced significantly if a few competent contractors (with mandated inputs by IBCs and local communities) could be made accountable for the performance (access, condition) of larger networks rather than the many contractors and community groups that are now paid for inputs over relatively small sections of road (e.g. see Contractor 2017b and 2017c).

Total income and expenditure by PWD is shown in Table 7. Issues of note are:

• Accounting practices have varied and so the allocation of costs to expenditure categories has also varied, placing some limits on interpretation of the data.

- Estimated expenditure on road maintenance and improvement by PWD (which includes urban roads, although expenditure on these has been limited) for 2015, 2016 and most of 2017 has been an average of VUV 600 million per annum, with a further expenditure of VUV 10 million on development of roads and bridges. (Note: these are average of nominal values, but low inflation reduces the divergence from analysis based on constant prices).
- Over the period to 2013-16, domestic funding for PWD was an average of VUV 910 million per annum, but this amount declined by 31 per cent in 2017 to VUV 627 million.
- Funding from external assistance rose rapidly in 2015 and thereafter, largely due to support for Cyclone Pam recovery activities.
- Funding for road maintenance and improvement provided through the R4D program has financed an average of 45 per cent of total expenditure by PWD on road maintenance and development over the period 2013-17.

Various time periods are referenced in the above to clarify understanding of the issues.

Declining domestic funding for road maintenance and development and the reliance on GoA funding suggest that some urgency is needed during R4D2 to take actions that will enable more sustainable financing of road maintenance and improvement by the end of the program. This includes strengthening PWD's and MIPU's advocacy for increased funding allocated to maintenance, supported by analysis using R4D's planning tools.

Foreign Assistance

The sector has seen a dramatic increase in foreign loan and grant assistance since Cyclone Pam. In addition to DFAT's support for R4D, and its co-financing of the Port Vila Urban Development Project (PVUDP) that is managed by the Asian Development Bank (ADB), other projects funded by the ADB, Japan International Cooperation Agency (JICA), New Zealand (NZ) Aid, the European Union (EU), China EXIM Bank and the World Bank Group (WBG) are all ongoing. Current major projects in the transport sector that are being implemented with assistance from development partners are shown in Table 8.

Notwithstanding informal working-level contacts, there is no overarching strategy for aid assistance in the sector. Yet limitations on the ability of the ADB and WBG to commission project preparation activities without requiring reimbursement under subsequent loans, and the independent position taken by some bilateral partners, argue for stronger coordination. This is a role in which R4D2 – which may be able to finance upstream pipeline preparation work – could play a useful part in conjunction with the ADB-supported Transport Plan 2030 (TP2030) exercise (see below). This is especially critical now that development partners are planning to ramp up their program assistance, with US\$385 million ongoing and committed over the next five years.

Sector Policies and Development Plans

Strategic direction for the Government's efforts in the transport sector are given by:

- The NSDP. This has several objectives highlighted earlier in Table 2 that are central to MIPU's transport functions and PWD's management of its network: strong governance arrangements; cost-effective use of resources for sustainable asset management, achieved through partnerships; universal access to affordable, safe and secure transport; development of the private sector and rural communities as transport and infrastructure service suppliers; and better access to information, including on-line government services.
- Rural Roads Access Policy (RRAP). This lays stress on keeping roads open in all but the worst weather conditions and involving local communities as much as possible in maintaining them. The policy includes a target that 82 per cent of all rural ni-Vanuatu have basic road access by 2030, and gives priority to maintenance (preservation) over upgrading (improvement) and network development (expansion).

		Calendar	year (= finar	ncial vear)	
	2013	2014	2015	2016	2017
	(actual)	(actual)	(actual)	(actual)	(actual to 15 Nov.)
A. Expenditure					
Administration and overheads (excl. vehicles)	567	624	519	504	540
Vehicles (purchase, maintenance & operation) and local travel	200	209	144	70	70
Road maintenance and improvement:					
Community-based contracts	0	0	0	69	50
Island-based contracts	0	0	0	38	16
National-based contracts	0	0	0	249	22
Road plant and equipment (capital, maintenance and hire)	13	18	143	64	136
Road materials	4	2	79	44	7
Other	207	295	275	196	422
Subtotal (Road maintenance and improvement) ⁽¹⁾	224	316	497	661	652
Infrastructure development					
Roads and bridges	97	38	317	213	203
Other	8	4	2	17	19
Subtotal (Infrastructure development)	105	43	320	230	221
VAT Refund	-52	-50	-47	-71	-52
Total	1,044	1,141	1,433	1,394	1,430
Memorandum item:					
Estimated total expenditure on road maintenance and development	321	354	815	875	854
B. Source of Funds					
Government of Vanuatu	850	949	861	989	627
External assistance:					
R4D:					
Works	173	139	555	337	197
Other	7	14	10	14	15
Sub-total (R4D)	180	153	565	351	211
Other sources	14	39	7	54	592
Sub-total (External assistance)	194	192	572	405	804
Total	1,044	1,141	1,433	1,394	1,430
Memorandum item:					
R4D funding for road maintenance and improvement (% of total expenditure on road maintenance & improvement) ⁽¹⁾	54%	39%	68%	39%	23%

Table 7: PWD Expenditure and Sources of Funding (VUV millior	, nominal pr	ices)
Table 1.1 WD Experiatare and oburces of Funding (VOV minior	i, nomina pi	1003

Note: (1) Indicative, and likely under-estimate, of expenditure on road maintenance and improvement. For example, Force Account labour is not distinguished from other labour and hence is included in *Administration and overhead* costs. Similarly, a significant share of local transport costs will be associated with works activities. If such factors could be accurately accounted for, the total cost of road works would increase and the share funded by R4D would decline. Some erratic use of expenditure codes further clouds the identification of expenditure on maintenance and improvement. Source: PWD, with analysis by Design Team

Donor	Project Name	Value (million)	Loan/Grant (million)	GoV Funds (million)	Project Imple- mentation Period	Separate Technical Assistance (million)
ADB/DFAT	Port Vila Urban Development Project (PVUDP)	US\$25.61 US\$5.39 US\$5M	DFAT Grant DFAT CFA ADB Loan	US\$3.1	2012 - 2017	US\$4.7
ADB	Cyclone Pam Road Reconstruction Project (Efate)	US\$9.81 US\$3.80 US\$2.68	ADB Grant ADB Loan GEF Grant	US\$2.21	2016 - 2018	US\$2.71
China Exim Bank	Vanuatu Road Rehabilitation Project (Malekula and Tanna)	US\$53 RMB350	Loan 2% Interest		2014 - 2016	
	Vanuatu Port Luganville Main Wharf Rehab-ilitation and Extension	US\$60 RMB541.9	Loan 2% Interest		2014 - 2016	
	E Gov Broadband Network	US\$30/- RMB199	Loan 2% Interest		2008- 2010	
JICA	Port Vila Lapetasi Inter- national Multi-Purpose Wharf Phases I & II	US\$90 /- JPY9543	ODA Loan		2014 - 2017	
NZ MFAT	Port Vila Seafront	NZ\$20				
ADB/NZ MFAT	Inter-Island Shipping	US\$29.3 US\$17.25	ADB Loan NZ Aid Grant	US\$5.07	2011 - 2017	US\$3.67
World Bank Group	Vanuatu Aviation Investment Project (VAIP)	US\$59.50 (SDR42.3) US\$0.3	IDA Credit PRIF Grant	Nil	2014 - 2019	US\$2.48
	Vanuatu Infrastructure Reconstruction and Improvement Project (VIRIP)	US\$25 (SDR17.65) US\$25 (SDR17.65)	IDA Grant IDA Credit	Nil	2016 - 2022	US\$4.0

Source: Independent Evaluation Team (2017)

Both NSDP and RRAP signal a shift from managing individual projects towards a more holistic view – that of a network manager – of infrastructure's broader role in addressing national development priorities: improved access and keeping roads open, for example, in the case of the RRAP. This network-manager role for PWD has given rise to discussions about corporatizing road delivery functions, establishing off-budget sources of funds from road users, further moves towards outsourcing road maintenance management, and introducing performance-based approaches to life-cycle asset management through multi-year contracts. These concepts are expected to be reviewed and developed further under the ADB-assisted project to help develop Transport Plan 2030; some are also discussed further in Section E of this appendix.

The ADB has recently commenced assistance to the GoV to develop a *Transport Plan 2030* to complement the NSDP (ADB 2017). The work, which will be completed in September 2018, will focus on:

- Development of a decision-making framework which links directly to the NSDP.
- Review of the institutional arrangements and structures responsible for the planning and delivery of transport.
- Preparation of an investment program comprising a 5-year investment plan and 20-year investment framework.

Initial work has noted that: "It has also become very apparent that there is a strong desire to restructure and realign MIPU so that it is better able to deliver transport as a service. It is expected that this would lead to a more integrated approach to network planning and delivery. This institutional review would need to be based around defining the functions of the organisation and then deciding how the organisation should be structured to enable these functions to be better served." The work has the potential to provide a framework within which the implementation of institutional reform and other capacity building activities of R4D2 will occur.

D. ROAD SECTOR NEEDS, PRIORITIES AND THE ROLE PLAYED BY R4D

The R4D Program

R4D originated as the VTSSP, which started in 2009 as a long-term program in response to a GoV request to support the country's transport sector. VTSSP was re-branded R4D in 2013 to reflect its primary focus on rural roads and their role in providing access, alleviating poverty, creating jobs and promoting local economic growth. R4D started as an A\$ 29 million, four-year commitment aimed at improving community access to a well-maintained, sustainable rural road network and strengthening public works management and administration. In March 2017, the activity was broadened to include PWD's transition to a road network manager, and an extension of the Managing Contract to June 2018 provided support for the initial steps towards this. The extension was to have more of a focus on capacity-building than hitherto. The RRAF was developed as the basis for prioritising works on the rural road network, and a Concept Note and more detailed Implementation Plan for the transition were prepared.

R4D Expenditures

Total expenditure under R4D from its start in FY 2013-2014 to the end of Q3 2017 has been VUV 1.24 billion (see Table 9). Nearly 96 per cent of this has been on: (i) plant and equipment (10.9 per cent) – mainly tractorbased equipment to test its suitability in Ambae and Tanna; and (ii) physical works (85.0 per cent). R4D expenditure on physical works amounts to about 45 per cent of total maintenance spending on rural roads. This indicates the rise in GoV funding needed if it is to replace the DFAT contribution, and questions its feasibility. A soon-to-be-commissioned ADB study will address the issue of maintenance funding over the long term.

Capacity-building and institutional strengthening – two key aims of R4D, especially under the extension – have only accounted for 1.6 per cent of spending to date according to the data in Table 9, but this figure covers only externally-commissioned activities. Most of the 2.5 per cent spent on project management has also been directed to training and institutional development, with R4D advisors working closely with PWD counterparts and holding workshops, seminars and training sessions. Arguably, the sustainability of the heavy DFAT spending on physical works is questionable without strong evidence that institutional commitments, staff capabilities, budgets, planning and delivery mechanisms can ensure effective ongoing maintenance of the sections of road treated. These are addressed in the design of R4D2 (see Section E of this appendix).

Component	Approved		Actual Expenditure F					Remaining	
		2013-14	2014-15	2015-16	2016-17	2017-18	Total	%	
Project management	32.969	0.203	5.801	8.883	11.401	4.644	30.931	2.5%	2.038
Cap Building & Instit'l Strengthening	20.162	6.238	6.611	4.693	0.806	1.601	19.949	1.6%	0.213
Procurement of plant & equipt	139.219	0.729	48.957	81.520	3.335	0.000	134.541	10.9%	4.678
Physical works	1,162.451	28.827	258.835	349.364	340.842	71.747	1,049.614	85.0%	112.837
Total	1,354.801	35.996	320.204	444.460	356.383	77.991	1,235.035	100.0%	119.766

Table 9: R4D Expenditure to Date (VUV million, up to Q3 2017)

Source: Contractor 2017e

Infrastructure Conditions and Spending Priorities

Levels of traffic in Vanuatu rarely justify significant investments in upgrading or expanding the network. From international experience, around 250-300 vehicles per day would normally warrant sealing a gravel road²¹, but such traffic levels are only experienced in and around Port Vila and Luganville and on very few other corridors, mostly in provincial centres. Elsewhere, the priorities lie with preventing deterioration and keeping roads open, using a combination of periodic, routine and emergency maintenance, including drainage works and relief of flooding. As noted earlier, this is done through CBC, IBC and NC contracts, the majority of which are directly awarded, and some FA work.

Funds are allocated among provinces by MFEM, and among work categories and contract types by PWD using a simple, spreadsheet-based budget allocation system (BAS) developed by R4D which recognises typical periodic maintenance cycles and is informed by the judgment of Divisional field staff, supported by R4D Road Operations Specialists. Rural road Annual Work Plans (AWPs) and contracts are based on these. A simple Road Inventory Management System (RIMS), also developed by R4D, supplies the basic link data (length, pavement type, width) for estimating needs, but no optimisation of spending to achieve target network conditions is possible.

 $^{^{21}}$ At this level of traffic, annual savings in vehicle operating costs (VOCs), discounted to the present, start to exceed the additional road agency costs.

The AWPs are reviewed and adjusted at quarterly PWD progress meetings. The July 2017 meeting, held with the support of R4D, was successful in achieving significant adjustments to the AWPs, most notably in cancelling proposed projects held up by the Central Tender Board (CTB, see below) and replacing them with others valued at just under the VUV 5 million threshold that requires CTB review and approval. As noted in Appendix C, this threshold was set in 1998.

In future, as a network manager, PWD will need to be able to advise central budgeting agencies on spending priorities, show the likely impacts of budget scenarios on network performance, and report on the effectiveness of maintenance work carried out. This will require up-to-date information on traffic levels and road conditions, and an ability to model the performance of links over time and under traffic: the basic prerequisites of a modern Road Asset Management System (RAMS). A regular traffic survey program and new approaches to road condition rating are being introduced by R4D, and the RIMS and BAS are being upgraded to include the full capabilities of a RAMS. With additional inputs under R4D2 where necessary, these should be capable of providing PWD with a full planning, optimising and reporting service early in the new program.

Works Delivery

The Concept Note (CN) and Implementation Plan for PWD to become a network manager that was prepared under R4D (Contractor 2017b and 2017c) made recommendations for a rationalisation of FA resources, following R4D's analysis showing how much more costly FA is. This rationalisation involves redeploying FA resources to concentrate only on areas (in Penama, Malampa and Tafea) where private-sector capability does not yet exist or where competition is limited (see Figure 3), and rationalising and reforming PWD's plant and equipment pool, including tractor-based equipment procured under R4D, to reduce its reliance on PWD's budget and transform it into a commercially-focused equipment-hire operation instead. A Force Account Working Group has been established by PWD to take these recommendations further. It is likely that further assistance will be needed under R4D2 to implement the rationalisation plan.

The capacity of IBCs – introduced initially by R4D – has continued to be strengthened, with many now becoming more experienced and capable of working in other provinces and tackling additional types of work, e.g. with some IBCs in Tanna building major box-culvert structures. Now that they are becoming capable in managing normal maintenance tasks, they need further assistance in business management and cost control.

CBCs have also continued to receive support from R4D. Guidelines, manuals and supporting material developed by R4D for the CBC program have been translated into Bislama and endorsed by PWD. These include a Social and Environmental Safeguards Facilitator's Guide, and a CBC Task and Safety Guide. Training on safeguards using the new material has been given on Tanna and South-East Ambrym; more is planned in 2018.

As noted in Section B, a critical problem with CBCs is the large number of contracts that need to be administered by PWD's divisions, and which are almost certainly well beyond PWD's capacity to administer effectively. Proposals were made in R4D's CN Implementation Plan for trialling an approach that mandates formal community-based sub-agreements for labour-intensive work carried out under IBC contracts, with performance risk carried by the contractor (the contractor would still be accountable for the quality of work done). Supervision of the community work would be done by the contractor, not by PWD's divisional staff or PWD's Community Partnership Officers (CPOs). Provision is made for this and other delivery innovations in the R4D2 design, including consideration of performance- (i.e. outcome-) based contracts (see below).

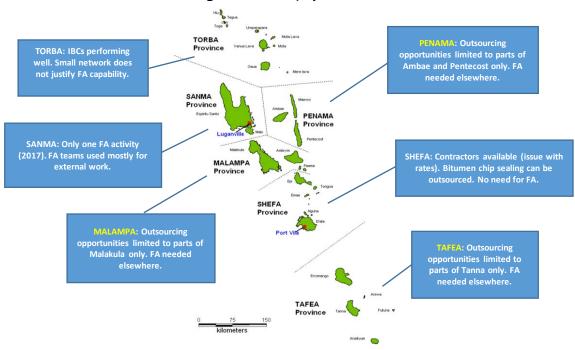


Figure 3: FA Redeployment Considerations

Procurement

The CN for PWD's transition to a network manager identified two further constraints that have an impact on progress towards effective and cost-efficient network management:

- the current restrictions set by the MFEM on multi-year budgets (and hence contracts) for projects funded by the Government which, unless amended, limits opportunities to introduce longer-term contracts that reduce contracting costs and optimise life-cycle maintenance; and
- the low threshold of VUV 5 million on the value of contract above which CTB approval is required to
 initiate the procurement process and award a contract. A R4D review of contracts awarded in 2017
 showed that many maintenance contracts are being awarded at a value just under the VUV 5 million
 threshold. Substantial CTB delays in approving projects in the 2017 work plan resulted in their being
 redesigned as smaller parcels to avoid the risk of under-spending the budget by year's end. The
 threshold, presumably designed to scrutinise value-for-money, is resulting in larger, more costeffective projects being divided into smaller, much less efficient and more costly parcels the
 opposite of what is intended by the regulation.

According to R4D estimates, by maintaining these restrictions, the costs of road maintenance is higher than they should be, even with existing delivery arrangements, and probably significantly higher than they would be if R4D proposals (discussed below) to transition PWD to a network manager are implemented.

Legislation

The legislative framework governing the roles and responsibilities of Vanuatu's road-sector institutions is examined in Appendix C. It is broadly adequate for PWD's activities in developing and maintaining the road network, though there remains a need to develop a comprehensive road network development strategy and to classify roads for functional and administrative purposes. Similarly, there remains the challenge of implementing obligations with regard to road use; the capacity to protect public safety (for example, through safety-related controls over drivers, vehicles, traffic management and road engineering), and public infrastructure (such as controls over truck overloading) are weak. It is expected that this will be reviewed in the process of drafting Transport Plan 2030 and can be expected to be included in proposals to restructure MIPU and PWD to reflect the latter's role as network service-provider.

Institutional Capacity-Building

R4D has recently ramped up its assistance with human resources (HR) management reform and HR development. A new HR specialist has been appointed to review and update the findings and recommendations of a performance assessment and review completed by R4D in October 2015. A plan for staff development and training through to June 2018 is being implemented. Further details are given in Appendix C.

Capacity-building priorities for the remainder of R4D are being governed by this capacity-building plan, and complemented by a Stakeholder Engagement and Communication Plan that was prepared in Q3 2017. The latter sets out arrangements for socialising and operationalising all documentation, processes, tools etc. developed during R4D, and provides a further contribution to capacity-building under R4D2. It covers stakeholder engagement under seven critical areas of PWD activity: institutional restructuring; HR development; rural roads planning and asset management; financial and contract management; works progress monitoring and reporting; design and construction of rural roads; and social and environmental safeguards.

The Transition to a Network Manager

MIPU and PWD are considering establishing a Ministry of Transport that includes a road network management function. They want PWD to transition from a traditional public works department, concerned only with implementing projects, to a more performance-focused organisation – a network manager – that relies largely on outsourcing to meet targets for the serviceability of the whole network (see Figure 4). The Concept Note and subsequent Implementation Plan for this transition, prepared by R4D in 2017 (Contractor 2017b and 2017c), presented a costed justification for PWD's continuing shift towards the outsourced model, and recommended a series of steps, with associated timetables, for a further shift from delivering individual projects to delivering a network that meets broader priorities like those in the RRAF, with performance risk transferred to those best able to manage it.

The implementation steps and suggested timetables included:

- a redeployment of FA resources, as outlined above;
- the trial introduction of a new agreement making contractors, rather than PWD, responsible for involving and managing community labour (community participation is a strong feature of the RRAF) and incorporating performance incentives;
- the preparation and procurement of a pilot, multi-year, performance-based maintenance contract (PBMC) to test and demonstrate the model's suitability for PWD as network manager; and
- the further development and operation of a RAMS, including associated survey procedures, with committed, long-term support guaranteeing the quality and functionality of the system until PWD can manage this itself.

The plan also outlined, and explained how to handle, some of the institutional changes that will be necessitated by the shift to a network manager.

These proposals have been accepted in principle by PWD, but the pace of change will depend on progress during R4D2 and the degree of support provided by donors. As noted in the main volume of the Investment Design Document, there is a risk of starting unfamiliar reforms without the ability to support them fully with technical assistance. The expected winding-down of expenditure in the latter years of R4D2 will put such reforms – notably the introduction of PBMCs – at risk unless alternative sources of funding, such as the ADB or World Bank, can make the commitment to continuing them.

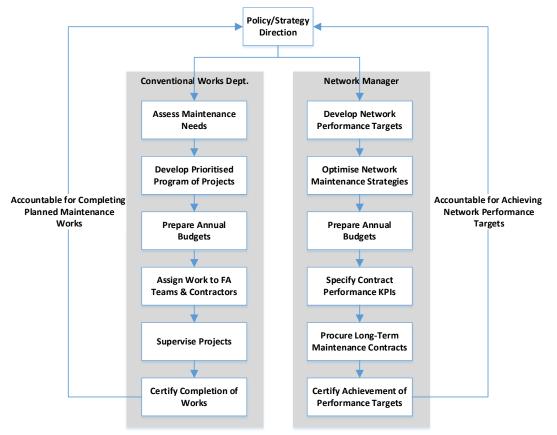


Figure 4: Differences between a Conventional Works Department and a Network Manager

Source Contractor 2017b.

Independent Review of R4D

A number of design and review documents have been prepared during the VTSSP and first phase of the R4D program. These trace the evolution of the program and the findings of them have been incorporated as appropriate into the ongoing program. Of greatest value for the current work is the report of an Independent Evaluation (IE) of the R4D program that DFAT commissioned in 2016 as part of its standard end-of-program review process. The value of this report (Evaluation Team 2017) is that it examined past documents and drew conclusions that were intended to inform ongoing activities.

Specifically, the report reviewed the formulation, content and performance of the past program to (Independent Evaluation Team 2017: ix):

"provide information - an evidence base - on the success and rationale of R4D: what worked, what didn't work, why, and is R4D still relevant (the "right thing to do"). This information will help inform two high-level decisions:

- Whether to continue supporting Vanuatu's rural roads subsector after R4D finishes on 30 June 2017; and
- What R4D success factors to carry through and what changes to make in designing a possible next round of rural roads subsector support."

Key recommendations of the IE were that:

- the GoA should continue to support Vanuatu's rural road sector following completion of R4D;
- the success factors to carry forward into R4D2 are linked to
 - improving and maintaining rural access, noting that: (i) the focus of R4D on PWD and rural roads alone had improved its focus; (ii) opening the program to all PWD divisions had strengthened the partnership; (iii) integration of the PWD and R4D funds into one jointly-determined works program was beneficial; and (iv) PWD engineers had developed the competencies to manage delivery of physical works; and
 - institutional development, noting that: (i) PWD has accepted the concept of becoming a network manager and had commenced necessary activities, including outsourcing of maintenance works; (ii) PWD staff have demonstrated they can manage operational financial, procurement, social safeguards, environmental management, and engineering aspects of physical works delivery; (iii) a mainstreaming approach has been

adopted for crosscutting issues and safeguards, including Gender, Disability, Child Protection, HIV/AIDS, Work Health and Safety and Environmental Protection; and (iv) enhanced environmental management and climate change mitigation measures are being adopted;

- the two main Components of Institutional Development and Service Delivery that have been present in the VTSSP since the inception in 2009 should be maintained as part of a possible next round of support, in particular to:
 - strengthen support for MIPU-PWD to transition from a works organisation to a network manager;
 - improve and sustain rural access;
 - integrate formal consultation as part of the planning process;
 - upgrade effectiveness, efficiency and value for money of service delivery;
 - improve program governance; and
 - the pre-conditions necessary for DFAT to move from an Implementation Service Provider (ISP) model of program delivery to a budget support model are not yet in place in MIPU-PWD and so the current R4D Support Delivery Model should be maintained with some small refinements.

The IE identified M&E as an area of concern. It noted that there had been three separate statements on M&E, with significant differences of Goals, Outcomes and Outputs between them. The M&E program contained few indicators and was of limited use in providing an understanding the progress of the program and in answering the questions the IE was required to address. The IE concluded that (Evaluation Team 2017:104):

"if the next round of rural road subsector support is to be a continuation of R4D, then for the sake of continuity as a general principle, only limited changes should be made to Goal, End Outcomes and Outputs. With this in mind, the IE recommends that these changes should be made:

- I. To incorporate the relevant Economic Goals and Policy Objectives from Vanuatu 2030 The People's Plan into the Goal Statement, and Outcomes
- II. Inclusion of definitions of the terms used in the statements of objectives so that progress can be easily monitored and evaluated
- III. Inclusion of baseline and target values for all indicators before the Plan is issued
- IV. Any changes needed to integrate the Plan with the Goals, Outcomes, Outputs and Indicators used by MIPU M&E Unit

The IE also recommends that the M&E Plan be finalised and agreed with MIPU-PWD as part of the design document (PDD) for the next round."

DFAT's response to the IE (DFAT c2017:5) noted that it held the view that:

"the evaluation provides a sound basis for the Australian Government (GoA) and Government of Vanuatu (GoV) to consider continuing Australian development assistance in Vanuatu's rural roads subsector. The evaluation identifies important 'success' factors to carry through into a possible new round of roads support; and while the suggested changes and enhancements are mostly already underway, the evaluation is a useful articulation and reminder of opportunities to improve on what we are doing. We agree with most of its findings, conclusions and recommendations and see it as a useful basis for reflection and further discussion"

DFAT generally agreed with the recommendations of the IE, with points of some difference being:

- A need to further consider the proposal to integrate formal consultations as part of PWD's operations annual planning process, including provisioning for one-off works expenditures DFAT noted that budgeting was properly a prerogative of the GoV, but there was a need to support an evidence-based approach to budgeting.
- In promoting outsourcing of roadworks, DFAT noted a need to develop the island-based contracting model so that it is able to gain the best advantage of community-based and competitively tendered approaches.
- DFAT noted that actions had been taken to refine program governance.
- DFAT anticipated that increased resources for technical assistance to assist PWD to transition to a road network manager might be funded without resources available for physical works.

The design of R4D2 has taken account of the findings of the IE and the changes that have occurred in the R4D during and since it. The R4D2 design varies with regard to two recommendations in the IE:

• For reasons set out in the main volume of the Investment Design Document, a Contractor form of contract for program delivery is preferred to an ISP model taking account of the generally well-understood activities that are to be undertaken in R4D2 and the heavy demands that an ISP approach places on the Australian High Commission.

• It is judged that a clearer Goal and End Outcome is needed for R4D2. This can be accommodated while still being able to make use of the information collected as part of the improved R4D M&E program as baseline data for the R4D2 M&E program.

E. SECTOR CHALLENGES AND RESPONSES

Table 10 summarises the main challenges and issues facing PWD for the management of roads in Vanuatu, and indicates ways in which R4D2 can assist. In addition to drawing on the review of the transport sector presented in earlier sections of this appendix, it notes links to social issues in Appendix B and institutional issues in Appendix C.

The responses are packaged into a program of activities for R4D2 as set out in the main part of the Investment Design Document.

Se	ctor Challenge	Issues	Proposed R4D2 Responses
A.	External Challenges		
1.	Insufficient funding for road maintenance and rehabilitation	 (a) Current GoV funding is significantly less than what is needed to sustain the current road network, which is in a deteriorated state due to inadequate past maintenance (b) GoV does not have the capacity to increase funding for rehabilitation and maintenance to the required level 	 Help MIPU-PWD increase funding for road operations by: Strengthening the case for larger national budget allocations Negotiating larger ADB and WBG road sub-sector financing (calibrated to GoV funding policies) Locking in medium-term funding expectations through a GoV Roads Medium-Term Expenditure Framework
		 (c) Most externally-funded road investments (by loans/grants from development banks) are for larger capital improvements, not maintenance. Note, however, that sealing arterial roads will reduce routine maintenance requirements and costs for 10-15 years depending on the seal design 	 Help MIPU-PWD contain its road budget requirements by: Encourage a more affordable national road policy with realistic targets Help provincial governments work with communities and others to keep feeder roads trafficable Help MIPU-PWD prepare sound road operations annual plans and execute them as efficiently as possible.
2.	Short-term perspective for long-life assets	(a) No multi-year forward budgeting	Help build the case for a MTEF for road funding; identify road maintenance and improvement practices that minimise life-cycle costs; and demonstrate the benefits of performance-based, life- cycle cost optimisation
3.	Special requests divert funding	 (a) Evidence-based planning and execution of work is compromised by special requests 	Help PWD better demonstrate the network service implications of diverting funds for special requests
4.	Constraints on procurement	(a) Prohibition on multi-year maintenance contracts	Seek the ability to enter into multi-year contracts, demonstrating their cost savings to GoV
	increase maintenance costs	(b) Threshold for external review of tenders unchanged since 1998	Seek higher thresholds and other reforms, demonstrating the advantages of larger, multi-year contracts and the cost inefficiencies of the present approach
5.	Constraints on staffing	(a) Restrictive rules around organisational change	Seek GoV approval for PWD organisational reform to be a road management agency
		(b) Recruiting and other HR inefficiencies	Fill positions in PWD on a substantive basis
6.	Poor MDB coordination	(a) No effective coordination strategy for MDB assistance	Assist in establishing a formal MDB coordinating group for the sector
В.	Road Network Challer	nges	
1.	Formal road network is unclear and too large	(a) Need agreed administrative categorisation of roads (private/public and local/national) to allocate responsibility	Help PWD develop administrative and functional classifications for roads and seek GoV approval for
		(b) No functional classification of roads to aid an understanding of the role of roads and development of a hierarchical, connected network	consistent and integrated management of roads

Table 10: Summary of Sector Challenges and Proposed R4D2 Responses
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Sector Challenge	Issues	Proposed R4D2 Responses
	(c) Road network upgraded/-extended without incremental funding for ongoing maintenance	Help PWD indicate the effect of capital works on future maintenance needs
	(d) Consider downgrading some roads to reduce maintenance obligations	Help PWD to develop an approach to identify a more sustainable road network
2. Roads are difficult and expensive to maintain	(a) Most rural roads are unsealed	Help PWD to identify the treatment solutions that minimise life-cycle costs for unsealed roads given the resources and capacity of local contractors
	(b) They are constructed with poorly processed materials	Help PWD engineers and contractors to identify and categorise materials and trial the use of portable crushers
	(c) Road engineering skills are limited	Provide training and mentoring to PWD Divisional staff and contractors
	(d) Road plant and skilled operators are limited	Provide training and mentoring to PWD Divisional staff and contractors for equipment that is available, linked to the FA rationalisation plan
	 (e) Insufficient maintenance is undertaken, leading to higher life- cycle costs 	Help PWD to explain the consequences of inadequate maintenance expenditure and to identify the treatment solutions that minimise life-cycle costs
	(f) Many sections are on steep grades	Help PWD to identify and assess alternative road engineering and traffic management approaches that could reduce the cost of maintaining roads with steep grades
	(g) Rainfall is intense and damaging	Help PWD review design standards and implement identified changes; strengthen the maintenance focus on drainage and flood protection
 Roads are susceptible to climate change 	 (a) Many road alignments are in exposed locations (e.g. coastal, steep slopes or close to volcanoes) 	Help PWD review design standards and implement identified changes
impacts and natural disasters and risk environmental	 (b) Short duration peak rainfall intensities are expected to increase by 20+% by 2040 	Help PWD review design standards and implement identified changes
damage	(c) PWD lacks disaster response capacity	Help PWD develop an Emergency Response Plan tailored to specific forms of disaster
	(d) PWD and development partners lack mechanisms to deploy disaster response support and funding quickly and effectively	Use funding arrangement for R4D2 to deliver additional aid
	(e) PWD needs to maintain a continuing focus on environmental protection	Help PWD update its design and works guidelines and provide practical guidance to, and supervision of, contractors
C. PWD Capacity Challen	ges	
1. PWD focuses on delivering contracts rather than a service (i.e. road	(a) Large number of small contracts	Help PWD seek approval for larger and multi-year contracts (see item A.4) and consider alternate arrangements for the management of community- based contracts
access)	(b) Other inefficient practices, e.g. role and use of community-based contracting	Help PWD to simplify supervision of CBCs, including as sub-contracts to IBC or NC contracts; and consider the role for CBCs in other road maintenance activities
	(c) PWD's remaining force account (FA) capability is inefficient and misallocated	Help PWD continue to: rationalise its FA resources, focussing on those parts of the network where private-sector capacity is unavailable or uncompetitive; and consider the most cost-effective means to secure equipment needed to respond to emergencies/disasters
	(d) PWD's organisational culture and competencies are oriented towards works delivery rather than network performance	Help PWD establish capacity in: planning and programming; monitoring and evaluation; and life- cycle management; set Work Plan targets that better reflect broader GoV development goals and community needs

Se	ctor Challenge	Issues	Proposed R4D2 Responses
		 (e) Works contracts are input-based rather than output/performance- based 	Help PWD to trial performance-based contracting that is appropriate to the competencies of PWD and contractors
2.	PWD is still building systems and processes needed for efficient management	(a) Inappropriate organisational arrangements	Assist PWD and the Public Service Commission to develop a new organisation structure and staffing suited to the network manager role (see Appendix C for more detail)
		(b) Underdeveloped people management policies, procedures and programs	Within the public service people management framework, assist PWD to develop and implement a Strategic People Management Plan and policies, procedures and programs that support the development of staff capacity (see Appendix C for more detail)
		(c) Piecemeal approach to digitalization and automation	Assist PWD to develop a digitalization and automation strategy and action plan (see Appendix C for more detail)
		(d) Financial management is based on use of multiple spread-sheets with duplication of data entry and inconsistencies	Refine the current system into a fit-for-purpose database-oriented accounting system linked with the GoV's SmartStream payment system and a PWD management information system (see next item)
		(e) No formal corporate management information system (MIS)	Draw on asset, financial and personnel management systems and work plans to provide essential information to aid senior management in PWD and other agencies as needed to oversee programs and respond to issues
		(f) No national road strategy, including integrated planning and management of rural and urban roads to optimise maintenance and improvement expenditures	Help PWD to: establish standard criteria and guidelines for prioritising both rural and urban roadworks; and develop the urban equivalent of the rural road access framework – both to take account of the administrative and functional classification of roads
		(g) Limited information on the features, condition and use of roads	Help PWD institutionalise the collection of essential information on its road network on a regular basis
		(h) Lack of a road asset management system to identify maintenance and development needs and to optimise use of limited funding.	Help PWD to install and use a road asset management system, building on the components already established by R4D
3.	PWD is still developing its focus on gender equality and social inclusion	 (a) PWD gives insufficient attention to gender equality and social inclusion and environmental protection 	See Appendix B for a detailed program of activities
4.	PWD needs to play a leading role in working with development partners	(a) No coordinated strategy for multi- lateral bank (MDB) assistance	Assist in establishing a formal MDB coordinating group for the sector
		(b) PWD needs to be able to take a leading role in discussions with development partners	Assist PWD to identify its road development priorities and assist MDBs with the preparation of projects to be supported by MDBs

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX B – SOCIAL DIMENSIONS

A. INTRODUCTION

This appendix addresses:

- An overall economic and social assessment for Vanuatu, including Government of Vanuatu (GoV) policies regarding gender equality and social inclusion (GESI)
- gender issues associated with transport in Vanuatu; and
- recommendations for actions to address key gender equality and social inclusion challenges through the Roads for Development Phase 2 (R4D2) Program, to assist the Public Works Department (PWD), and the Ministry of Infrastructure and Public Utilities (MIPU) more generally, to become more gender responsive with regard to road sector activities.

B. ECONOMIC AND SOCIAL ASSESSMENT

Economic Profile

The United Nations Development Program (UNDP) Vanuatu Hardship and Poverty Report, Analysis of the 2010 Household Income and Expenditure Survey (UNDP 2013), notes that economic growth is the only realistic means to address extreme poverty in Vanuatu, however the capacity of people in poverty to participate in economic growth must be enhanced if they are to share in its benefits. Improvements in roads and affordable transportation are a needed contribution to this end. The report examines Port Vila and Luganville as the two key urban centres while the rest is classified as rural. Apart from in Luganville, there was a significant reduction in food poverty between 2006 and 2010, driven by economic growth during the period from 2005 to 2009; it reduced by half to affect 3.2 percent of the population. Growth, however, was not structured in a way to reduce basic needs poverty, which only declined from 13 per cent to 12.7 per cent. A large proportion of the population are concentrated marginally (20-50 percent) above the basic needs poverty line and thus vulnerable to becoming poor. However, the depth and severity of poverty have diminished significantly in rural areas and the inequality of expenditure distribution has reduced, particularly in Port Vila as it is the location of a disproportionate share of economic growth.

Inequality and vulnerability have multiple dimensions, including age, location, gender, education and disability. Gender-based inequality is deeper in urban than rural areas, reflecting wage inequality. The unemployed poor, elderly and people with disabilities are more vulnerable in urban areas than in rural areas. Overall, women's share of benefits from economic growth has been less than men's, with more of the growth being in male-dominated jobs such as construction. More women than men are vulnerable to falling below the poverty line. A strong three-way relationship between gender, low or no education and poverty prevails in urban areas, as vulnerability and the incidence of basic needs poverty is higher among women than men with limited or no schooling. (ibid)

The 2010 Household Income and Expenditure Survey (HIES) reported that about 12.2 percent of all households are headed by women, though this will not necessarily consider those where men are essentially not present due to work or other reasons. Nearly 20 percent of all women-headed households were in the lowest poverty quintile. (ibid)

Social Profile

Vanuatu is a patriarchal society, despite some variation in norms and sub-cultures. Women in Vanuatu are overwhelmingly responsible for unpaid domestic work and access important social standing through their traditional roles as caregivers and upholders of custom. Economic pressures mean that everyone, including women, is increasingly involved in income generation, including in rural areas where people increasingly work to monetise whatever is left over after meeting subsistence needs to meet various costs. However, the barriers women face in generating income, both in the smaller formal and larger informal economy, are higher than those faced by men. They lack access to time, higher education, social support for playing leadership and management roles, technology, information, credit, financial literacy, property registration, markets, professional networks, personal security and role models/mentors.²²

There has been progress for women in Vanuatu in recent decades. According to the 2009 National Population and Housing Census: Gender Monograph, the gender gap in literacy and education has narrowed and in some provinces, girls outperformed boys in school. Child mortality declined between 1999 and 2009, and teenage pregnancy rates across the country have dropped, though this remains an issue. The proportion of women in waged employment has increased and strides are being made towards addressing the severe security issues faced by women and girls; the Family Protection Act (FPA) of 2008 provides legal protection for victims of violence, and there is much focus amongst the donor community to address this pervasive issue.

Despite progress, challenges remain:

- Gender based violence (GBV) is a serious issue. Approximately 60 per cent of women in Vanuatu have experienced some form of physical and/or sexual violence in their lives, of whom 21 per cent were left with permanent injuries and 68 per cent were subjected to psychological violence by their intimate partners.²³
- Since independence in 1980, only five women have been elected into national parliament and no women were elected to Parliament in 2016 (UNData).

²² The Unfinished State: Drivers of Change in Vanuatu. Cox, Marcus et al. 2007. AusAID

²³ Vanuatu Women's Centre, 2011

- Reports indicate that women represent just 3 per cent of total senior/executive government positions²⁴.
- The opportunity for women to establish businesses is limited as they lack access to capital, financial services and markets²⁵.
- Despite gender parity being nearly reached in school enrolment rates, women are underrepresented in tertiary education and are less likely to be awarded government scholarships (Vanuatu National Statistics Office VNSO -2011).
- Discriminatory laws restrict women's rights to property and inheritance (Government of Vanuatu 2012).
- More women than men (49 per cent and 41 per cent respectively) are involved in the subsistence economy (VNSO 2011), making them more vulnerable to poverty, climate change, disasters and other livelihood stresses.
- Discrimination against women is reinforced through legislation as well as cultural and religious beliefs and practices (Bowman, Cultural, Ellis and Manuel 2009).

Social inclusion and safeguards

Gender is multi-dimensional, intersecting with a range of other social variables such as age, location, socioeconomic status, health status, and educational level to influence the roles people play in society as well as the barriers and opportunities they experience. Likewise, gender is only one of a number of variables that must be considered through the lens of social inclusion and vulnerability. This section will briefly touch upon a few others: disability, youth, and child protection. And while it is necessary in any infrastructure work to consider vulnerability to displacement and resettlement, these are not relevant to R4D2 given its focus on improvement and maintenance of the current road reserve.

Official figures place the rate of persons with a disability at about five per cent of the population, though it seems clear that there are limitations to the data available. For children, the figure is more like 8 per cent, although real rates are likely to be much higher as data is drawn from in-school children and not reflective of those with disabilities who are among the more likely to be out-of-school.

(https://vnso.gov.vu/index.php/special-report/disabilities-in-vanuatu-what-do-the-data-say). Children with disabilities are significantly less likely to attend school than their non-disabled peers; among 10-19 year olds, the gap in primary school attainment is more than 53 per cent. People with disabilities are much more likely to be poor; nearly 31 per cent of people with severe disabilities are living in the lowest wealth quintile, compared with 16 per cent of people without reported disabilities. While people with disabilities are as likely to take part in productive activities as non-disabled people, they are less likely to be employed outside the home and more likely to be either self-employed or working in a family business, suggesting barriers preventing them from obtaining employment. (https://www.hurights.or.jp/ archives/focus/section3/2015/06/persons-with-disabilities-in-vanuatu.html).

The GoV has signed onto international instruments promoting the rights of people with disabilities and has taken steps to implement them, including the creation of national legislation. One barrier that people with disabilities face, particularly in non-urban centres, is a lack of services and support.

Youth in Vanuatu face particular challenges, among them being a limited formal job market in which to turn skills or education into productive livelihoods. The Vanuatu Rural Development and Training Centres Association (VRDTCA) estimates that fewer than 20 per cent of graduates of their programmes in rural areas can hope to find employment in urban centres (https://www.radionz.co.nz/international/pacific-news/207407/youth-unemployment-big-challenge-for-vanuatu). Youth have limited access to further education, employment, decision making and participation opportunities, resulting in economic and social marginalisation—even as they navigate the pressure of their elders' expectations to be successful and contribute economically. Rapid social change and urban drift has impacted on their sense of identity and belonging as well as access to land. These factors are magnified for young women. (Youth Challenge Vanuatu; stories of change. Oxfam and Youth Challenge Vanuatu, 2016)

Many children in Vanuatu are vulnerable to abuse, including sexual abuse, neglect, violence and exploitation; physical punishment, including in schools and homes, is not met with overwhelming public disapproval or sanction. The lack of social welfare services, counselling, and legal service-people appropriately trained and resourced tends to be compensated to some extent by the involvement of community and church-based actors, though customary non-formal justice and support measures cannot be said to be standardised or underpinned by up-to-date training (for example on child development or gender-responsiveness) or legislation. (Protect Me with Love and Care; a baseline report for Vanuatu. UNICEF Pacific, 2009) The Vanuatu National

²⁴ Morgan 2013

²⁵ Bowman, Cultural, Ellis and Manuel 2009) particularly rural women (World Bank 2013)

Policy on Child Protection 2016-2026 provides a basis for improved coordination and action to enhance child protection, including in times of disaster, though the legal framework for child protection could be further strengthened. (ibid).

Women's Participation in the Economy

Women's labour force participation in Vanuatu is high at 61 per cent, but they earn less and lag men in tertiary education and skills training, in no small part due to the difficult prospect of seeking higher education offisland. Many women are engaged in the informal and traditional economy, including production and processing of food and cash crops such as copra and making handicrafts. Income derived from these activities is vital for paying for food, clothes, and energy, medicine and school costs.

Educational attainment is a key determinant of employment outcomes. Although the gap is narrowing, girls are less likely than boys to be enrolled in primary, secondary and tertiary education (VNSO 2011). Women lack numeracy, literacy and financial skills, restricting their chances of entering the labour market, obtaining formal employment and establishing their own businesses.

The most recent gendered analysis of labour market figures is based upon the 2009 Census. At that time, men in Vanuatu occupied more than 60 per cent of the jobs in both private and the public sectors – a figure unlikely to be significantly different today. The private sector employed more than 18,500 people, 36 per cent of whom were women. The much smaller public sector employed around 6,500 people, 39 per cent of whom were women. In both sectors, men predominated in positions of leadership, management and decision making with women occupying lower-level positions. Although women hold fewer jobs both within the government and the private sector, their level of qualification was generally higher than their male counterparts for the same jobs.²⁶

Women in Vanuatu lack full control over their ability to earn and spend money. Nearly a fifth of women who work within the public and private sectors had reportedly given up or refused a job because their husband/partner did not want them to work, more than one in five had their savings or earnings taken by their husband/partner, and nearly half had their husband/partner refuse to give them money for household expenses. Fewer than one in five women has savings in the bank and few women own major assets, including property.²⁷

Not all women in Vanuatu are uniformly disadvantaged. Women-headed households are more likely to rely on the sale of goods as their source of income than men-headed households and own fewer possessions. This way of making a living is precarious and does not offer benefits, protections or guarantees. (VNSO 2011).

As compared to their urban counterparts, women in rural and remote areas lack access to education, training, information, financial services and markets. They bear a disproportionate share of economic pressures, becoming involved in income-earning activities by travelling to the market to sell produce or taking on more agricultural labour in the absence of husbands working outside of their locality. In urban and peri-urban areas, women may work as domestic labour and pursue informal businesses, for example in small-scale catering.

While the entry of women into the formal economy should result in their economic empowerment and an increase in social status, this was not found to be the case amongst ni-Vanuatu women interviewed for a 2007 study. In rural communities, women's status depends upon how active they are in their community roles, including church and women's groups, and contributions in caring for the elderly and vulnerable. When women increase their involvement in income-earning activities in addition to their domestic roles, they have little time left for other activities, and can lose status ('The Unfinished State: drivers of change in Vanuatu. April 2007)

Women's Political Participation

Women face a variety of constraints to playing a role in politics: leadership is seen by both women and men to be a male arena (a view reinforced by *kastom* and the Church which reinforce the primacy of men in leadership at home and in the community), women lack key patronage and support from established political parties, and domestic demands of motherhood, food production, water collection and income generation leave women with little spare time. It is common for women to take on leadership roles within the churches and local committees, and to be influential in consensus-based decision-making processes at village levels. These roles generate status for women within their own communities, which may be seen by women themselves as more desirable than political office. (ibid)

By law, Provincial Councils are to contain a mixture of elected members, and appointed representatives of chiefs, churches, women and youth. In practice, women are often not appointed at all as a cost-saving measure, or have become political appointees and lost their representative character.

Roles played by women vary considerably in different parts of the country, making a simplistic characterisation of women's status impossible. On some islands, such as Epi, women may be appointed as chiefs within their

²⁶ 2009 Census Gender Monograph. Slightly more men in these sectors have tertiary education, as is the case for the total population. However, the number of women who have completed a senior secondary qualification is greater than men.

²⁷ Government of Vanuatu (2014). National Gender Equality Policy 2015-2019, Prepared by the Department of Women's Affairs, Port Vila.

communities. In areas such as North Ambae and North Pentecost, women traditionally played important roles in succession, inheritance and peace-making, although these have been gradually eroded since independence. On other islands, notably Tanna, women's roles are highly restricted and centre on reproduction.

Different communities and networks in Vanuatu have their own, unique sets of values and social relations. People from within a particular network share a common set of cultural codes, which makes it easier for them to interact with each other, than with outsiders. These cultural values are often gendered—that is, they entail beliefs about the proper role of women and men in social relationships. But again, this varies across groups. People from certain areas are familiar with women in leadership roles within their own communities, and so are comfortable with having a woman in a superior position while those from other communities may find it more difficult. Certain institutions (like the Treasury) have attracted a cadre of young, professional women, while others remain male dominated. (ibid)

Policy Framework

GoV has made commitments related to gender equality and social inclusion at international, regional and national levels; the Government of Australia (GOA) supports these. However, there are gaps in implementation and information and analysis—much needed to inform evidence-based planning and advocacy—is inadequate. The official focus on women is largely on the need to reduce violence against them and improve their education outcomes rather than situating women as potentially powerful economic actors in a growing Vanuatu. Sensitivities around discussion of gender equality mean that much official discourse proclaims a nearly gender-neutral commitment to non-discrimination rather than engaging with the nature, causes and repercussions for women of the many types of discrimination that do occur and what active steps should be taken to redress them and empower women.

On paper, the policy landscape for gender equality and women's empowerment in Vanuatu is fairly comprehensive. The GoV has made commitments to gender equity and women's empowerment at the international level, including the Convention on the Elimination of all forms of Discrimination Against Women and Optional Protocols, the Millennium Development Goals and the Beijing Platform for Action and the Sustainable Development Goals (SDGs), launched in 2015, each of which has specific targets to be achieved over the next fifteen years. Integrating gender equality and women's empowerment into infrastructure development directly contributes to achieving seven of the SDGs:

- Goal 1: End poverty in all of its forms everywhere.
- Goal 5: Achieve gender equality and empower all women and girls.
- Goal 6: Ensure availability and sustainable management of water and sanitation for all.
- Goal 7: Ensure access to affordable, reliable, sustainable and clean energy for all.
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Regional commitments include the Pacific Plan, Revised Pacific Platform for Action on the Advancement of Women and Gender Equality and the Pacific Leaders Gender Equality Declaration.

Nationally, commitments to equality are made in the Constitution²⁸, various sector-based gender policies (Education, Agriculture, public works, environment, health, and land) and the National Vision for Vanuatu. This focuses on economic growth led by the private sector and acknowledges women's disadvantaged role in society, but limits its discussion mainly to gender issues in health, education and political participation. Other instruments, such as the Vanuatu National Child Protection Policy 2016-2026, the UN Convention on the Rights of Persons with Disabilities (2006), the National Disability Policy and Plan of Action 2008-2015, the Mental Health Policy and Plan 2009-2015, and the Inclusive Education Policy and Strategic Plan 2010-2020 demonstrate the GoV's legislative commitment to combatting exclusion and ensuring social protections and rights.

The National Plan of Action for Women 2007-2011 included an explicit focus on women in the economy, promoting women's access to employment, appropriate working conditions and economic resources and The National Gender Equality Policy 2015-2019 prioritises four strategic areas:

• Reducing Domestic and Gender Based Violence.

²⁸ Chapter 2, Part I recognises the rights and freedoms of all individuals without discrimination on the grounds of sex, race, place of origin, religious or traditional beliefs, political opinions or language. It has provisions for the 'special benefit, welfare, protection or advancement of females, children and young persons, members of under-privileged groups or inhabitants of less developed areas' (Chapter 2, Clause 5 (1) (k)).

- Enhancing Women's Economic Empowerment.
- Promoting Women's Leadership and Equal Political Participation.
- Building a Foundation for Gender Mainstreaming.

Some national laws discriminate on the basis of gender, including those related to matrimonial property, inheritance, citizenship, domestic violence, working hours, employment, marriage and rent. The Personal Properties Securities Act is important for women in that it allows access to credit with collateral other than land, to which women have little access.

The GoV has included gender equality in its development agenda, first through the *Comprehensive Reform Program* and later in the *Priorities and Action Agenda 2006–2015* (PAA). The 2012 PAA identified gender equality/women's empowerment as key policy objectives and carried them forward as specific policy interventions in the *Planning Long Acting Short Strategy* that supported the implementation of PAA. The PAA was replaced by the *National Sustainable Development Plan 2016-2030*, otherwise known as 'The People's Plan', which addresses the triple pillars of the economy, society and environment. It mentions the need to reduce violence against women and children, and to 'increase the number of decent, productive employment opportunities, particularly for young women and men and people with disabilities'.

The goal of the Vanuatu Infrastructure Strategic Investment Plan 2015-2024 is 'Infrastructure services contribute to inclusive (broad-based and gender-balanced) economic growth, human development, and poverty reduction, with increasing resilience to climate risks'.

The *MIPU Inclusivity Policy* (February 2015) deserves special consideration. It states a dual commitment to workplace and community inclusivity, noting that inclusion is reflected in an organization's culture and practices, programs and policies. "This ideal of inclusion works in conjunction with our Ministry's motto for Consultation and Co-operation 'Nasi Tuan' which means 'yumi helpem yumi' — we all help each other." Inclusivity measures in this policy focus on three key areas (disability, gender and youth) and set out a vision to create a positive, 'gender diverse' workplace culture that is inclusive and in which women and men are equally represented, valued and rewarded. It notes that barriers faced by specific groups should be identified and action taken to address them.

The Policy recommends measures include training, awareness raising, establishing an Inclusion Committee and Inclusion Issues Register, appointment of an Inclusion Champion in each MIPU workplace and establishment an annual Inclusivity Excellence Award. It requires the establishment and analysis of records and information on gender, disability and age within the Ministry and identification of opportunities for improving inclusivity.

Within Ministries, there is little functioning infrastructure or capacity to drive or support meaningful prioritisation of GESI objectives across sectors. The Department of Women's Affairs (DWA) in the Ministry of Justice, has taken various steps to strengthen the GoV's ability and mandate to strengthen a meaningful GESI approach, though their reach and human resources are limited. The DWA is tasked with implementing the *National Plan of Action for Women 2007–2011*, despite limited capacity and resources. Other key Ministries such as Finance and Treasury are not actively engaged with follow-up.

Civil Society

Civil society, in the form of Community-Based Organisations (CBOs) and Non-Government Organisations (NGOs) play a key role in advancing a social and gender-inclusion and empowerment agenda at the community level in many countries, as they may be knowledgeable about, trusted by and have access to local communities and people who would be considered vulnerable. In practice, NGOs in Vanuatu are more active in service delivery than in voice and accountability, including those focussed on women. As a result, there is little or no joined-up advocacy for women's empowerment coming from civil society — a space where it is often found. Of the twenty-something NGOs registered under the Charitable Organizations Act, only a few have an active research and advocacy agenda; in relation to women, these focus largely on domestic violence. NGOs struggle to find and retain qualified staff, and depend upon the work of a small number of active individuals. Most compete for short-term funding, inhibiting collaboration across organisations. One analysis characterised Vanuatu's NGO sector as demonstrating mistrust, personality conflicts between NGO leaderships, competition for scarce resources, and limited energy to expend outside of their immediate areas of work.

The Vanuatu Association of NGOs (VANGO), an umbrella organisation for NGOs and community-based organisations, is meant to develop advocacy coalitions in a number of areas including women's issues, but is not particularly active. VANWODS is perhaps Vanuatu's best-known NGO, providing micro- and medium credit loans predominantly to women to start small businesses, based on the successful Grameen model.

The R4D2 project will articulate and implement a gender and inclusion strategy. However, rather than working with NGOs, it is considered that a continuation of the more focussed practice of the current Roads for Development (R4D) program of working with communities involved in community--based contracting in

particular and also with island-based and national contractors is the best means for delivering outreach programs

C. GENDER AND TRANSPORT IN VANUATU

Gender Assessment of the Transport Sector

There is no question that improved infrastructure benefits women — in some cases even more than men, as women's needs may be greater in some respects; because of their expected role as caregivers, women and girls face unique constraints on their time and mobility that investments in electricity, water, roads, and transportation services can mitigate.

Over time, global discourse on infrastructure, including transport, is gradually moving from a sole focus on 'do no harm' and minimum compliance, to engaging with the ways that infrastructure investment can promote equality and prosperity through supporting women's empowerment. However, it is early days yet. Recent research indicates that, 'despite policy level commitment there is very little evidence of infrastructure projects taking conscious action on gender. As such, impacts on women are often unplanned and unintended and there may be no gender perspective when targets are set or outcomes are monitored' (IMC Worldwide, 2012).

In Vanuatu, maintenance and improvement of rural roads is now primarily undertaken through contracts with communities and contractors, with only a small remaining amount undertaken through force account. With some variation across sub-cultures, road construction and maintenance is largely considered to be 'men's work', though women are taking on roles at the community areas in growing numbers. Women have a pressing need for safe, affordable, reliable transport options, not least as they are often responsible for selling goods in markets and often for transporting them there.

Community-based contractors (CBC), small-scale, island-based contractors (IBCs) and national contractors (NCs) are key stakeholders in road maintenance and improvement as the PWD works to formalise their procedures. At present, CBC contracts, which include GESI requirements, are made with the village chief, who then arranges issues of who will carry out the work, when and how. Consultation is a feature of these arrangements; while they do not exclude women, the nature and extent of their involvement is likely to reflect predominant norms of power and voice. As the CBC contract is public, the community knows how much the chief, on behalf of the village, will get from the contract.

Works to maintain and improve rural roads have flow-on benefits, including:

- Improved accessibility. Improved roads allow communities who live away from towns to better access markets where they can sell items (mostly fruit and vegetables, though also including some locally manufactured goods) and purchase necessary items. They also improve access to social infrastructure such as schools, medical facilities and other government services. The evidence for these benefits of improved accessibility are mostly anecdotal at present, with limited quantitative data to support the extent of the benefits or to unpack the degree to which they benefit women or enhance equality. To the extent that the benefits have materialised, they are likely to benefit women more directly than men because women are primarily involved in taking goods to sell in markets and responding to the needs of their children and themselves to access school and medical services. The M&E program for R4D2 will seek both quantitative and qualitative enquiry to determine this.
- Increased community income. The CBCs deliver increased income to communities. Communities have responded in a range of ways to the CBCs, for example with some providing modest payments to those undertaking the work and spending remaining money for community purposes. Others deliver all funds for community activities, with community participation in works done without direct financial reward. The community funds appear to have been used for genuine community purposes, which has been facilitated by publicly-available information on contract payments. Interviews indicated that funds have been used for activities such as sending a disabled child to Fiji for treatment and building community facilities such as a kindergarten. Again, the extent and nature of GESI-related benefits of increased community income will be examined in the R4D2 M&E program.
- Improved safety. Cutting of grass on the side of roads improves safety by increasing motorists' visibility and making it possible for pedestrians to walk in the grass on the side of roads rather than on the roads themselves. There is no measured evidence as to the gendered benefits of improved safety on rural roads in Vanuatu. However, given women's role in caring for children and those who are ill or injured, it is reasonable to make the link between improved safety and benefits to women in rural roadside communities, including time and security. This matter will, again, be examined in R4D2.

Attitudes and Awareness

There is a widespread though incomplete recognition of matters related to GESI, and with practice being less wellembedded than the reported level of awareness. For example, interviews with three CBCs on the islands of Tanna and Malekula during the design of R4D2 indicate that all recognised the objective of having equal participation of men and women in the works they are to provide and articulated that this equal participation was achieved, though observation suggests this was generally not the case. In one instance, a community indicated that they involved a person with disabilities in grass cutting. In addition, some CBCs have purchased motorised grass/brush cutters ("Whipper Snippers"). Besides not always being appropriate for cutting heavy foliage, it appears that this equipment is used exclusively by men. Safety is, again, somewhat recognised, with observation indicating that most, though not all, communities place cones on roads in the vicinity of their work to warn motorists of the presence of workers. The interviews, together with discussions with Community Partnership Officers (CPOs), who are employed in PWD Divisional Offices to guide, support and supervise CBCs, indicate that it is commonly around two years since the CBCs received formal training in GESI, safety and environmental matters, though the CPOs provide ongoing advice and direction.

Island-based Contractors (IBCs) interviewed showed an understanding of the intent that women be involved in all aspects of roadworks. This is consistent with the findings of the most recent *Island Based Contractor (IBC) Tracer Study* that there had been a steady improvement in the awareness of relevant Australian Department of Foreign Affairs and Trade (DFAT) policies related to gender, disability and social inclusion, with only 61 per cent of IBCs being aware of the policies in 2015. Field inspections undertaken during the design of R4D2 identified only limited evidence that the awareness was being put into practice, with only some involvement of women in construction activities. Again, interviews with the contractors and site inspectors located in PWD Divisional Offices indicate continuing advice and direction from the latter, through an inadequate understanding and focus on ensuring GESI matters are addressed.

Gender and Transport at the Institutional Level

At 17 percent, women account for only a small share of the employees of the central offices of MIPU and of both the central and Divisional offices of PWD in established positions and 20 percent if contract staff are included. In terms of distribution, the majority of women staff work at the head office (45 per cent) with very few employed in Division offices (see Figure 1).

As noted in Appendix C (Institutional Review), women are more likely to be involved in lower level administrative work rather than managerial or technical activities. For instance, out of ten engineering positions only one is occupied by a woman and no women occupy any of the managerial level positions.

There have been some formal programs in the past to support women working in PWD but such activities have been considered only to a limited extent in R4D in more recent years, and with only limited positive support from management. There is a clear opportunity to address these matters in a more substantive way in R4D2.

Progress and remaining Challenges

Looking ahead, a central task will be to consolidate progress to date, strengthen the vision for gender and social inclusion in R4D2, develop an articulated strategy to support its implementation and ensure that momentum and focus are not lost over time.

R4D provided support in establishing PWD's Social and Environmental Safeguards Framework, a set of modules which addresses crosscutting issues for the safety of communities and other contractors and protection of the

environment during work. The Framework is designed as a training programme for PWD to implement internally and with its broader stakeholders. Likewise, gender appeared in training for IBC and CBC contractors to some extent in the past, though there is much to be done to consolidate, target and update training as well as to measure its impact on women, gender issues and social inclusion.

A challenge for the R4D2 Program will be to integrate a GESI focus—the intended outcome of which is to contribute to equality and women's empowerment, as mandated by the Government of Australian (GOA)—in potentially non-receptive context where capacity gaps are only slowly being filled. To do this will require generating analysis, identifying champions, building capacity (both within and outside of R4D2) and adopting new ways of working.

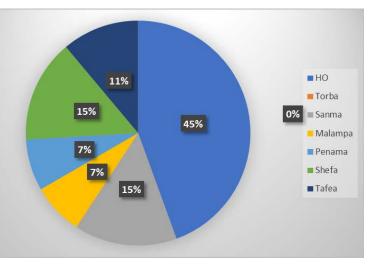


Figure 1: Level of women employee in PWD by location

Another challenge is the need for information.

The current situation needs a baseline from a GESI perspective, including both qualitative and quantitative data and analysis; establishing how this can be done will be an early task of articulating a Gender Strategy and Action Plan.

Conclusions

Bearing all of the above in mind, it will be necessary for R4D2 to initiate what needs to be a long-term approach to GESI in the transport sector in Vanuatu, working simultaneously at the community level, through the work and formalisation of CBC contractors — including awareness raising, training, contractual measures and information-gathering — as well as national and institutional levels. There will be a need to engage with attitudinal barriers and variation between localities across the islands where R4D2 will work and exert influence. While the policy framework is largely in place, including at institutional levels, there is an ongoing need to work towards supporting, innovating and guiding the implementation of the Government's GESI aims and aspirations. Practical measures for providing such support are touched upon in the next section.

D. RECOMMENDATIONS TO ADDRESS KEY GENDER EQUALITY AND SOCIAL INCLUSION CHALLENGES

This section provides recommendations to address the key challenges to GESI in the transport sector discussed above as relevant to R4D2. While not a core issue in this appendix, matters related to safety and the environment are also noted to the extent that it is appropriate for practical reasons to implement them jointly with GESI-related activities (such as through contracts with CBCs, IBCs and NCs).

Extensive activities related to GESI and related safety and the environmental issues have been undertaken in R4D. These need to be reviewed at the commencement of R4D2 and a detailed program to reinforce past activities and ensure comprehensive coverage for future activities developed and implemented. Clear opportunities that are evident from activities undertaken as part of the design of R4D2 are identified in following sub-sections with reference to the three streams of work that comprise the R4D2 Program:

Stream A: Road Network Operations

This stream of works will focus on building the capacity of decentralised Divisional Offices of PWD to manage the delivery of road works and provide finance for rural road maintenance and improvement works. Recommended activities to be undertaken in Divisional offices of PWD and in the delivery of rural road maintenance and improvement are:

- **CBCs**. Communities have participated in training in the past, but generally several years ago. There is a need for the CPOs in PWD Divisional offices to be supported to deliver updated training that reinforces GESI, safety and environmental issues and presses for broad-based participation in contract activities by all community members, including women, youth and people with disabilities. The way these activities are delivered could vary is changes are made to the way in which CBCs are managed, for example if CB contracts are to be aggregated into larger contracts and/or are to be placed under the management of IBCs.
- **IBCs.** Monitoring should be undertaken to confirm that Divisional Managers ensure IBCs engaged to undertake work fully understand GESI, safety and environmental aspects of contracts and that contract supervisors in their offices manage compliance. Contractors should also be encouraged to increase opportunities for women and youth to be trained and engaged in skilled employment and leadership roles, and to ameliorate construction-related risks including the spread of HIV infections and physical and mental bullying. In addition, contractors need to be aware of the need to avoid creating mosquito breeding grounds to support Ministry of Health programs (which are supported by the GOA) to reduce the risk of dengue fever and malaria.
- **PWD Divisional offices.** The above activities require improved awareness and understanding of GESI, safety and environmental matters for PWD Divisional Managers and contract supervision staff in PWD Divisional offices, and also for those involved in delivering force account works. This should be provided both in the form of official guidelines, mandates and job descriptions as well as ongoing mentoring, training and other support.

Stream B: Sector Finance and Road Network Management

The second output of Stream B is to develop the capacity for PWD to be a manager of the road network. Support will focus on the central office of MIPU-PWD in Port Vila. Activities to be undertaken at the national level are:

- MIPU staff. Human resource management is undertaken though the Corporate Services Unit (CSU) in MIPU rather than in the constituent departments of the Ministry. More generally, working arrangements in PWD are influenced by MIPU policies. Hence, activities related to improve gender awareness and responsiveness need to be driven from the CSU as well as being implemented in PWD. Recommended activities include, but need not be limited to: (i) generating an understanding of gender-related behaviour that affect the workplace and securing sustained changes in the behaviours so that more desirable working conditions for men and women are achieved; (ii) more generally support MIPU management to meet its obligations to implement GoV gender policies as well as the MIPU Inclusion Policy; and (iii) the introduction of formal programs and the setting of specific gender equity goals in line with the *Vanuatu National Gender Equality Policy 2015-2019* (e.g. Engineer Recruitment Programs targeting women; providing managerial training and senior acting opportunities for women so they can compete for managerial roles)
- **PWD employment.** R4D2 will seek opportunities to encourage the employment of more women in PWD in all levels of the organisation. Potential activities include, but need not be limited to: (i) given the limited number of women in PWD, priority will be given to employing women where candidates for jobs are equal in all other respects; (ii) mentoring will be provided to women in PWD to support them in their work, covering

technical, personnel and personal matters as appropriate; and (iii) special events will be provided for women in PWD, and in MIPU more generally, for training and mutual support.

- PWD management of a GESI agenda. Opportunities will be sought to encourage PWD to take a dual approach of taking stand-alone steps in support of a GESI agenda as well as mainstreaming it across key institutional mechanisms. For example. PWD could join over 3,700 organisations from approximately 164 countries worldwide to become involved in the '16 Days of Activism Against Gender-Based Violence' movement which takes place annually from 25 November to 10 December as a means to signal its commitment and opening up dialogue on how its work can promote equality and empower women. At the same time, it can enhance its daily institutional practice by incorporating GESI commitments and accountability in reporting, job descriptions, monitoring, performance reports and quarterly progress reviews and analyses.
- PWD contracts, manuals and guidance. As part of the formalisation of roadworks and contracting in Vanuatu, various manuals, guidelines and other materials have been developed, for example social and environmental safeguards guides, CBC contracting manual, partnership establishment guide, and Provincial Administration guides. Gender is included in the social and environmental safeguards as a training module provided to communities participating in the CBC programme. It encourages women to participate and sets up some rules to help them participate if they have the capacity, for example provision of a shelter, an area for breast-feeding and a babysitter close to the work area. However, there is much scope to revise the full set of materials from a GESI perspective, for example enshrining equal pay for equal value work and measures for the prevention and response to abuse including sexual abuse.
- **Prevention of abuse.** To an unknown extent, there may be an issue of contractors abusing or at the least forming problematic liaisons with women in local communities. Measures to address this such as training, grievance and disciplinary action are to be formally enshrined in official mandates and a better understanding will be built as to the magnitude and nature of this risk.
- **PWD partnership and communication**. There is an opportunity for R4D2 to support PWD in linkages it makes with other bodies and networks to strengthen its GESI approach. For example, the Skills for Development programme, currently present in Torba, Sanma, Tafea and Malampa provinces, has had success with involving women in training, including in non-traditional arenas, and in fostering attitudinal change. It has developed an exemplar gender policy and approach. IBCs approach the skills providers for training, the recipients of which are then employed. The PWD could usefully learn from the Skills' programmes successful GESI practice as well as explore practical linkages with placing trained women in work. Another useful relationship to foster is with the Gender Protection Cluster, headed by the Department of Women's Affairs and co-supported by CARE. Gender Protection Clusters generally operate in times of disasters (along with education clusters, WASH clusters, etc.). In Vanuatu, they Gender Protection Cluster has continued to meet in non-emergency time. Led by DWA, the network includes members of NGOs involved in gender, the Justice Ministry, the police, the child and disability desks and the UN. A PWD official (preferably one level down from Director) could gain much from membership in this network.

Stream C: Transformational Partnerships and Investments

No specific needs to address GESI matters are identified at this stage as the activities will depend on the features of initiatives that are to be implemented. Accordingly, the specialists undertaking the R4D2 Program will need to ensure that GESI, safety and environmental issues associated with each initiative are identified and then develop an appropriate response.

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX C – INSTITUTIONAL REVIEW

A. INTRODUCTION

This appendix provides a brief overview of the institutional arrangements of the Public Works Department (PWD) in the Government of Vanuatu's (GOV's) Ministry of Infrastructure and Public Utilities (MIPU) and its capacity development needs. These two factors will be crucial as the PWD transitions from being a traditional public works infrastructure agency to a modern-style road network manager. In this regard, it is crucial that the institutional arrangements and the organisational structure of PWD are closely aligned with the network manager development strategy, and that at the same time PWD has both the institutional capacity and staff capacity to be an effective network manager.

The R4D2 design team wrote this appendix while Asian Development Bank (ADB) technical assistance consultants were working on a proposed Vanuatu Transport Plan 2030 (Transport Plan). The Transport Plan will likely include modernised institutional arrangements across Vanuatu's transport sector. Whatever is the final form of MIPU-PWD, there will be a national agency managing Vanuatu's national road network. The appendix is written on this basis.

B. INSTITUTIONAL ARRANGEMENTS

Legislative Framework

The functions of the Director-General of MIPU in relation to roads and the operations of the PWD are set out in the relatively new **Public Roads Act 2014**²⁹. The **Public Roads Act** focuses on how government should develop, maintain and administer its physical road asset, including the road reserve the road asset is on. The main objectives under section 2 of the Public Roads Act are to:

- establish a procedure for identifying and designating public roads;
- assign a level of government to be responsible for each public road;
- provide a legislative basis for strategic planning and making policies for the public road network;
- apply technical standards to the public road network;
- clarify functions and provide powers to road authorities to design, construct and maintain public roads; and
- regulate access, utility works, encroachments and unauthorized activities on the public road network.

The key functions to implement these objectives are allocated to the Director-General of MIPU, and, by delegation, exercised by the Director, PWD.³⁰

As the PWD is a public service department it is also subject to the general public sector legislation, including the:

- Public Service Act 1998;
- Public Finance and Economic Management Act 1998;
- Contracts and Tenders Act 2001; and
- Decentralization Act 1994.³¹

The impact of the general legislation is discussed below in relation to the institutional arrangements.

As the **Public Roads Act 2014** is a relatively new, a key issue is that a number of its provisions have not yet been fully operationalised. For instance, although the Government of Vanuatu (GoV) has an approved Rural Roads Access Strategy (RRAS), MIPU-PWD will need to review and supplement this consistent with Section 7 of the Act, which requires a 'national road strategy'.³² PWD has a comprehensive and recently updated set of roads and bridges technical guides and standards as required by Section 8 of the Act; however, these will need to be reviewed and supplemented as the network manager model is progressively implemented. In addition there are a number of other areas that need to be addressed such as the full classification of the road network, as required by section 6. It is essential that they be addressed under R4D2, along with other provisions in the Act that are yet to be implemented.³³

In this regard, a briefing paper³⁴ to MIPU reviewed by the Design Team noted that the Public Roads Act introduces a significant range of changes that will need to be "implemented progressively as the amount of change required by the new legislation is too much to be absorbed by stakeholders in a short period". In particular, the briefing paper notes:

- The Act introduces a number of significant changes to the way roads in Vanuatu are managed. There are new and changed concepts, roles, powers, functions and responsibilities.
- There are many stakeholders involved in implementation, including all levels of Government, adjacent land owners, any person or organisation wanting to do construction or run a business on the road reserve and road users. Carrying out education and awareness of the Act to these stakeholders will be a major activity.

³⁴ Wayne Trappett, Briefing Paper - 1st Stage Implementation of Public Road Act (undated)

²⁹ The **Public Roads Act 2014 Act** was proclaimed on 16 July 2014. Some contingent matters PWD has to undertake (e.g. vehicle inspections) are set out in the **Road Traffic (Control) Act 1962** but they are not considered here.

 $^{^{30}}$ It is significant that the Public Roads Act 2014 allocates these functions to the Director-General of MIPU and not to the Director, PWD. This means that the Director, PWD effectively exercises these functions only under delegation from the Director-General, MIPU. This will have to be taken into account in any restructuring of MIPU and PWD, to ensure the lines of delegation are maintained or, alternatively, the legislation amended. Future legislative review could consider if these powers would be more appropriately allocated directly to the Director, PWD, as the main implementing body.

³¹ The impact of this Act is relatively limited but it establishes what are commonly called 'provincial governments' in Vanuatu (these are called Local Government Councils in the legislation) which PWD deals with on road issues.

³² In this regard, the RRAS states: "this Strategy covers Vanuatu's rural arterial and feeder road network only. It does not expressly cover urban arterial roads, which will have their own policy and strategy in due course" (Rural Roads Access Strategy, Public Works Department, Vanuatu, page 7

³³ For example, the Design Team was informed that not all relevant roads have yet been officially designated as public roads under Sec. 3 of the Act. This effectively means MIPU/PWD has no legal authority over those roads, although in practice they may maintain them.

Regulating access, utility works and encroachments on the road reserve will require the establishment of
processes and procedures, the creation of new forms and allocated trained officers to manage the process.

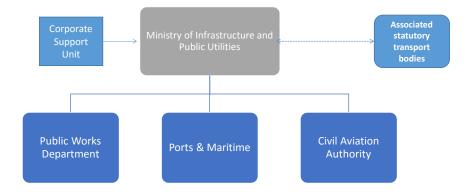
This indicates that the implementation of the Public Roads Act will be a significant challenge for PWD and, as such, will require the active support of R4D2. In particular, it will require policy and legislative advisory support for the development of new policies and regulations under the Act to operationalise it and to provide an authoritative policy and legal basis for the network manager model being adopted by PWD.

Ministry of Infrastructure and Public Utilities

PWD is a department within MIPU, which is the national government agency responsible for the transport sector. In addition to being responsible for operational work such as infrastructure construction and maintenance, MIPU is also the key regulatory, policy and licensing body in the transport sector.

Structurally, MIPU consists of three departments (see Figure 1): PWD; the Civil Aviation Authority (CAA); and the Ports and Maritime Department (PMD).³⁵ As the key focal point of R4D2 is the PWD, this is the only department addressed in this institutional review in detail, with references made to MIPU as required. ³⁶ Notably, a small human resource (HR) group in the Corporate Support Unit in MIPU undertake HR functions for PWD.

Figure 5: Ministry of Infrastructure and Public Utilities organisational structure



³⁵ There are also six statutory bodies attached to the Ministry, Air Vanuatu, Airports Vanuatu Ltd, Ifira Wharf & Stevedoring, Vanuatu Post Ltd, Northern Islands Stevedoring (NISCOL) and the Vanuatu Maritime College. As these organisations are not covered by R4D2 they are not discussed in this appendix.

³⁶ For instance, the corporate services function, including areas that R4D2 is addressing such as people management and corporate planning, is located in MIPU and not PWD.

The Influence of Other Agencies on MIPU and PWD

A number of agencies have significant influence over the direction of MIPU's, and in turn PWD's, work program and its capacity to implement its work program. These agencies are: the Public Service Commission (PSC); the Department of Finance and Treasury (DFT) and the Central Tender Board (CTB) within the Ministry of Finance and Economic Management (MFEM); and the Vanuatu Project Management Unit (VPMU) and the Department of Strategic Policy, Planning and Aid Coordination (DSPPAC) that are within the Prime Minister's Office (PMO) - (see Figure 6).

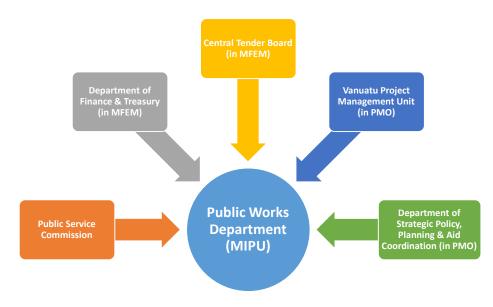


Figure 6: Broader institutional arrangements

These agencies have varying degrees of influence over PWD, from setting employment policy and financial arrangement (e.g. expenditure control, tendering, contracting) to overall national level policy direction. While these agencies facilitate the implementation of Government policy, from an organisational perspective these influences have both positive and negative impacts, both facilitating and, at times, impeding its work and reform program. The types of influence over PWD by other agencies and the key issues these raise in relation to PWD are set out in Table 11.

In summary, the analysis conducted by the Design Team suggests that PWD has a relatively low degree of managerial autonomy and that key decisions in relation to its staffing and financing are, if not fully controlled, heavily influenced by external agencies. This means that capacity to negotiate and form effective working relationship with these agencies will be critical. However, the Design Team found that PWD had limited capacity to do this and no formal mechanisms had been established to address this. This is a key area of capacity that R4D2 could assist in.

Agency	Nature of influence on PWD	Key issues
Public ServiceCo mmission (PSC)	 Sets overall framework for corporate planning process Sets people management policy and procedures in areas set out in Public Service Staff Manual (PSSM) Provides approvals and checks for recruitment, staff performance evaluations, creation of positions, structural changes, discipline matters & terminations Reviews and influences structural reorganisation proposals 	 PWD has relatively little autonomy in the management of its own staff. Key decisions regarding appointment, performance, discipline and workforce planning are made by PSC. As the PSC, with limited resources, has to provide these services to all public service departments, there are often excessive delays. The PSSM has not been reviewed since 2008 except for the inclusion of a new chapter on performance management. As such, many of its policies no longer reflect current people management practice. Combined with a centralised approach by the PSC to people management, this impedes the PWD from modernizing its people management practices.
Department of Finance & Treasury (In MFEM)	 Administers public service financial regulations and policies Reviews and approves proposed PWD budget & expenditure Provides financial approval for any recruitment actions or new positions requested by PWD Track expenditure and releases funding for PWD operations 	 Budgets are prepared on an annual basis with no multi-year budgetary framework to provide forward guidance. PWD has relatively little autonomy in the management of its own finances. Key decisions on budget levels, expenditure, warrant release and budget virement are controlled by DFT. As the DFT, with limited resources, has to provide these services to all public service departments, there are often delays although these have been reduced substantially in recent years with the establishment of Financial Service Bureaus (FSB) in the provinces which can make local payments and which is utilised by PWD.
Vanuatu Project Managem ent Unit (in PMO)	 Manages large scale infrastructure projects with a minimum value of VUV1 billion (~A\$11.7 million) and so precludes MIPU from managing most of these projects 	 While VPMU has a Charter setting out the limits of its role, who actually manages any particular infrastructure project is generally subject to negotiation between various ministries. A recent ADB review found no compelling reasons for having a separate PMU from MIPU-PWD and recommended that they be merged.³⁷ GoV leadership does not agree with the recommendation. However, if the government's position does ever change and the recommendation is implemented, it will have a significant impact on the workload and the required staffing and skill levels of PWD and, in turn, on the level of support required under R4D. The current arrangement of splitting road projects across two agencies means that limited project planning and engineering resources are divided. It also means that PWD staff do not gain experience in managing large scale infrastructure projects and so miss out on the opportunity to develop advanced project management and engineering skills typically required on such projects but also useful in PWD.
Central Tender Board (under MFEM but independe nt)	 Administers procurement legislation, regulations and policy Manages and conducts all tenders for PWD over VUV5 million (~A\$59,000) Registration and grading of preferred contractors 	 The limit of VUV5m was set in the Government Contracts and Tenders Act 1998 and has not been adjusted in nearly 20 years. This low amount sets a severe constraint on the level of direct tendering and contracting PWD can undertake on its own. In addition, as the CTB handles a very large volume of contacts from all government agencies there are often long delays in tenders and proposed contracts that PWD has submitted

³⁷ Edwin Vowles (2017) **Vanuatu: Supporting the Vanuatu Project Management Unit and the Ministry of Infrastructure and Public Utilities**, Asian Development Bank, Project Number: 49462, July 2017, pp 24-25

Agency	Nature of influence on PWD	Key issues
Dept. of Strategic Policy, Planning, and Aid Coordinati on (in PMO)	 Sets national development policy Co-ordinates and sets government policy across portfolios Co-ordinates aid across sectors 	 DSPPAC provides a very useful framework for PWD to align its work with the Vanuatu's National Sustainable Development Plan.³⁸ Three goals in particular in the Plan - (ECO 2: Improve infrastructure, SOC 6: Strong and effective institutions) - are directly relevant to the work of PWD. However, currently PWD does not have a Strategic or Corporate Plan in place to address these goals. It is critical that this is developed in line with these national goals
Ministries of Health, Education & Trade, Tourism, Commerce and Industry	 No direct influence but rely on PWD provided infrastructure and roads to support their work 	• PWD should develop and maintains close relationships with these Ministries and their divisional counterparts to ensure that their infrastructure needs are addressed in PWD's planning processes and development and maintenance plans. The need to support the work of these Ministries is also a key argument for increased development and maintenance funding.

Public Works Department Structural Arrangements

The current organisational structure of PWD is not clearly defined and is currently being reviewed. As such, Figure 7 sets out **a working approximation of the <u>current</u> PWD organisational arrangements**, rather than a definite structure. At the provincial level in particular functions are not clearly defined and functions tend to be shared across units, depending on local needs.

³⁸ The National Sustainable Development Goals are set out in the publication, **Vanuatu 2030: The People's Plan**, produced by the Department of Strategic Policy, Planning, and Aid Coordination, November 2016

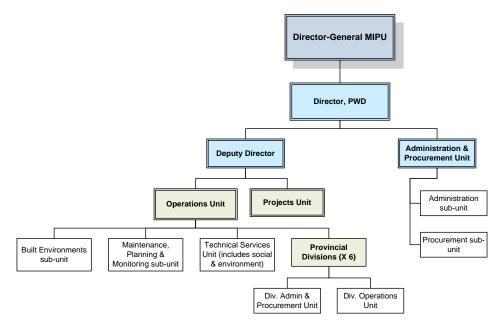


Figure 7: Current PWD organisational structure³⁹

Structure Issues

The key issue in relation to the PWD structure is whether it facilitates or hinders the implementation of the network management model. Fundamentally, the network manager model is an outsourcing model, where policy and contractual arrangements are set by PWD, but the bulk of its operational work is delivered by contracted parties. However, currently PWD structure is configured on the basis that it undertakes the bulk of the capital development and maintenance works, with units, positions, and job categories supporting those functions.

Related to this issue is what type of structure PWD should have: (i) functional (where programs are run vertically); (ii) divisional (where most functions are delegated and programs are run horizontally); (iii) matrix (combination of functional and divisional); or (iv) network (where most key functions are contracted out and managed from a central office).

Currently, although PWD is in nominally configured into a divisional structure, in practice the divisions have very little autonomy or decision-making powers, although they have some limited financial delegation. All key operational decisions and contracts are managed at the central level. This means that PWD effectively has a functional structure with all key functions and programs being driven vertically from the head office, but with insufficient positions to support this. In addition, the responsibility for various functions is not clearly delineated or allocated, especially at the Divisional level, and functions are often duplicated across units.

Another issue is that there is no finalized formal corporate plan in place that clearly identifies the functions of PWD both currently and as a network manager. Following the principle that strategy should drive the structure and that form should follow function, there is an urgent need to finalise the corporate plan to provide a clear strategic direction for the proposed restructuring.

The network manager model has been broadly discussed in MIPU and PWD and there appears to be widespread acceptance of the concept within MIPU. However, this has not been formalized into a specific policy or regulation that could be endorsed by government to ensure that the model has the explicit support of the government, is legally sustainable, and is formally incorporated into PWD's planning strategies.

Finally, ADB has recently commenced assistance to the GOV to develop a Transport Plan 2030. The work, which will be completed in September 2018, will review institutional arrangements for the planning and delivery of transport, and prepare a 5-year investment plan and 20-year investment framework. In addressing broader transport sector issues, it is likely that the Plan will identify matters that affect PWD. The R4D2 program will need to be fully aware of the content of the Plan, the response of the GOV to proposals in it, and be able to assist PWD to develop plans to implement agreed changes.

Staffing Profile

PWD is a relatively small department with 158 established posts. Thirty-three positions are based at the Head Office (HO) and 125 positions are spread across the six provincial Divisions of PWD (see Table 12 and Figure 8). This

 $^{^{39}}$ Organisational chart developed by the Design Team based on discussions with PWD staff and R4D advisors

means that 21 per cent of PWD's 158 positions are based at HO. This ratio may need to be evaluated as PWD transitions to be a network manager, to ensure that staff are correctly placed, in terms of both their skill sets and their location.

For instance, with the significant reduction in force account work, it is likely that fewer staff may be required in the Divisions but more staff at the HO to undertake network planning and contract planning and oversight. On the other hand, if PWD was to more substantially delegate contract planning and oversight to the Divisions, they would require more staff in these work areas, while at the same time continuing to reduce the number of manual force account staff.

Currently, while there has been a growing trend to decentralise the work to the Divisions, no formal assessment has been made as to where the key network management functions should be located (though it is likely to remain a largely centralised activity so that the road network in Vanuatu as a whole can be optimised) or what delegations should be introduced in relation to the Divisional Managers.

An ongoing concern is the high level of vacancies within PWD. While a good number of these are filled on an acting basis they are still substantially vacant (with staff filling them facing uncertainty) and represent a significant capacity gap in PWD, particularly as positions are often not backfilled when staff act in another role.

This indicates that it is a systemic structural issue that needs to be addressed on a system-wide level, in conjunction with the PSC, rather than just an organisational level issue or delays in the recruitment process (albeit that these are also issues).

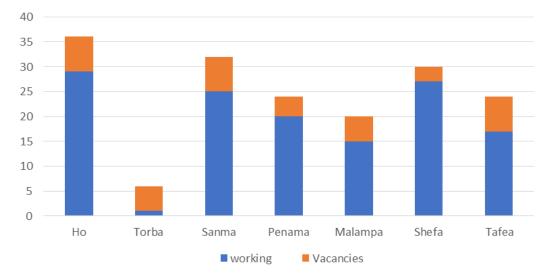


Figure 8: PWD Staffing levels by Division (provincial) location

In this regard, a study needs to be undertaken to see why PWD consistently, year after year, carries such a high vacancy rate and how this can be addressed beyond just conducting ongoing recruitment actions. As part of its organisational transformation to becoming a network manager, people management strategies, including talent management strategies, need to be developed that position PWD as an Employer of Choice where people aspire to work and build a career. Gradate recruitment programs could also be introduced that highlight public works as a positive career option for young people, especially for women.

Staff allocation across provinces (Divisions) varies considerably, compared to population levels. These levels appear to be driven by historical precedents rather than systematic workforce planning. R4D has started to introduce workforce planning and R4D2 should continue to support this and make it an integral part of the corporate planning process to ensure that the optimal levels of staffing and required skill sets are allocated to each Division.

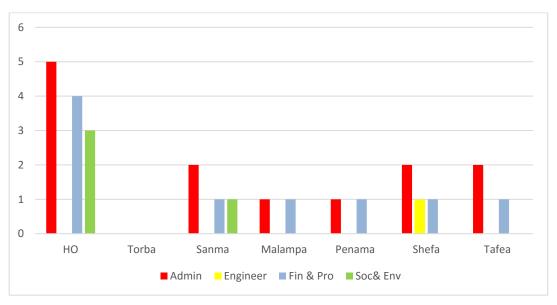


Figure 9: Women staff numbers across PWD functions

Gender composition of the PWD workforce can be improved as only 17 percent of establishment positions are occupied by women. Moreover, women generally occupy lower-level administrative roles rather than technical or managerial roles across PWD (see Figure 9). Indeed, with the recent resignation of the Procurement Manager, there is now no female representation at the managerial level and only one woman engineer, out of 10 positions.

Although gender considerations appear to be taken into account in the planning processes, and there are some workplace policies or programs in place within PWD to address this issue, R4D2 needs to, in line with the **Vanuatu National Gender Equality Policy 2015-2019**, support the development of a **PWD Gender Equity Policy** and specific programs with clear targets to increase the level of women in PWD, especially within the management and engineering occupational groups.⁴⁰ These issues are discussed in more detail in Appendix B.

In terms of the level of qualifications of PWD staff, the picture is somewhat mixed. While 15 percent of staff hold a qualification at diploma level or higher and 46 percent have a certificate level qualification, 39 percent of staff have no formal qualification (see Figure 6).

In this regard, PWD has in the past recruited staff with qualifications and skills relevant to the force account model. Implementing the Network Manager model will require developing and recruiting staff with different competencies with an increased focus on management, economic and business skills and qualifications.

 $^{^{40}}$ Vanuatu National Gender Equality Policy 2015-2019, The Department of Women's Affairs 2014

In addition, there is a need to determine the necessary level of engineering skill needed, at the HO and Divisional level, to oversee, maintain and develop what is a basic road network. To a significant extent, it is likely that practical technical training will be appropriate rather than full university-based engineering qualifications.

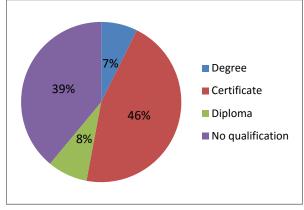


Figure 10: Level of qualification of PWD staff

C. INSTITUTIONAL AND STAFF CAPACITY DEVELOPMENT

Institutional Capacity Development Approach

Capacity development is crucial to the success of PWD as it transitions from a traditional public works organisation that predominantly directly delivers infrastructure services to a network manager model where it manages the delivery of strategic infrastructure services both directly and through third parties. In this regard, the 2017 Independent Evaluation of R4D noted that:

PWD capacity has improved since 2012, with significant improvement in PFM. The change in PWD capacity is a function of the support for capacity building and institutional transformation provided by R4D, and the increased demands placed on PWD by the increase in the programs and projects of other donors (as discussed in Section 2.3). This capacity is now under pressure from increased workloads (from additional donor projects as discussed in Section 2.3), staff departures, and inefficiencies and gaps in systems. If the gaps and efficiencies in the systems were addressed, the capacity of PWD would increase through greater efficiency and throughputs. This could reduce, but not overcome the current pressures. Apart from system improvements, there is an ongoing need for professional development of PWD staff, and capacity development of PWD, not just to respond more effectively to current pressures, but also to further assist in the institutional transformation of PWD.⁴¹

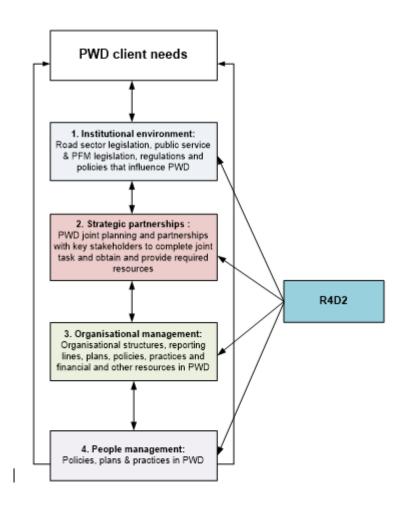


Figure 7: Capacity levels requiring R4D2 support

These findings have been confirmed by the Design Team who found that both institutional and staff capacity continue to be significant concerns in PWD, despite the increase in capacity up to date. Indeed, the capacity issues raised in the Independent Evaluation have been raised in nearly all previous reviews relating to PWD. This

 $^{^{41}}$ Vanuatu Roads for Development Program Independent Evaluation Final Report 12 41 April 2017, p 25

indicates that the issue of capacity is not merely an issue of individual staff capacity but structural system capacity.

Consequently, unless this is addressed on a comprehensive and systematic basis, overall PWD capacity is unlikely to be significantly improved or sustainable. It also raises the question as to where the focus of capacity building by R4D2 should be. It will not be sufficient to focus on the staffing or organisational levels for change to be sustainable. R4D2 will need to support the development of capacity within the institutional environment PWD operates in and support the development of strategic partnerships with PWD (see Figure 7).

From a system perspective, many of the capacity issues can in fact be attributed to factors outside PWD's control and, indeed, outside of MIPU's control.

For example, significant delays in recruitment and restructuring are fundamentally driven by delays in obtaining the necessary approvals from the PSC while tenders over VUV5 million are subject to significant delays at the CTB due to inefficient processes and lack of staff at CTB.⁴²

As both of these functions are set out in legislation, rather than just in policy, it is unlikely that significant gains would be made unless the applicable legislation was also amended to provide greater scope for delegation of these powers to PWD. While this is an option that R4D2 could explore and advocate, it would be challenging to secure change within the term of R4D2. A more feasible approach would be to form joint working groups with the PSC and CTB to review the business processes underlying these functions to ensure they work at optimal efficiency levels.⁴³

Such an approach is essential as internal capacity development, both at a system and an individual level, within PWD or even MIPU, while critically important, will not be sufficient to sustain the transition to a network management model. Side by side with internal capacity development efforts, R4D2 will need to engage with the PSC, DFT, and the CTB to address system-wide structural capacity issues.

This could be supported by, for instance, R4D supporting a business process review within and between these three receptive agencies to accelerate approval processes and ensuring that staff at all three agencies have the capacity to undertake their functions at an optimal level.

However, in relation to institutional and staff capacity there is a high risk for both PWD and DFAT that capacity development inputs will not have the expected impact due to a number of factors including: the lack of counterpart staff; the scope and pace of the organisational reforms; the complexity of the institutional setting; and the absorptive capacity of PWD.⁴⁴ Any overly ambitious reform program, while desirable, may lead to what has been described in the literature as "capacity overload".⁴⁵

This risk can be mitigated by R4D2 to some extent by taking a case by case approach to proposals for capacity development, setting clear outcomes for the activity and making a judgement on the likelihood of those outcomes being achieved with the internal and external resources available. In this regard, ultimately only PWD is in a position to assess the political and institutional context for progress and to make the necessary judgements and commit to outcomes that it identifies as being achievable within the timeframe of R4D2.

This is in line with contemporary development theory that stresses *doing development differently* and adopting an incremental, iterative, and fit-for-purpose, rather than a blueprint or best practice, approach to development.⁴⁶

The essence of this approach, called the **Problem Driven Iterative Adaptation** (PDIA) approach, is contextualizing the reforms to the local context by addressing "(i) problems that agents in the context care about; and (ii)

⁴² This last point was also noted in the IE Final Report, p 31, while information on PSC delays was obtained through interviews with the R4D HR Adviser and the former A/Secretary of the PSC, Ms Judith Melsul and Murielle Metsan, Executive Assistant Secretary, Compliance, PSC.

⁴³ The Design Team was informed by the Director of the Governance for Growth Program that a procurement adviser will be placed in CTB in 2018. This would provide an ideal opportunity to jointly review the procurement processes.

⁴⁴ Absorptive capacity in this context is an organisation's ability to identify, assimilate, transform, and use external knowledge, research and practice to improve its performance. For additional discussion of the relevance of the concept to developing countries see: Naqshbandi, MM, Kamel, Y, (2017) Intervening role of realized absorptive capacity in organizational culture-open innovation relationship: Evidence from an emerging market. Journal of General Management 2017, Vol. 42(3) 5–20. The seminal article by Cohen and Levinthal (1990), "Absorptive capacity: A new perspective on learning and innovation", Administrative Science Quarterly, (Volume 35, Issue 1 pg. 128-152), is also still highly relevant. As absorptive capacity is a critical determinant for the pace and scope of organisational transformation, it is essential that R4D2 conduct a study to ascertain how PWD absorptive capacity can be deepened. A key factor that increases organisational absorptive capacity is having an organisational culture that encourages learning, creativity and innovation, as opposed to requiring rigid adherence to established organisational norms and practices.

⁴⁵ Sierd Hadley and Helen Tilley (2017) **Governance for Growth in Vanuatu: Review of a decade of thinking and working politically**, Overseas Development Institute (ODI), London, p 10

⁴⁶ Matt Andrews, Lant Pritchett, Salimah Samji and Michael Woolcock (2015) "Building capability by delivering results: Putting Problem-Driven Iterative Adaptation (PDIA) principles into practice" **A Governance Practitioner's Notebook: Alternative Ideas and Approaches**, OECD, Paris p 124. For a more extensive discussion of this issue see: Lant Pritchett, Michael Woolcock & Matt Andrews (2013) "Looking Like a State: Techniques of Persistent Failure in State Capability for Implementation" **The Journal of Development Studies** 49/ 1

[introducing reforms] iteratively—through a stepwise process where ideas are tried and lessons are learned and used to adapt (or fit) ideas to context".⁴⁷

People Management

A critical component of both institutional and individual capacity is effective people management. A starting point for effective people management is having in place tailored policies and procedures that facilitate the work of the organisation. In the case of PWD, people management needs to facilitate and support its transition to being an effective network manager. In this regard, people management policies and procedures are critical to organisational success as they "service to guide decision making [...and] direct the actions of the HRM function towards achieving its strategic objectives".⁴⁸

Without clearly defined policies in place, management decision making in these areas will occur on an inconsistent and contingent basis, rather than a consistent and strategic basis. People management polices also serve as a statement to all staff of the expected standards to be followed by all staff and that they will be treated in an equitable and consistent manner.

As PWD is a public service department it is subject to the policies set out in the **Vanuatu Public Service Staff Manual** (PSSM). However, with the exception of the addition of a new chapter on performance management in 2014, the PSSM has not been reviewed for many years and many of its provisions date from its first publication in 1998. Moreover, a serious shortcoming of the current PSSM is that it does not directly address many contemporary developments in people management such as gender equity and social inclusion (GESI), strategic human resource (HR) planning, career development and succession planning, and occupational health and safety (OHS) issues.

To ascertain the level of people management in PWD, in addition to the review of the relevant documents and interviews with staff, a **People Management Functions Assessment** was conducted by the Design Team. The purpose of this exercise is to assess the people management policies PWD uses and the extent of their implementation. This exercise is useful for identifying what future people management policy development and implementation work R4D2 could potentially support in PWD. The exercise works by allocating a score based on a simple three-level scale:

- 1. No PWD or PSC policy in place (either PWD or PSC)
- 2. Existing PWD or PSC policy in place but needs to be substantially amended to meet PWD's needs
- 3. Existing PWD or PSC policy and appears to be satisfactory (may still require minor amendments)

After this, an assessment is made of the extent the policy has been implemented (using a three-level scale) and the scores are then combined to give a total score out of six. The results of the **People Management Functions Assessment are set out in** Figure 11.

Overall, the implementation of people management in PWD could be improved with an average rating of 1.9 out of 6.0 and with many key areas not currently being addressed by PWD, such as staff attendance, HR reporting, induction, staff grievance procedures, OHS, career development and succession planning.

With a low rating of two for job descriptions, discussions with PWD staff indicate that current job descriptions no longer reflect much of the work they do now as PWD transitions to a network manager role. In addition, some work activities are inappropriately specified due to ad hoc changes over time. R4D is helping MIPU-PWD comprehensively review of all PWD job descriptions to ensure that they up-to-date and support the implementation of the network manager model. R4D2 will need to continue this work as PWD's transition continues.

To support this transition, many positions, particularly senior level positions, in PWD will need to be substantially reconfigured in PWD, both in terms of key responsibilities or accountabilities and required competencies.

⁴⁷ Matt Andrews (2014) **Can one retell a Mozambican reform story through Problem Driven Iterative Adaptation?** Center for International Development Working Paper No. 278, Harvard University, February 2014

 $^{^{48}}$ Stone R (2010) Managing Human Resources (3rd Ed) John Wiley & Sons Ltd, Australia p 26

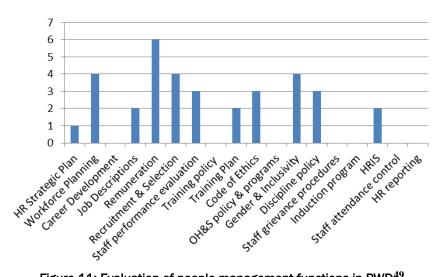


Figure 11: Evaluation of people management functions in PWD⁴⁹

R4D has developed a comprehensive organisational change program, including performance management, that has been progressively implementing and is beginning to have a positive effect in PWD. Indeed, the above results need to be seen in the context where PWD started off from a very low baseline in terms of its organisational development as indicated in the PWD situational analysis undertaken by R4D in 2015.⁵⁰ With the support of R4D, PWD is also starting to implement more strategic GESI initiatives⁵¹, workforce planning and performance management. Recently Increased remuneration, for the first time since 2006, provides enhanced motivation that facilitates such capacity building activities.⁵²

Overall public sector reform has slowed down in more recent years although "since February 2016, however a new window of opportunity has emerged, with a reformist government taking power and pressing for change".⁵³ In addition, the last three years dealing with the aftermath of Cyclone Pam has also left few resources to devote to organisational reform as more pressing infrastructure priorities had to be addressed by PWD.

The gap in the area of people management can also be attributed to the fact that for some time now MIPU has not had a full-time HR Manager in place and the position is still vacant. Moreover, the HR group in the Corporate Support Unit is very small, with only one HR Manager position and one HR Assistant position serving the entire MIPU including PWD. As there is no separate PWD HR Manager position, and PWD is served by the MIPU HR Manager, this has a direct impact on PWD people management performance.

This also raises a structure issue as the PWD may benefit from having their own separate HR Manager position, rather than relying on the services of the MIPU HR Manager as is currently the case. Suitable reporting and performance management arrangements between these positions can be developed during the PWD reorientation and HR policy development process under R4D2.⁵⁴

Under these circumstances, there has been limited capacity in the HR group to focus on more strategic people management as staff time has been fully occupied with purely administrative personnel functions, such as the processing of leave on a predominantly manual basis (MIPU does not have an automated online Human Resource Information System).⁵⁵

The proposed structural review of PWD under R4D2 needs to address this issue and ensure that sufficient staffing resources are dedicated to the people management function in PWD and MIPU, while at the same time,

 $^{^{49}}$ This table sets out the results of the **People Management Functions Assessment** done by the consultant with PWD described in the preceding paragraphs

⁵⁰ R4D (2015) **PWD Performance Situational Analysis: A Pathway for Incremental Change**, 26 October 2015.

⁵¹ These are in addition to GESI initiatives that have been implemented in roadworks programs in the past.

⁵² Remuneration is in fact set by the Government Remuneration Tribunal (GRT) and administered by PSC. PWD cannot vary this or offer any performance-based financial incentives or benefits that are not already in the PSSM. Currently there are no such provisions. The high score in this area may be reflective of the fact that the GRT recently approved a substantial pay increase (22 per cent) for public servants, although this will not be paid until 1 January 2018.

⁵³ Sierd Hadley and Helen Tilley (2017) **Governance for Growth in Vanuatu: Review of a decade of thinking and working politically**, Overseas Development Institute (ODI), London, p 8

⁵⁴ As noted earlier, the people management function is placed in the Corporate Services Unit which services the whole of MIPU, not just PWD. This means that PWD does not have its own HR Manager position. As the bulk of MIPU staff are in PWD the suitability of this arrangement should be reviewed as part of the proposed PWD restructure.

⁵⁵ The PSC HRIS has not yet been rolled out to PWD and while the GOV financial system SmartStream can calculate remaining leave balances, leave processing within MIPU is still currently done on a predominantly manual basis.

administrative personnel functions need to be fully automated so that staff can focus on more strategic people management functions.

These factors strongly indicate that R4D2 will need to focus extensively on improving people management in PWD. In this regard, R4D has begun to support the implementation of a number of key people management initiatives such as performance management, workforce planning, and HR planning. These initiatives should be incorporated into R4D2.

Corporate Planning Processes

PWD does not have its own Strategic Plan, but instead has developed a draft corporate plan based on the MIPU Strategic Plan. Divisions in turn develop Divisional Business Plans. However, discussions with staff indicate that while the planning processes appear to be fairly well established, effective implementation continues to be an issue. Moreover, staff performance management as an integral part of the corporate planning processes has not been implemented.

With R4D2 support, a number of supporting mechanisms could be introduced into PWD to strengthen the implementation of the corporate objectives and to ensure that associated key performance indicators are achieved. These include introducing:

- Cost-centre reporting that makes each Divisional Manager responsible for expenditure in their area;
- Performance-based rewards system within the framework of the Public Services rules;
- Formalised Performance Management Cycle, with regular reporting and KPIs incorporated into management performance agreements;
- Adopting the Balanced Score Card approach to ensure that all keys aspects of the required organisation work are addressed; and
- Enhanced executive management understanding of their new roles in a restructured PWD, through training workshops, study tours and mentoring.⁵⁶

Digitalization and Automation

While recognizing the capacity limitations in fully utilizing new technology, substantial efficiency gains and organisational change could be achieved through accelerating the pace and level of automation and digitalization in PWD. This would strongly support PWD in its role as a network manager. In this regard, "the digitalization of a business refers to the strategy, planning, and execution of the right digital initiatives that align business strategies, enabling a value-producing enterprise".⁵⁷

Indeed, automation and digitalization not only leads to increased efficiency, but introduces new ways of working and possibilities into the organisation. As the management consultants McKinsey note in this regard:

In many large companies, using digitization to improve how things get done -whether it's a customer experience or an internal-facing process - has boosted revenue, increased customer loyalty, and removed big chunks of internal costs. The best companies, however, do more than just improve these journeys, they systematically reinvent them.⁵⁸

However, while PWD has some basic planning and management information systems in place, these are at an embryonic stage of development. Moreover, it lacks an overall integrated and strategic approach to automation and digitalization. Different units install different systems in isolation from one another and, as a consequence, the systems are not integrated and there is no overall management information system (MIS) that draws on these subsidiary systems to provide useful management reports as a basis for management decision-making.⁵⁹

The lack of integration into a coherent digital platform means that the overall impact of automation and digitalization remains disaggregated. As McKinsey points out, collaboration between digital technology groups is essential to ensure systems work together and to fully realise the benefits of digitalization.⁶⁰ However, this does not mean adopting a 'best practice' digitalization model, but rather developing and implementing a 'fit-for-purpose' digitalization and automation strategy and action plan that not only meets the demands of PWD but is sustainable in the long term.⁶¹

As such, before the separate systems are developed any further, R4D2 should support PWD in developing an overall **PWD Digitalization & Automation Strategy**. The goal of such a strategy would be to specifically identify what

 $^{^{56}}$ For instance, a study tour could be undertaken top the Fiji Roads Authority which uses the network manager model

⁵⁷ https://www.tompkinsinc.com/en-us/Services/Digital-Strategy-Operations (accessed 30 November 2017)

⁵⁸ McKinsey (2017a) Scaling a transformative culture through a digital factory McKinsey & Company

⁵⁹ Interviews with PWD staff and R4D advisers. Since these interviews, R4D helped PWD prepare and roll-out a preliminary MIS.

 $^{^{60}}$ McKinsey (2017b) Toward an integrated technology operating model McKinsey & Company

 $^{^{61}}$ Interviews with the Acting DG, PWD, strongly supported this point.

forms of digitalization and automation are required to support the transition to being a network manager, what are the best strategies to achieve this and (then) what specific systems does PWD require and how can the existing systems be used to their full potential.

Staff and Contractor Capacity Development

Traditionally, public works departments or similar type agencies only focused on their own staff development. However, as PWD transitions to becoming a network manager, it will also need to focus on developing the individual and group level capacity of island-based contractors (IBCs) and community-based contractors (CBCs), as these will be carrying out the majority of road maintenance and improvement activities. In effect, PWD has to build the capacity of the construction sector and the labour market in the rural sector.

Currently, some degree of training is provided in the past by community partnership offices (CPOs, who are PWD staff located in Divisional offices) to IBCs and CBCs but this is focussed on training in gender equity, social inclusion, work safety and environmental protection. No comprehensive assessment of the training needs of IBCs and CBC groups has been undertaken, but discussions held with IBCs indicate that they require additional training in business skills such as bookkeeping, project management and contract management.

In terms of technical skills, IBCs praised the work of R4D as it had greatly enhanced their construction skills and knowledge. For example, IBCs noted that before they were unable to build more complex works such as culverts and small bridges but they were now able to do this on their own.

CBC groups valued the training they had received but some groups had yet to receive any training due to limited PWD staff resources. Discussions held with CBC groups did not raise any particular training needs as the nature of their work is relatively simple, but some indicated that financial literacy training was important to them and that this should continue. However, it was observed that most training had occurred several years ago, and there was a need to update and reinforce it.

In terms of PWD staff, the key issue is that they need training that would support the transition of PWD from a traditional public works agency to being an effective network manager. As noted above, this requires different competencies with an increased focus on management and business skills, rather than just technical engineering or construction related skills, although these will also continue to remain important, and capacity building in these areas should continue under R4D2. Similarly, current cadet programs need to be reviewed to ensure they are still relevant and support this transition.

R4D assisted in the development of a **PWD Capacity Development Plan** in late 2014 and much of the material is still highly relevant to PWD⁶². R4D produced a new draft PWD HR Strategy since the design team interviewed R4D advisers. MIPU-PWD is reviewing the strategy, which will be finalised and endorsed later in 2018. R4D2 will need to continue this process as PWD's transition continues.

In this regard, a key target group for development is the senior management team of PWD. Many of the management staff have only been recently appointed or are acting in the role. As this is the key group of staff who will be driving the transition to a network manager, it is critical that they have the competencies required for this role.

For instance, R4D2 could develop a specialized **Road Sector Executive Development Program** that focuses not only on general management skills such strategic planning, budgeting and people management, but also specific competencies in areas such as contract management, project management legislative developments and change management in the road sector. This would equip the PWD senior management team with the competencies they require to effectively lead the PWD transition to a network manager role.

In addition, R4D2 should periodically update R4D's comprehensive skills audit and training needs analysis of PWD to monitor: (i) what particular competencies are required across PWD as it transitions to being a network manager; (ii) what competencies do PWD staff have in this regard; and (iii) what capacity development strategies, policies and programs need to be developed and implemented to both address any competency gaps and built on existing strengths within PWD.

⁶² R4D (2014) Public Works Department 2015 Capacity Building Program Workforce Planning for a Resilient Organisation, December 2014, Port Vila.

D. RECOMMENDED R4D2 ACTIVITIES

To address the institutional and organisational issues identified in the analysis by the Design Team and in earlier reviews of PWD and R4D a range of proposed activities have been identified that could be implemented by R4D2 (Table 13).

To ensure continuity with R4D, ideally activities to better equip PWD to fulfil its functions should build on the *Transitioning PWD to a More Effective Road Network Manager Implementation Plan* (July 2017). However, in line with the PDIA approach advocated above, these activities should not be seen as a definite blueprint but rather as a starting point to explore how they can be further contextualised and what would work in PWD.

The advisors engaged to implement the R4D2 Program should further asses and prioritize the potential activities to ensure that they meet PWD needs, can be implemented within the required timeframe and are sustainable.

Key focal area	Recommended activities
Institutional and organisational arrangements	 Identify and address any legislative issues that may affect PWD's transition to become a network manager, including: Identifying what provisions of the Public Road Act 2014 have yet to be operationalized Developing legislative and policy strategies to address these, including the development of any required supporting regulations, policies and procedures Further developing any required National Technical Standards as PWD transitions to be a network manager Assessing the impact of any other legislation (e.g. the Public Service Act, the Contracts and Tenders Act 2001 etc) on PWD's capacity to be an effective network manager Reaching agreement with PSC and DFT on the maximum extent of decentralisation of powers under current legislation and policies, while exploring new legislative options If not finalised under R4D, further develop a new PWD organisational structure to facilitate its new role as a network manager, including: Developing appropriate restructuring principles and organisational design goals to support the network manager model Identifying the most suitable structural model for PWD to implement the network manager model (e.g. functional, divisional, matrix or network model) Conducting a workforce planning exercise to determine the required number of staff and required skill sets Preparing of updated PWD position descriptions
Engagement with strategic partners	 Enhance the capacity for PWD, and assist as needed, to make the case to other GOV agencies for increased funding for road maintenance and improvement, to fill approved staff positions and to secure greater flexibility regarding procurement (also drawing on support provided through the GfG program); Establish a Joint Working Group with PSC to accelerate the implementation of organisational reforms in PWD, including performance management, enhanced and faster recruitment procedures and agreed succession planning Establish a Joint Working Group with CTB to identify impediments in the procurement process, review and amend business processes and explore the possibility of appropriate policy and legislative change to accelerate the process Assist PWD to continue to proficiently work with project financiers to secure support for projects that provide the greatest value to the people of Vanuatu Support PWD to link and draw on relevant regional activities (including the Pacific Region Infrastructure Facility and the Pacific Community–Government of Australia Partnership for Pacific Regionalism and Enhanced Development 2014-2023)

Table 12: Recommended R4D2 institutional and organisational change activities

Key focal area	Recommended activities
Corporate management	 Implement refined corporate planning processes with an associated performance management framework, including: Introducing a range of supporting mechanisms to ensure the Corporate and Divisional plans are implemented, including
People management	 Develop a Strategic People Management Plan with specific strategies that support PWD's transition to a network manager Within the PSC people management framework, develop and implement key people management policies, procedures, and programs, including on: Recruitment and succession planning Staff performance and career development Work health and safety Workforce planning Induction and organisational expectations Grievance procedures and sexual harassment Gender equality and social inclusion AIDS/HIV discrimination Workplace ethics Staff attendance HR Reporting Implement gender and other inclusivity awareness and action programs for PWD staff and contractors Develop a PWD Capacity Development Plan and implement staff capacity building programs that address both staff and contractor capacity, focusing on the core competencies required to implement the network manager model, which will include prioritising some or all of these initiatives with PWD: Road Sector Executive Development Contract and project management Effective Procurement practices Leadership skills in the road sector Relevant computer skills (e.g. MIS, corporate programs) Management of internships, apprenticeships and cadetships Financial literacy and bookkeeping Small business management Entrepreneurship and corporate planning People management in a de-centralized environment, including performance management and workforce planning Road operations engineering Road operations and network management Transport sector policy and reform Road operations and network ma

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX D – NOT USED

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX E – MONITORING AND EVALUATION

A. INTRODUCTION

This Appendix summarises the main features of the M&E system. It outlines how Roads for Development Program Phase 2 (R4D2) will monitor progress, measure performance and assess success. It also aligns R4D2 monitoring and results measurement systems and products with DFAT M&E Standards.

Improving the national road network is a high priority for the Government of Vanuatu (GOV), with 2,100 km of national roads providing Vanuatu's predominantly rural population access to schools, medical facilities, and commercial and transport hubs. The Government of Vanuatu (GoV) and the Government of Australia (GoA) agree that R4D2 should explicitly help Vanuatu achieve the following two Vanuatu National Sustainable Development Plan (NSDP: 2016-2030) goals:

- A dynamic public sector with good governance principles and strong institutions delivering support and services to all citizens of Vanuatu.
- Sustainable and well-maintained infrastructure and services for all, through inclusive and effective partnerships.

The R4D2 M&E arrangements align with these NSDP goals.

Since 2009, the Australia funded Roads for Development Program (R4D) and its predecessor, the Vanuatu Transport Sector Support Program, have helped the Public Works Department (PWD) of the Ministry of Infrastructure and Public Utilities (MIPU) deliver support and services to rural ni-Vanuatu and have strengthened both the Ministry and the Department (MIPU-PWD).

An independent evaluation of R4D in 2016 concluded that Australia should continue support in the style of R4D, which would help GOV improve rural living conditions and contribute to economic growth by improving and sustaining rural access.

Australia will continue supporting rehabilitation, improvement and maintenance of urban and rural national roads. R4D2 will be the third and final phase of Australia's long-term support to Vanuatu's infrastructure sector.

The (re)design aims to ensure that Australia consolidates the successes of its long-term investments in rural roads. The new program will build on the R4D-GOV partnership, which includes joint work planning, blended financing and cooperation in the field, including R4D-funded engineers working directly with PWD divisional managers. The program will also continue to build capacity through helping PWD review, update and operationalise road transport policy and pursue sector reform, and help transition PWD into a network manager.

If successful, at the program's completion, the GOV will be able to finance, maintain and manage its National arterial road network better.

B. M&E POLICY FRAMEWORK

Purpose

Monitoring, evaluation, and reporting for R4D2 has three purposes:

- To assess adequacy of progress (against budget, plan and towards end-of-program outcomes) and program performance.
- To inform strategic and operational decision-making by the MIPU-PWD and DFAT regarding program implementation.
- As a basis for ongoing R4D2 progress and performance reporting.
- To generate information that be used by DFAT, MDBs and others for policy dialogue and public diplomacy in Vanuatu and the Pacific region.
- To generate information that forms part of a broader knowledge and learning.

Principles

Monitoring and results measurement for R4D2 is guided by the following key principles:

- Flexibility featuring a programmatic approach with a defined program scope, implementation principles & agreed work plans.
- Collaboration joint work and decision-making with PWD.
- Developmental supporting the development of PWD capacity and improving rural accessibility.
- Sustainability building the capacity of PWD to be a sustainable, effective and efficient road network manager.
- Coordination enhancing intra-government engagement and donor coordination.
- Feedback rigorous monitoring and evaluation with effective feedback for learning and informed decision-making

Information Users

The primary stakeholders who will use performance information produced and communicated through R4D2's monitoring and evaluation system are described in Table 1.

Table 1: R4D2 M&E Information Users

Who	Needs information about	For the purposes of
MIPU/PWD (National and Division), PSC	 > Effectiveness of R4D2 program > Ongoing physical and financial progress > Compliance with agreed milestones and standards 	 Program decision making Ensuring corrective action if necessary Accountability reporting Learning for future programming
Office of Prime Minister, Department of Finance and Treasury, PSC	 Ongoing physical and financial progress Adherence to Whole of Government policies and development targets Effectiveness of program 	 Decisions regarding budgetary and administrative support National sustainable Development Plan reporting
DFAT	 Changes in the development context relevant to road network maintenance in Vanuatu Effectiveness of R4D2 program Adequacy of physical, program and financial progress Compliance with social and environmental safeguards Achievements on Performance Assessment Framework (PAF) indicators Supporting information related to Aid Quality Check (AQC) criteria 	 Outreach and advocacy at the national and provincial levels Decisions regarding ongoing support Internal DFAT reporting (related to PAF and AQC) Learning for future programming
R4D2 Team	 Changes in the development context relevant to road network maintenance in Vanuatu Effectiveness of R4D2 program Adequacy of physical, program and financial progress Compliance with milestones and standards 	 Ensuring corrective action if necessary Accountability reporting

C. M&E OPERATIONAL FRAMEWORK

After nine years of implementation and improvement, R4D is a mature program. Much work and thinking around M&E has been done during the current and predecessor programs. Monitoring and Evaluation Plans (MEP) have, as a result, been progressively refined in response to experience and review. Overall the methods used are working, appropriate to the Vanuatu context, align with DFAT M&E Standards 2 and 3 (for monitoring) and 4, 5 and 6 (for evaluation) and generally able to produce required performance information. Accordingly, and with some necessary enhancements, most of the key features and methodological approaches will be retained in the R4D2 M&E system.

The most recent revision of the R4D M&E Plan (July 2017 – June 2018) responds to, and incorporates, key findings and recommendations of the (2016) Independent Review. Amongst these are stronger focus on quantitative indicators, baseline and time-series data to more clearly track change and measure impact. Gender Equality and Social Inclusion (GESI) indicators are included to better assess the extent to which the program has, or will, impact upon livelihood/employment opportunities for women and/or disadvantaged groups. These important aspects remain central to the R4D2 M&E approach.

The current R4D M&E Plan will remain an initial central reference document but will need to be amended and refined in close consultation with PWD and DFAT during the R4D2 Inception Phase in order to:

- incorporate the main high-level target outcomes and key performance objectives of the R4D2 program (see next sections);
- enable ownership of the M&E arrangements by implementers/users (R4D team, PWD, DFAT); and
- ensure the M&E system aligns with the NSDP and is "fit-for-purpose."

Program Logic

There is no R4D2 Goal, *per* se. Rather, R4D2 will help GoV achieve two specific NSDP Goals (Section A, page 1). Within this strategic guidance, R4D2 Outcomes have been refined to provide a clearer focus for the Investment. A summary Program Logic diagram and associated description is shown in Section D of the Investment Design Document.

In support of the two NSDP goals, the new target End-of-Program Outcome (EoPO) is simply:

MIPU-PWD positively influences road funding outcomes and uses enhanced institutional capacity to manage the Vanuatu road network more efficiently and effectively.

In setting that EoPO, key matters considered in developing the amended design were:

- The current program is generally performing well, and there is no need to substantially change its approach. Even so, there is a need for a greater sense of urgency and commitment by PWD and other key GOV agencies:
 - to make the changes that are necessary for PWD to become an effective and efficient manager of the road network in Vanuatu for which it is responsible; and
 - for PWD to take advantage of the support provided through R4D2 to build its capacity to work independently following completion of the Program.
- Support for physical works should continue to focus on rural roads.
- The program needs to support PWD develop the capacity to work with other financiers of road infrastructure development in Vanuatu to secure continued financial support after completion of the Program.
- The program needs to take a phased and managed approach to minimise end-of-program disruption to PWD and contractors from a potential decline in funding for road maintenance and technical support.

Program Outputs and Activities

Based on the above, there are three broad streams of outputs and activities that will produce intermediate outcomes in support of the EoPO. (Please refer to the *Investment Description* section on pages 5-6 of this IDD).

Cross-Cutting Issues

To ensure a consistent whole-of-program approach in implementing program activities, six cross-cutting areas have been identified:

- Program Oversight informed and responsive management
- Capacity building Technical Assistance and training
- Gender and Social Inclusion mainstreaming Technical Assistance, financing and leveraging (see next section – GESI))

- Climate change, resilience and safety ensuring good road engineering and maintenance practice
- Maximising benefit of infrastructure spending capacity and road works delivery
- Phased end to program work program calibrated to minimize end-of-program disruption to PWD and contractors

Gender Equity and Social Inclusion (GESI)

R4D2 will continue and intensify the focus on ensuring equity of participation and benefits for women and vulnerable groups (people with a disability, children, youth, elderly, remote location). The M&E system - through indicators and relevant evaluation questions - will need to be able to track, assess and report the impact the program is having in areas that include leadership roles, training and skilled employment opportunities, equal access to labouring jobs on construction sites, and having a voice in annual work planning.

A number of supplementary indicators and related Key Evaluation Questions are proposed. These can be strengthened and refined during the R4D2 Inception Phase.

D. PROPOSED PERFORMANCE ASSESSMENT APPROACH AND METHODOLOGY

Context

The R4D2 M&E system will continue to align with DFAT's M&E Standards 2 and 3 (for monitoring) and 4, 5, and 6 (for evaluation). It will work at three levels:

- **Performance monitoring** periodic monitoring of changes in knowledge, attitudes and practices in targeted individuals, groups and agencies (e.g. MIPU, PWD) as well as changes in performance that can quantified either directly (e.g. proportion of road network maintained to agreed standard) or indirectly (e.g. road access index). These data will support judgements about adequacy of progress towards program outcomes and their contribution to the R4D2 end-of-program outcome. Where relevant to assessing R4D2 performance, data will be disaggregated by sex and location. The data will also be used by DFAT, MDBs, strategic partners (e.g. PWD and private business partners and other government agencies) and the contractor to inform medium-term R4D2 resource allocation decisions. This strategic function complements evaluative studies and will be resourced from the program budget.
- **Progress monitoring** semi-annual measurement of actual delivery of outputs (*e.g.* deliverables and other program products) and intermediate outcomes (*e.g.* adoption of new practices and early behaviour changes) actually delivered. Where relevant to assessing R4D2 results, data will be disaggregated by sex and location. Progress reports will be consistent with DFAT M&E Standard 3. The contractor will use progress information to assess variance from the annual plan and present quantitative analysis to support judgements about adequacy of progress against the annual plan in semi-annual progress reports. This is a normal project management function and will be resourced from the management fee.
- Management monitoring systematic measurement as a normal part of good project management of inputs (e.g. people and costs); activities (e.g. trainings, coaching events, knowledge exchanges); and outputs will be measured and reported monthly in simple variance from plan metrics. To support social inclusion and gender equity in delivery, data will be disaggregated by sex and location where useful. The contractor will use these data to inform management decisions and report variance from planned disbursement. This is a normal project management function and so will be resourced from the management fee.

The monitoring system will also measure qualitative, contextual and unexpected change. Evaluative studies, contextual meta-analyses and case studies will be systematically and purposefully prepared to inform semiannual strategic reviews of the Vanuatu infrastructure development context. For example, semi-annual updates of macro-economic settings (e.g. fiscal space for recurrent budget financing of road maintenance operations), MDB investments in Vanuatu, private sector engagement in the sector, and economic activity reliant on road and related intermodal transport systems (e.g. exports of cocoa and kava – obtainable from the PHAMA Plus program) will be compiled from existing meta-data sources. The information will be collated into a semi-annual Vanuatu Infrastructure Development Context Analysis for use by DFAT in their policy dialogue with Vanuatu and regional organisations.

A revised M&E Plan will be prepared by an M&E specialist during the Inception Phase, and involve the R4D2 team, PWD and DFAT. The M&E Plan will be prepared describing the content of the M&E program, procedures for implementing the Plan, analysis to be undertaken and M&E outputs ('products") to be produced. The M&E specialist will continue in a part-time periodic role to support on-going M&E and proposed external monitoring reviews.

Specific elements of the approach and methodology are described in following sub-sections.

Methodology

The M&E strategy seeks a rigorous yet flexible approach building on systems and approaches that have worked well during R4D. These feature activity level monitoring and higher-level outcome related monitoring involving independent research, evaluation and learning studies. There is scope for new approaches, and innovation is encouraged.

There are now good baseline data available (quantitative and qualitative) and these will be drawn upon, and added to, as a basis for ongoing measurements of progress and assessing impact. Use of Road Condition Surveys, Physical Works/Technical specification monitoring, Traffic Counts, and the RAI will remain essential performance monitoring tools.

The M&E system must include approaches to monitoring GESI. Specific entry points for performance assessment of GESI, where appropriate, include:

- Project activity design should reflect GESI in the rationale for activity selection and linkages to intermediate outcomes.
- The activity-level reporting framework should incorporate criteria to monitor GESI at activity level.
- Disability and youth engagement should be included as areas against which the facility is required to provide program-level reporting on a six-monthly basis.

R4D2 success depends on commitments or 'mutual accountabilities', primarily between GoA and GoV. For instance, success will require PWD to engage on strategic and budget matters with key central Ministries (Office of the Prime Minister, Ministry Finance and Economic Management, Public Service Commission, Central Tender Board). Performance indicators for these commitments will be agreed, and carefully monitored and reported. Similarly, the extent to which PWD and key development partners (especially the multilateral development banks) are developing future infrastructure investments will require ongoing monitoring, assessment and reporting.

With the strong focus on capacity building in R4D2, the longitudinal organisational case study and tracer study methodologies should continue, targeting relevant cohorts (current and/or new) to document key processes over an extended period. Studies could focus on an individual intervention or a possible thematic area of interest (e.g. women in leadership, new employment opportunities, community-based and island-based contractors).

There is scope to continue to include quantitative data as part of the case study approach. The combining of methods is ideal as it promotes a higher level of rigor, reliability and validity in the evaluation process. Although the case study approach is a preferred option for R4D2, it does not limit the opportunity for the Contractor to consider other options and approaches (to be detailed in the revised M&E Plan).

Evaluation Studies and Reviews

R4D2 will have budget for two evaluative studies. No specific focus is suggested at this stage. Instead, the studies will respond to priority areas and topics identified by PWD and DFAT and relating to the program logic.

In addition to the evaluative studies, R4D2 will have two external assessments of performance (aligned with DFAT M&E Standards 4, 5 and 6):

- **Mid-Term Review**. If required by DFAT, this review could be conducted in the middle of the third year of the R4D2 Program to: (i) examine general Program progress and impacts; and (ii) review progress towards mid-term milestones (described in the *Implementation Plan* section below) leading to remedial actions in the event of unsatisfactory progress.
- End-of-Program Evaluation. Two actions are proposed at the end of R4D2: (i) examine the 14-year program of assistance to PWD to identify achievements and lessons that can assist in the development of future programs; and (ii) use workshops and other means to disseminate the results to a broad range of interested people and organisations

Reporting, Dissemination and Learning

There is strong engagement and interest of PWD and DFAT staff about monitoring and results measurement and the way results are used to inform operational management decisions.

Reporting

R4D has a clear reporting structure, working to an agreed Quarterly Progress Report (QPR) format along with regular monthly reports. These reports also complement monthly management meetings. Annual Reports will include assessments towards target outcomes.

Reporting is aligned to the information needs of PWD and DFAT and will feed into the governance arrangements and support PWD broader reporting needs. The quality of these reports will align with DFAT M&E Standard 3.

Dissemination of Results

The use of findings from M&E across R4D2 critical is essential. The current R4D M&E structure provides sound opportunity to meet and disseminate information. A close stakeholder working relationship has already been established and there is scope for regular and updated presentations summarising key results and findings to ensure decision-making is aligned and shared. R4D2 should retain flexibility to consider other alternatives for dissemination based on the needs of PWD as they emerge. The use of simple language and accessibility of M&E products is vital for effective utilisation.

Learning

Learning underpins monitoring and results measurement. Learning will be initially confined to the R4D2/DFAT team through semi-annual reflections. The team will use the progress reports and contextual analyses described above to inform a review of adequacy of progress, inform discussions with MIPU/PWD and MDBs about strategic

direction, identify key achievements and opportunities for public diplomacy or policy dialogue, as well as proposed areas for focus moving forward.

In addition to disseminating the findings of the four currently scheduled evaluative studies and reviews, an annual lessons learned event with key stakeholders (PWD, DFAT and R4D2) will identify, discuss, prioritise and document key lessons and issues learned during the year, the strategies employed to address them and mitigating factors to be used in the following year. The process will draw upon the extensive body of evidence and information derived through the implementation, management and on-going monitoring of R4D2. November of each year may be the best time for the lessons learned workshop.

Performance Assessment Framework

A Performance Assessment Framework (PAF) has been prepared to guide the Contractor in the development of the final M&E Plan and associated monitoring and results measurement system. The PAF covers the Goal, Endof-Program Outcomes, Intermediate Outcomes Level, and Outputs. It includes Indicators, Evaluation Questions, and Assumptions (not for Outputs). They will be reviewed and adjusted as necessary during Inception and after periodic reviews. The PAF does not include Output and Activity Milestones.

Evaluation Questions

The PAF's Evaluation Questions -- at Goal and Outcomes levels - will be used to frame evaluative studies and will be applied during implementation. Note the following High Level evaluation questions:

Goal level:

- 1. How have road users benefitted from maintenance and improvement of Vanuatu's Arterial road network?
- 2. How have women and children, the disabled and other vulnerable groups, and youth accessed opportunities and benefits attributable to the program?
- 3. How have communities benefitted from PWD's community-based road maintenance contracts?

End of Program Outcome level:

- 1. To what extent is MIPU-PWD influencing road funding outcomes?
- 2. How well does PWD meet its mandate according to GoV's Rural Road Access Policy and Strategy?
- 3. To what extent is PWD more effective and efficient in delivery of rural road Operations (maintenance, spot improvements, rehabilitation)?
- 4. To what extent is PWD's improved road Operations capability sustainable?
- 5. To what extent is PWD ensuring its road Operations provide equal access for women and children, for the disabled and for other vulnerable groups.
- 6. To what extent is PWD ensuring that its road Operations protect the environment and result in resilient roads.

Each evaluation question is linked to a specific methodology (e.g. traffic counts and condition surveys, tracer studies, organisational case studies, interviews, evaluative studies and reviews) to be detailed in the M&E Plan.

The PAF informs Program performance at the End of Program and Intermediate outcomes levels. On-going assessment of Outputs is undertaken through monitoring, with results incorporated into semi-annual progress reports that will align with DFAT M&E Standard 3. Overall and more extended assessment of the achievement of Outputs in included as part of the Annual Report and Annual Work Plan.

Table 1: Indicative R4D2 Performance Assessment Framework

with good governance principles and strong institutions delivering support and services to all citizens of Vanuatu.Evaluation Framework.maintenance and improvement of the Vanuatu's arterial road network.> PWD traffic countsestablished where it benefits the most number of peopleSustainable and well- maintained infrastructure and services for all, through inclusive and> How have communities benefitted from PWD's community-based road maintenance contracts?> PWD traffic counts> established where it benefits the most number of people> National and sector census > Provincial Administrations surveys Sector studies by development partners (DPs) and NGOs> Road improvements result in a road's 'level-of-service' (road standard & condition) matching its economic valueSustainable and well- maintained infrastructure and services for all, through inclusive and> How have community-based road maintenance contracts?> Public transport fleets grow and operators provide equally for men, women and children, and make special provision for the disabled	Objectives	Indicators	Evaluation questions	Means of Verification	Assumptions
with good governance principles and strong institutions delivering support and services to all citizens of Vanuatu.Evaluation Framework.maintenance and improvement of the Vanuatu's arterial road network.> PWD traffic countsestablished where it benefits the most number of peopleSustainable and well- maintained infrastructure and services for all, through inclusive and> How have communities benefitted from PWD's community-based road maintenance contracts?> PWD traffic counts> established where it benefits the most number of people> National and sector census > Provincial Administrations surveys Sector studies by development partners (DPs) and NGOs> Road improvements result in a road's 'level-of-service' (road standard & condition) matching its economic valueSustainable and well- maintained infrastructure and services for all, through inclusive and> How have community-based road maintenance contracts?> Public transport fleets grow and operators provide equally for men, women and children, and make special provision for the disabled	NSDP Goals that R4D2 will	contribute to			
	A dynamic public sector with good governance principles and strong institutions delivering support and services to all citizens of Vanuatu. Sustainable and well- maintained infrastructure and services for all, through inclusive and effective partnerships.		 maintenance and improvement of the Vanuatu's arterial road network. How have women and children, the disabled and other vulnerable groups, and youth accessed opportunities and benefits attributable to the program? How have communities benefitted from PWD's community-based road 	 PWD traffic counts National and sector census Provincial Administrations surveys Sector studies by development 	 established where it benefits the most number of people Road improvements result in a road's 'level-of-service' (road standard & condition) matching its economic value Public transport fleets grow and operators provide equally for men, women and children, and make

Objectives	Indicators	Evaluation questions	Means of Verification	Assumptions
MIPU-PWD positively influences road funding outcomes and uses enhanced institutional capacity to manage the road network of Vanuatu more effectively and efficiently.	 Achieved biennial RAI targets (%) for the whole of Vanuatu and for individual provinces (GoV's time- bound targets are in the Rural Roads Access Framework - RRAF). Achieved Level of Service (LoS) targets (kilometres (km)/standard/ condition) for Vanuatu's rural Arterial road network (GoV's time-bound targets are in the RRAF). The % of completed road Operations works (by km/number and value) reported as meeting all aspects of PWD's Roads and Bridges i) Design Guide; ii) Design Specification; and iii) Standard Drawings – including climate resilient design considerations. The number of National and Island- Based Contractors (NCs and IBCs), committed, and gearing up to participate long-term in PWD's road operations program (also, by total value of annual contracts, and by totals of physical works outputs). 	 > To what extent is MIPU-PWD influencing road funding outcomes? > How well does PWD meet its mandate according to GoV's Rural Road Access Policy and Strategy? > To what extent is PWD more effective and efficient in delivery of rural road Operations (maintenance, spot improvements, rehabilitation)? > To what extent is PWD's improved road Operations capability sustainable? > To what extent is PWD ensuring its road Operations provide equal access for women and children, for the disabled and for other vulnerable groups. > To what extent is PWD ensuring that its road Operations protect the environment and result in resilient roads. 	 MIPU annual budget submissions GOV National Appropriation Bill Record of Annual Planning Workshop PWD Management Information System (MIS): procurements, expenditure, physical works progress PWD Road Inventory Management System (RIMS) MIPU Annual Reports R4D2 review and evaluation studies, including the IBC Tracer Study. 	 > PWD has capacity to set and meet annual targets and plans > PWD budget levels are sufficient to achieve targets > MIPU-PWD management remains committed to organisation change and performance improvement > Political and other external interference in work planning and procurement is limited > No exceptional weather, tidal, earthquake or volcanic eruptions

Stream A: Road Network O	perations			
Intermediate Outcomes				
A.1. PWD Divisions fully execute PWD's annual road Operations work plans.	 Variance of executed vs. approved annual road Operations work plans. 	To what extent are Divisions achieving their annual Operations work plan targets.	 R4D2 Quarterly and Annual Reports. PWD Management Reports PWD Divisional Manager (DM) Monthly and Quarterly Reports MIPU Annual Reports 	 'Special requests' and outside influence are limited. IBC capacity and willingness continues to grow in all provinces. Communities are willing to undertake road maintenance works. All necessary Central Office support systems function as required, e.g. procurement; contract administration financial management; dispute resolution; and so on. Divisions have the staff and resources needed.
A.2. PWD Divisions require only limited road Operations technical support from R4D2.	 R4D2 Road Operations Engineers' (ROE) and other specialists' time (days) spent in-field with each Division. % (by value and number) of Work Plan items (outsourced and force account) completed without ROE inputs. 	 How are Divisions reducing their reliance on R4D2 technical support. 	 R4D2 quarterly and annual reports. 	 As for A.1. above. Divisional managers perform to the required level.
A.3. Road Operations contractors and contracted communities comply with contract provisions.	 % (by value and number) of IBC and national contracts passing performance assessment reviews % of CBC contracts passing performance assessment reviews % of contracts meeting contract social and environmental safeguards provisions. 	To what extent are PWD Operations contractors and contracted communities complying with contract provisions.	 R4D2 Quarterly and Annual Reports. PWD Management Reports PWD Divisional Manager Monthly and Quarterly Reports MIPU Annual Reports 	 Divisions have the staff and resources necessary to supervise works and administer contracts. Merit-based selection of new IBCs. Local political influence and pressure in favour of contractors is nullified. PWD's CBC works program is rationalised.

A.4. Divisions complete road Operations efficiently.	 % (by value and number) of contracts completed on-time and within budget. Other suitable metrics, including: i) rates of production; ii) unit costs; iii) equipment utilisation rates; and so on. Number of pilot and demonstrated projects executed. Number of multi-year maintenance contracts commenced. 	To what extent is R4D2 support improving the efficiency of PWD road Operations?	 R4D2 Quarterly and Annual Reports. PWD Management Reports PWD Divisional Manager Monthly and Quarterly Reports MIPU Annual Reports R4D2 targeted surveys and case studies. 	 As for A.1. above. GoV reforms procurement rules to allow multi-year road maintenance contracts. Divisional managers perform to the required level.
A.5. Divisions ensure executed road Operations comply with PWD's GESI and environmental safeguards.	 % (by value and number) of contracts with specifications that meet all of PWD's relevant safeguards requirements. % of executed contracts confirmed a have fully complied with contract safeguard specifications. 	To what extent are PWD's field Operations meeting gender & social inclusion and environmental protection policies and standards?	 R4D2 Quarterly and Annual Reports. PWD Management Reports PWD Divisional Manager Monthly and Quarterly Reports MIPU Annual Reports R4D2 targeted surveys and case studies. 	 As for 1.A. above. Adequate and timely PWD Central Office social and environmental safeguards support, including materials and guides, training, and monitoring support.
Output Increased and sustainab 	le year-round rural access.			

Stream B: Sector Finance and Road Network Management				
Intermediate Outcomes				
B.1. MIPU-PWD initiatives and actions result in a reducing road sub-sector funding gap.	 The rate of increase (by % and by Vatu value) in GoV National budget allocations for road sub-sector Operations (GoV's time-bound targets are in the Rural Roads Access Framework - RRAF). The value (Vatu and US\$) of road Project investment commitments from development banks, donors, and private and other sources (GoV's time-bound targets are in the Rural Roads Access Framework - RRAF). The % of PWD's road Operations (by value, against total Operations works) undertaken on Arterial roads, declared under the Public Roads Act 2014. 	 How effective is MIPU-PWD in achieving the highest reasonable road Operations allocations from the National annual budget? How effective is MIPU-PWD in leveraging and influencing the allocation of road Projects funding from external, private and other sources? How has MIPU-PWD contained it road Operations budget requirements by focusing on Arterial roads. 	 R4D2 Quarterly and Annual Reports. PWD Management Reports MIPU Annual Reports MIPU annual budget submission GoV National Appropriation Bill 	 MIPU-PWD Management is committed and willing to advocate to central agencies, development partners, and other players. Improved road access performance encourages GOV and partners to increase funding commitments. MIPU-PWD management are committed to joint annual work planning with development partners. Development banks are willing to support the roads sub-sector and to finance GoV priority projects. GoV is willing to borrow from development banks.

B.2. PWD is successfully transitioning to a performance-focused, road network manager.	 % (by units) of force account plant, equipment and staff redeployed according to PWD's force account redeployment strategy. Number of contractor-managed consolidated CBC contracts piloted (targets are in PWD's Road Network Manager Implementation Plan). Number of multi-year maintenance contracts piloted (targets are in PWD's Road Network Manager Implementation Plan). Progress in operationalising PWD's Road Asset Management System (compared to PWD's Road Network Manager Implementation Plan). The proportion of Operations annual plans (by number and value of subprojects) that are demonstrably consistent with GoV's RRAF. % of required enterprise systems (Asset Management, Finance Management, MIS, HR) in place. % of staff assessed as proficient in using systems. 	 How is PWD's transition to road network manager tracking? What changes to women's positions within PWD are attributable to R4D2 activities? How have R4D2-supported systems and processes changed the efficiency of PWD Operations? To what extent has R4D2 support for human resources management and capacity building improved PWD's organisational performance (both at the work-unit and individual level)? 	 R4D2 Quarterly and Annual Reports. PWD Management Reports PWD Divisional Manager Monthly and Quarterly Reports MIPU Annual Reports R4D2 review and evaluation reports Review of audit reports, financial reports and interviews with staff Annual review of achievements Annual review and discussion with PWD management to consider and review previous decisions, directives and recommendations 	 Political support for PWD's road network manager reform agenda. Limited political and other external intervention in Operations work planning. MIPU-PWD management remains committed to organisation change and performance improvement PSC supports MIPU-PWD organisation change management and HR plan; HR plan is financed. PWD is able to absorb and institutionalise new & improved systems and processes.
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Manager Implementation Plan. > Annual review and discussion with PWD management to consider and reforms achieved (including: streamlined PSC processes; HRM functions devolved from PSC to PWD) - targets are in PWD's HR Transition Strategy. > Annual review and discussion with PWD management to consider and review previous decisions, directives and recommendations	 Hun refo stre func
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Outputs

> Reduced road sub-sector funding gap.

> Stronger PWD road network management competencies and systems.

> Supportive reform and policy conditions.

Intermediate Outcome				
C.1. Australia supports high impact investments.	 The value (\$) and number (#) of high impact infrastructure investments funded by Australia. The number (#) of direct beneficiaries, appropriately disaggregated (by gender, people with disabilities, youth, and so on). [Targets will be set later.] 	 How have Australian infrastructure investments impacted direct beneficiaries, catalysed change, strengthened Australian niche positions, and improved Australia's public standing. To what extent have Australian infrastructure investments influenced attitudes and practices around inclusive and gender-responsive development? 	 R4D2 Quarterly and Annual Reports AHC reporting Independent evaluations Feedback and progress reports by implementing agencies 	 Suitable investment opportunities arise. GoV agrees to Australia funding identified investments.

C.2. MIPU-PWD can respond to disasters more immediately and effectively.	 MIPU endorses a PWD Cyclone Response Plan; it specifies roles and responsibilities by R4D2 personnel. 	How has R4D2 strengthened PWD's capacity to respond to damaging cyclones?	 R4D2 Quarterly and Annual Reports PWD Management Reports MIPU Annual Reports Independent evaluations 	 MIPU endorses a Cyclone Response Plan. MIPU-PWD assign roles for R4D2 personnel in cyclone responses.
C.3. Australian support leverages and improves the quality of development partner (DP) infrastructure investments.	 The value (\$) of Australian project preparation and implementation technical assistance (TA) taken up by DPs. The value (\$) of infrastructure investments supported by Australian TA. [Targets will be set later.] 	 How is Australian TA improving the planning, design and implementation of DP-funded infrastructure investments? To what extent are DP-funded investments more inclusive and gender-responsive because of Australian TA? 	 R4D2 Quarterly and Annual Reports AHC reporting Independent evaluations Feedback and progress reports prepared by GOV implementing agencies and DPs 	 DPs continue supporting infrastructure development in Vanuatu. DPs and implementing agencies request Australian TA support for their investments.

Indicative outputs

> Support for innovation and catalytic initiatives

> Leveraged development outcomes

> Better investments by development banks and other development partners.

> Investment project support.

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX F – RISK ASSESSMENT

A. STRATEGY

There are always risks associated with development programs and although R4D2 is transitioning efficiently from its successful earlier phases, not only will many of the risks identified remain, but also as R4D2 embarks on a new five-year program, new risks may emerge and evolve. Risk management is a tool used to not only assess and mitigate events that might adversely impact R4D2, but also to increase the likelihood/ probability of achieving successful outcomes with the purpose of:

- ensuring levels of risk and uncertainty are effectively managed,
- enabling the participants involved in the program to identify possible risks, the way these risks can be contained and the likely cost of any mitigation strategies.

Effective risk management will support R4D2 to be more effective through not taking and / or avoiding risks, and will greatly improve the transparency of how the program operates; provide a roadmap to achieve strategic goals and objectives; and provide reassurance in relation to the management of potential risks. It is vital to the well-being of R4D2 that the incoming management team addresses risk management proactively.

Successful management of R4D2 requires informed and timely management of risks, through a Risk Management Plan (RMP) that the Contractor, in consultation with DFAT, will need to prepare as part of the R4D2 Transition Phase. The risk approach will use the 2017 DFAT Risk Assessment (outlined in detail below) as the basis for planning. The Plan will aim to:

- facilitate attention to key risks impacting R4D2
- produce meaningful information that allows R4D2 management to focus efforts on the "right" (e.g., high likelihood and high consequence) risks with an effective coordination of effort;
- ensure appropriate stakeholders are informed and, if applicable, participate in the mitigation;
- ensure critical risks impacting on R4D2 activities are proactively identified, communicated, mitigated and escalated in a timely manner; and
- provide an audit trail of discussions and mitigation of program risks.

The goal is to proactively identify and address risks early and continuously throughout R4D2 lifecycle to avoid unwanted and unnecessary surprises.

B. RISK ASSESSMENT MATRIX

Risks are assessed with regard to the likelihood of them occurring and the consequences that would result from them. The rating of risk for various combinations of these parameters is shown in Figure 1. It is applied to the R4D2 Program in the next section.

Likelihood		Consequences					
	Negligible	Minor	Moderate	Major	Severe		
Almost Certain	Moderate	Moderate	High	Very High	Very High		
Likely	Moderate Moderate		High	High	Very High		
Possible	Low	Moderate	High	High	High		
Unlikely	Low	Low	Moderate	Moderate	High		
Rare	Low	Low	Moderate	Moderate	High		

Figure 1: Risk Assessment Matrix

C. RISK EVENT, SOURCE, IMPACT AND MITIGATION

Six categories of risk are identified:

4. Operating environment

What factors in the operational or physical environment (political instability, security, poor governance, lack of essential infrastructure, natural disasters etc.) that might impact directly on achieving the objectives?

5. Results

How realistic are the objectives and can they be achieved within the timeframe? Are the objectives/results sustainable? Would the failure to achieve the results in the proposed timeframe, or at all, affect the targeted beneficiaries directly? How will gender and social inclusion concerns be monitored and where necessary be addressed?

6. Safeguards

Do any of the activities involved in this investment have the potential to cause harm relative to safeguard issues (vulnerable groups, child protection, displacement and resettlement and environmental protection)?

7. Fraud/fiduciary

Are there any significant weaknesses which mean funds may not be used for intended purposes, not properly accounted for or do not achieve value for money? (Fraud Control and Anti-Corruption Strategies and Assessments of National Systems will assist in identifying significant risks.)

8. Reputation

Could any of the risks, if they eventuated, cause damage to DFAT's reputation? Could any aspect of implementation damage bilateral relations?

9. Partner relations

Could a relationship breakdown occur with key partners or stakeholders and would this prevent the objectives/results from being achieved? Does the intended partner (if known) have the capacity to manage the risks involved with this investment? Could differing risk appetites or changing partner priorities affect the relationship? Will other doors emerge with different interests?

The event and source of risk in the R4D2 Program are set out in Table 1, together with an assessment of the risk and indication of means to mitigate the risk. While full allowance is made for all potential risks, the R4D2 Program will build on the prior VTSSP/R4D programs that have demonstrated the low level of risk associated with program activities and which have developed systems to reduce the likelihood of risks eventuating.

While most risks are rated as being unlikely or rare, the potential for them to have a moderate consequence results in an overall assessment for them as being a *Moderate* risk based on the risk assessment matrix described in the previous section. Hence, the risks are judged to be: (i) *High* with regard to (a) the operating environment, and (b) safeguard matters; and (ii) *Moderate* with regard to (a) program results, (b) fraud/fiduciary; (c) reputation, and (d) partner relations. The overall risk rating is rated as *Medium*. However, these risks are all at the lower end of the respective scales, and careful management of them that also draws on the experience with R4D will ensure the overall project remains at the low end of the *Medium* rating if not in the *Low* category. The greatest risk to the success of the R4D2 Program is judged to be that of other GoV agencies not responding adequately to the need for increased funding and other reforms for PWD. Milestones set in the R4D2 Program will better enable these risks to be managed.

Table 1: Risk Event, Source, Impact and Mitigation

		Likelihood	Consequence	Rating				
1.	Operating environment	Possible	Moderate	High				
Eve	nts:							
>	GoV does not fully commit to roads sector reform and financing.							
>	Political priorities trump evidence-based planning							
>	PWD's annual work planning/procurement/execution cycle falters.							
>	PWD's planned road investments and maintenance are not consistent with key sector policy objectives (increasing RAI, and achieving levels-of-service that match each road's economic value).							
>	Natural disasters damage road infrastructure.							
>	Reduced MIPU-PWD staff competencies reduces operation	onal effectiveness and	l efficiency.					
→ Sou	GoV and/or funding agencies reject or do not act on advi rce:	ce and guidance provi	ded.					
>	Change in Government. Change in Prime Minister. Change	ge in Cabinet, including	g the Infrastructure	e Minister.				
>	Political pressure for PWD to plan and carry out 'special annual work planning/procurement/execution cycle. Pol plant and equipment away from where it is required to ex-	itical pressure forces t						
>	MIPU-PWD management (Director General, Director, Dep Manager, and Divisional Managers) willingly or are press management priorities.							
>	Cyclones, floods, tidal surges, earthquakes, volcanic eru	ptions.						
>	Senior and other key technical staff retire, move to other study.	departments, move to	o the private secto	r, leave to				
Imp								
>	Fewer kilometres of rural Arterial roads will be spot imprecondition.	oved and maintained t	o a year-round pas	sable				
>	Fewer kilometres of high value economic and tourist roads will be improved and maintained to their optimum level-of-service.							
>	Fewer kilometres of dusty town roads will be sealed.							
>	Parliament and partners will lose confidence in GoV's co National budget allocations and external funding will not			gement –				
>	The overall condition of Vanuatu's road network will star	t declining again.						
>	The improvement and expansion of transport infrastruct	ure will slow or stop.						
>	Major transport infrastructure investments will be less w	ell aligned with nation	al development ob	jectives.				
Miti	gation:							
>	The investment will strengthen MIPU-PWD's budget proc reporting. The annual planning/procurement/execution of			tools and				
>	Help MIPU-PWD leadership brief political leaders on road importance of evidence-based Operations and Projects v			he				
>	Help build confident MIPU-PWD leadership by providing i	nformation, tools and	training.					
>	Help with public diplomacy outreach to road users and o	ther stakeholders.						
>	Road investments will be planned and designed for resili	ence:						
	 Comply with Vanuatu's Roads and Bridges Design Guide, and Roads and Bridges Standard Specification (updated in 2016 by R4D-PWD). The Guide factors in adjusted rainfall IDF curves (Intensity-Duration- Frequency) from the Pacific Climate Change Science and Adaptation Program (PACCSAP). 							
	 Re-align coastal roads away from tidal surge and coa Size water crossings, culverts and other drains, and othigher peak rainfall intensities. 			imodate				
	 Seal and drain more steep sections of gravel-surface 	d roads.						
	 Elevate more roads on embankments. 							
	 Stabilise road-side slope more effectively. 							
>	The investment will step-up workforce planning support a	and training. If necess	arv. the investmen	t will jointly				
	finance in-line technical experts until regular staff are re- regional staff placements (e.g. though the Melanesian S GoV to consolidate all transport sector project managem PWD.	cruited. The investmer bearhead Group). The	nt will jointly sponse investment will en	or Pacific courage				

	Likelihood	Consequence	Rating
2. Results	Unlikely	Moderate	Moderate

Events:

- > Basic rural access: Rehabilitating pavements and constructing spot improvements to make sections yearround passable to achieve realistic Road Access Index (RAI) targets is achievable. Sustaining higher RAI targets will be more difficult.
- > High value economic and tourist roads (rural and urban): Achieving targeted kilometres of improved roads will depend on funding, notably from the World Bank and this investment. If funding is sufficient, reasonable targets will be achieved. Sustaining the higher levels of service should only become an issue five or so years after the investment finishes.
- Policy, reform & budgets: By its actions and its statements, GoV wants to fill policy gaps and institute reform (this could change – see 1 above). However, budget outcomes are more at risk.
- PWD a good road network manager: During the past 15 years of external support for PWD, the Department has not demonstrated that it can sustain service delivery improvements without continuous support. Sustaining improvements will remain a critical risk.
- Lack of progress in ensuring equity of participation and benefits for women and vulnerable groups (people with a disability, children, youth, elderly, remote location).
- Source:
 - <u>Basic rural access</u>: Drainage structures, crossings, and sealed pavements are resilient. However, rehabilitated gravel pavement sections can quickly degrade during Vanuatu's very high rainfall monsoon season. If gravel roads are not graded and reshaped 2-3 times each year, they quickly lose their gravel and become "unmaintainable". Within 3-4 years, they may become impassable in wet weather. The cause is insufficient pavement routine maintenance; all things being equal, this will happen when the length of roads to be maintained exceeds maintenance resources.
- Policy, reform & budgets: Vanuatu's fiscal situation is tightening. Liabilities are increasing, and revenue is stagnant.
- <u>PWD</u>: PWD is changing but it will take years to inculcate a performance-driven corporate culture. PWD remains fragile. It is highly dependent on a slender cohort of leaders, who in-turn rely on external support. If support is withdrawn, PWD's change-management gains may not be sustainable.
- There is an ongoing need for PWD to actively work at an institutional level towards supporting, innovating and guiding the implementation of the GoV's policy framework(s) for Gender and Social Inclusion (GESI).

Impact:

- Basic rural access:
 - Rural communities will lose year-round access to their island's services/commercial/transport hub. Women and children have most to lose.
 - Local economic activity may fall away during the wet months, but will otherwise be little affected.
- > High value economic and tourist roads: No impact.
- > Town roads: No impact.
- Policy, reform & budgets: Targeted social and economic benefits will not be achieved if road budgets stagnate or fall. In particular, lower levels-of-service will impede economic growth, particularly commercial agriculture and tourism.
- > PWD: Staff are unmotivated and/or seek employment elsewhere. Outsourcing will fall away in favour of inefficient outsourcing. Island-based contractors – who are key to expanding year-round basic access – will get less work and rural communities will lose access.
- PWD do not, or insufficiently, track, assess and report the impact the program is having on GESI in areas that include leadership roles, training and skilled employment opportunities, equal access to labouring jobs on construction sites, and having a voice in annual work planning.

		Likelihood	Consequence	Rating			
Miti	gation:						
>	Basic rural access: Improved value-for-money will reduce costs, leaving more for maintenance: - The investment will avoid high cost rehabilitation of g						
	 roads slated for sealing (by the investment or another funding source). The investment will jointly rehabilitate roads strictly according to PWD's Roads and Bridges Design Guide and Standard Drawings, which set parrower carriageway widths than most VISSP & P4D rehabilitation. 						
	 and Standard Drawings, which set narrower carriageway widths than most VTSSP & R4D rehabilitation to-date. This will reduce rehabilitation and future maintenance unit costs. Gravel-surfaced roads will be maintained to 'fair' and 'poor' condition, not 'good' (which is not feasible in 						
>	Vanuatu). The investment will trial technologies to stabilise gravel-s	surfaced roads; and wi	Il trial new equipm				
>	methods to maintain the shape of gravel-surfaced roads <u>Policy, reform & budgets</u> : The investment will advocate for their development partners. It will help MIDL DWD about	or more road sub-secto	or funding, includir				
	other development partners. It will help MIPU-PWD show working and that the roads deserve higher budgets.	-		is are			
> >	PWD: The investment will maintain and increase capacit			u working			
,	R4D2 to initiate what needs to be a long-term approach simultaneously at the community level, through the work awareness raising, training, contractual measures and ir institutional levels. There will be a need to engage with a across the islands where R4D2 will work and exert influe	and formalisation of (nformation-gathering a nttitudinal barriers and	CBC contractors in s well as national a	cluding and			
3.	Safeguards	Possible	Moderate	High			
Ever	nt/s:						
>	<u>Vulnerable or disadvantaged (children, disabled, poor, rebenefit from the investment, or are harmed in its implem</u>		e target community	/ do not			
>	<u>Child protection</u> : Road improvement workers abuse loca						
>	Displacement and resettlement: Road and drainage wor leaseholders and businesses.	ks in Port Vila and Lug	anville disadvanta	ge property			
>	Environmental protection: Larger drainage structures an local environment during construction.	d watercourse crossing	gs in rural areas da	amage the			
>	Workplace health and safety (WHS): Road improvement						
> Sou	Disability inclusion: Urban road rehabilitation activities d rce:	isadvantage people liv	ing with disabilities	5.			
>	<u>Child protection</u> : Workers from other areas make contact isolate and abuse them.	t with local children an	d set up opportuni	ities to			
>	<u>Displacement and resettlement</u> : Many private buildings a onto public roads. Road improvement works bring these properties are compulsorily acquired to accommodate ro particularly affected. Improved traffic management stops onto busy arterial roads – resulting in loss of on-site bus	conflicts to a head. Pa bad improvements. Vul s dangerous practices,	rts of roadside lea nerable groups ma	isehold ay be			
>	Environmental protection: Environmental management p local (downstream) environments at risk. Flash floods du problematic.						
>	<u>WHS</u> : Workers face risks from: moving vehicles and workplace accidents; abusive drivers; construction machinery and vehicles; poor use of hand tools; overhead construction activities; working next to excavations; working in confined spaces; land slips and collapses; contact with live power cables; contact						
>	with chemicals; dust exposure; and sun exposure and heat. <u>Disability inclusion</u> : Footpath detours are too rough for wheelchairs and are hazardous for low sight persons. Changed traffic conditions put people with disabilities at greater risk. Excavations are hazardous for low site persons.						
Impa	•						
>	<u>Child protection</u> : Severe reputational damage to the invector cancellation of some activities and missed targets.		-				
>	Displacement and resettlement: Some urban road impro	mpensation will divert		nent and			
>	Environmental protection: Some crossings may be aband	-					
>	WHS: Severe reputational damage to the investment and some activities and missed targets.		-				
>	Disability inclusion: Severe reputational damage to the in cancellation of some activities and missed targets.	ivestment and its spor	isors, which may o	ause the			

		Likelihood	Consequence	Rating			
Miti	gation			•			
>	<u>Child protection</u> : Pre-construction, contractual, and on-site child protection measures are fully resourced to achieve DFAT's zero tolerance approach to children abuse (see DFAT's Child Protection Policy 2017 and Child Protection Guidance Note – Infrastructure Activities 2017). Weekly site inspector reports will have a mandatory field for Child Protection. DFAT's Child Protection Compliance Section regularly vets the investment's child protection measures.						
>	Displacement and resettlement: The investment will finance competent community liaison experts able to negotiate Public Access Agreements with affected property and business owners. PVUDP provides useful lessons learned.						
>	Environmental protection: The investment will require its	engineering team to:					
	Environmental Management Plan (EMP) when signifi environmental protection law).	 Assess every road improvement job for possible environmental damage and to prepare an Environmental Management Plan (EMP) when significant risks are identified (consistent with GoV environmental protection law). 					
	 Insert the EMP into the construction contract as required. Have site inspectors monitor and report on EMP community. Have the investment's road maintenance engineers. 	pliance.		e.			
	- Include environmental management in all the investr	ment's progress report	S.				
>	<u>WHS</u> : The investment will fully resource the health and safety of workers, including training, equipment, supervision, reporting. Construction contracts include mandatory penalties for non-compliance (contract bonuses have not worked under R4D).						
>	<u>Disability inclusion</u> : All urban road improvement designs will comply with Australian disability access standards (achieved in PVUDP). Planning and resourcing of construction activities will ensure minimal disadvantage to people with disabilities. DFAT's Disability Section will examine opportunities for rural road improvements to incorporate disability-inclusive development elements, consistent with DFAT's Development for All 2015-2020.						
4.	Fraud/Fiduciary	Unlikely	Moderate	Moderate			
Eve >	nt/s: <u>Misappropriation:</u> Investment funds deposited into GoV's	•		ect funding			
>	arrangement may be misappropriated: a) by Department <u>Procurement</u> : The investment will generate 200-400 wor	ks and supply contrac	ts each year. Som				
>	may be fraudulently procured, resulting in poor value-for- Contract administration: Some contracts may be fraudule		ty/incomplete out	Juis.			
>	<u>Staff appointments</u> : Some investment-funded PWD contracts transparent.	5	s may not be fair a	ind			
Sou	•						
>	Misappropriation: Fraud within the Department of Finance PWD, contractors and/or subcontractors.	ce and the Reserve Ba	nk of Vanuatu, witl	hin MIPU-			
>	Procurement: Fraud and political pressure within MIPU-P	WD.					
>	Contract administration: Fraud and political pressure within MIPU-PWD.						
>	Staff appointments: Political pressure with MIPU-PWD.						
Imp							
>	<u>Misappropriation</u> : At worst, it could cause the complete a result in revised implementation arrangements that wou	ld weaken the 'partner	rship'.	·			
>	<u>Procurement</u> : Outputs would be reduced. Due diligence w costs and reduced efficiency.	would be increased, re	sulting in higher tr	ansaction			
>	<u>Contract administration</u> : Outputs would be reduced. Due transaction costs and reduced efficiency.	diligence would be inc	creased, resulting	in higher			

- transaction costs and reduced efficiency.
 Staff appointments: Parts of the investment may need to be abandoned. Due diligence would be increased
- Staff appointments: Parts of the investment may need to be abandoned. Due diligence would be increased, resulting in higher transaction costs and reduced efficiency. Outputs would be reduced.

		Likelihood	Consequence	Rating				
Miti	gation:							
>	<u>Misappropriation</u> : This has never happened under VTSSP or R4D (there is a different arrangement for PVUDP). GoV's development fund accounts are internally audited annually. Direct funding within MIPU-PWD will be externally audited annually. MIPU-PWD expenditure codes will be retained and densified.							
>	Procurement: All jointly funded procurements will require sign-off by a (DFAT-funded) contractor delegate.							
>	<u>Contract administration</u> : The contractor engineering team will certify contractor and supplier claims. Variation orders will require sign-off by the contractor 'Engineer'.							
>	<u>Staff appointments</u> : Jointly funded staff consultant appoleader.	intments will be sign-o	ff by the contracto	r team				
>	ANS assessment: Recommendations from upcoming ANS appropriate risk treatments.	S and sector PFM asse	essments will inform	m				
5.	Reputation	Unlikely	Moderate	Moderate				
Eve	nt/s:							
>	Safeguards non-compliance							
>	Delayed construction and excessive disruption to busine Luganville.	sses and other activition	es, particularly in F	Port Vila and				
>	Increase in traffic accidents, injuries, deaths.							
>	Increase in roadside nuisance from speeding vehicles ar	nd heavier traffic volum	nes.					
>	Political unease with increased work planning, procurem seen to be "interfering".	ent, and execution rigo	or and transparend	cy. Australia				
Sou	rce:							
>	Poor quality/inadequate due diligence and feasibility and construction supervision and contract administration by inexperienced contractors.	5	•					
>	Higher speed roads.							
>	Higher speed, higher volume roads. Induced traffic volun	ne increases.						
>	Local politicians and leaders no longer able to push through	ugh 'special requests'.						
Imp	· · · · · · · · · · · · · · · · · · ·							
>	Public criticism of the Australian aid program in Vanuatu blames Australia. Reduced outputs. Bilateral tensions.	. Grievance and compe	ensation claims loo	dged. GoV				
>	Political pressure to wind back the investment. Reduced	outputs.						
Miti	gation:							
>	-	vsis. Undertake relativ	elv straightforward	I. low risk.				
	Thorough, good quality due diligence and feasibility analysis. Undertake relatively straightforward, low risk, high reward subprojects. Select and adequately resource a well-regarded, experienced design and supervision engineer. Ensure contractor tender evaluation criteria give due regard to relevant Pacific experience and record of accomplishment.							
>	The investment will include driver education and other sa elements and special traffic management around school engineering safety standards.							
>	Improved roads are supposed to induce high usage. Mor			ice dust and				

other nuisances. Traffic 'calming' and other design elements will reduce nuisance.
The investment will help the Infrastructure Minister and MIPU-PWD advocate for local political support for the new 'business-as-usual'.

			Likelihood	Consequence	Rating		
6.	Partner relations		Rare	Moderate	Moderate		
Eve	Event/s:						
>	MIPU-PWD leadership is at odds with the investment's objectives, methods and approach. The partnership fractures.						
>	MIPU-PWD feels a diminution of fractures.	road management indep	pendence and sovere	ignty. The partners	hip		
>	Operational-level relations with F	WD breakdown.					
>	The Government is selective abo	ut how it works with the	multilateral banks				
>	The multilateral banks are unwill Australia to stay in the sector	ing or unable to underta	ake some of the R4D2	2 work, putting pres	sure on		
>	The emergence of other donors with different interests deflect or adversely influence the investment's objectives						
Sou							
>	Change of GoV and MIPU leadership and attitudes (please see Item 1).						
>	MIPU-PWD leadership loses patience with Australian aid delivery transition from a Contractor (with close AHC oversight) approach to a MIPU-PWD managed approach.						
>	Personality clashes.						
>	Domestic political concerns about	ut GoV taking on further	multilateral bank loa	ns			
>	Changing priorities within the mu	Itilateral banks on secto	oral activities				
>	New donors offer, or are approace	ched by GoV, to engage	in the roads sector				
Imp							
>	The fractured or strained partner The severity of differences will in	-		reduced outputs a	nd impact.		
>	Relatively minor and isolated reductions in results and impact.						
Miti	gation:						
> >	On-going high-level consultations between the Australian High Commission (AHC), Port Vila and Minister for Infrastructure and senior MIPU-PWD management. If appropriate, adjust aspects of the investment's implementation approach, moving towards more MIPU-PWD control.						
7.	Overall Risk Rating:		Moderate ris	sk			

VANUATU ROADS FOR DEVELOPMENT PHASE TWO INVESTMENT DESIGN DOCUMENT

ANNEX G – BIBLIOGRAPHY

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