# VANUATU TRANSPORT SECTOR SUPPORT PROGRAM - PHASE II

AN AUSTRALIAN FUNDED INITIATIVE

This Program Design Document details the rationale and implementation arrangements for the four year second phase of the Vanuatu Transport Sector Support Program

VERSION 5.3 FINAL

September 2012

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

| Document: | Program Design Document  |
|-----------|--|
| Version:  | 5.3 (Final)  |
| Program:  | Vanuatu Transport Sector Support Program   |
| Agency:   | Australian Agency for International Development  |
| Authors:  | David Swete Kelly; Peter Smith; Peter Kelly; Peter<br>Heijkoop; Charles Meluish, Simon Cramp |
| Date:     | 17 September 2012  |

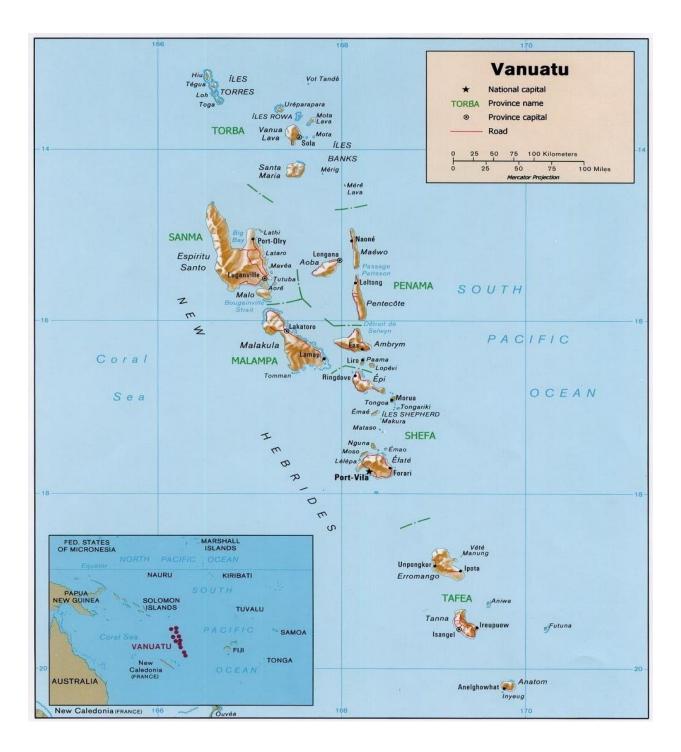
This document is the property of the AusAID.

It is not permissible to copy or use any of the material in this report without the expressed permission of the Australian Agency for International Development. Further information is available from:

Jennifer Kalpokas Doan Senior Program Manager GFG Infrastructure AusAID PO Box 342, Port Vila VANUATU Ph +678 27752 Fax +678 27749 Email Jennifer.Kalpokas@ausaid.gov.au www.ausaid.gov.au

© AusAID 2012

# $Map \ of \ Vanuatu^1$



<sup>&</sup>lt;sup>1</sup> http://www.lib.utexas.edu/maps/australia/vanuatu\_rel98.jpg

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

| ACRONT   | Meaning  |
|----------|--|
| ADB      | Asian Development Bank   |
| AUSAID   | Australian Agency for International Development  |
|          |  |
| DFA      | Development Fund Account (GoV Ministry of Finance)   |
| DTIS     | Diagnostic Trade Integration Study   |
| EHC      | Equipment Hire Contracts   |
| EU       | European Union   |
| GDP      | Gross Domestic Product<br>Governance for Growth  |
| GfG      |  |
| GoA      | Government of Australia<br>Government of Vanuatu   |
| GoV      |  |
| GPOBA    | Global Partnership on Output-Based Aid   |
| HH       | Household  |
| HIV/AIDS | Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome<br>Island Based Contractors |
| IBC      |  |
| ICB      | International Competitive Bidding  |
| ISP      | Implementation Service Provider  |
| JICA     | Japan International Cooperation Agency   |
| M&E      | Monitoring and Evaluation  |
| MCA      | Millennium Challenge Account   |
| MDG      | Millennium Development Goal  |
| MFEM     | Ministry of Finance and Economic Management  |
| MIPU     | Ministry of Infrastructure and Public Utilities  |
| MoE      | Ministry of Education  |
| NCB      | National Competitive Bidding   |
| NSO      | National Statistics Office   |
| NZAID    | New Zealand Aid Programme  |
| PAA      | Priorities and Action Agenda   |
| PDD      | Program Design Document  |
| PDS      | Program Delivery Scorecard   |
| PfD      | Partnership for Development  |
| PIPP     | Pacific Institute of Public Policy   |
| PWD      | Public Works Department  |
| RTC      | Rural Training Centre  |
| STD      | Sexually Transmitted Disease   |
| TNA      | Training Needs Assessment  |
| ToR      | Terms of Reference   |
| TVET     | Technical Vocational Education and Training  |
| UNCTAD   | United Nations Conference on Trade and Development   |
| UNFCCC   | United Nations Framework Convention on Climate Change  |
| USD      | United States (of America) Dollar  |
| VERD     | Vanuatu Electricity for Rural Development  |
| VIT      | Vanuatu Institute of Technology  |
| VNSO     | Vanuatu National Statistics Office   |
| VRDTCA   | Vanuatu Rural Development Training Centre Association  |
| VT       | Vatu   |
| VTSSP    | Vanuatu Transport Sector Support Program   |

## ACRONYMS

# TABLE OF CONTENTS

| Ex        | ecutive | Summary   |      | v   |
|-----------|---------|---|------|-----|
| 1         | Intro   | duction   |      | 1   |
| 2         | Analy   | vsis and Strategic Context  |      | 2   |
|           | 2.1     | Country and Transport Sector Context  | 2    |     |
|           | 2.2     | Partner Government Policy and Institutional Context                                   | 3    |     |
|           | 2.3     | Problem Analysis  | 5    |     |
|           | 2.4     | Lessons Learned   | . 11 |     |
|           | 2.5     | Consistency with Existing AusAID and other Donor Programs                             | . 13 |     |
|           | 2.6     | Rationale for AusAID Involvement  | . 14 |     |
| 3         | Prog    | ram Description   |      | 16  |
|           | 3.1     | Goal and Purpose  | . 16 |     |
|           | 3.2     | Expected Outcomes   | . 17 |     |
|           | 3.3     | Form of Aid Proposed  | . 23 |     |
|           | 3.4     | Estimated Program Budget & Timing   | . 25 |     |
| 4         | Imple   | ementation Arrangements   |      | 27  |
|           | 4.1     | VTSSP II Governance Arrangements  | . 27 |     |
|           | 4.2     | VTSSP II Management and Operations Arrangements                                       | . 28 |     |
|           | 4.3     | Transition Plans  | . 31 |     |
|           | 4.4     | Monitoring and Evaluation Arrangements  | . 31 |     |
|           | 4.5     | Sustainability Issues   | . 35 |     |
|           | 4.6     | Overarching policy issues   | . 37 |     |
|           | 4.7     | Critical Risks and Risk Management Strategies   | . 40 |     |
| Ar        | inex 1. | Work Undertaken by AusAID Technical Advisors to the MIPU/PWD Reform<br>Program Agenda |      | 44  |
| Ar        | nex 2.  | VTSSP Funding and Fiduciary Control Mechanisms  |      | 45  |
| Ar        | nex 3.  | Review of Vanuatu Transport Sector Private Sector Providers & summary of              |      |     |
|           |         | road improvement costs  |      | 56  |
| Ar        | nex 4.  | Human Resource Development Program  |      | 60  |
| Ar        | nex 5.  | VTSSP II Work Plan and Road Selection Criteria  |      | 65  |
| Ar        | nex 6.  | Resource and Cost Schedules   |      | 80  |
| Ar        | nex 7.  | Monitoring and Evaluation Framework   |      | 84  |
| Ar        | nex 8.  | VTSSP Environmental Screening and Protection Measures                                 |      | 96  |
| Ar        | nex 9.  | Risk Matrix   |      | 100 |
| Annex 10. |         | . Proposed VTSSP II Advisory Support Alignment to PWD                                 |      | 104 |
| Ar        | nex 11  | . Position Descriptions / Terms of Reference  |      | 105 |

1

# VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

DRAFT PROGRAM DESIGN DOCUMENT – SEPTEMBER 2012

## **EXECUTIVE SUMMARY**

The poor quality, unreliability and high cost of basic transport infrastructure in Vanuatu are major constraints to broad-based economic growth, poverty reduction, and service delivery. Because of its small size, Vanuatu has difficulty generating sufficient internal revenue to finance the construction and maintenance of the infrastructure necessary to support the delivery of basic services, and underpin the growth it desires. Delivering an affordable and sustainable multi-modal transport network in Vanuatu will require long term coordinated investment by Government and donors. The key challenge will be to define a core transport network for the country that is both affordable and justified by transparent and internationally accepted criteria for economic and social benefit.

Australia has responded to these needs through its support to the fifteen-year Vanuatu Transport Sector Support Program (VTSSP). The \$16.9m first phase of VTSSP (VTSSP I) commenced in September 2009, and finished in July 2012. VTSSP I focused on the maintenance and rehabilitation of priority roads on the islands of Ambae, Malekula and Tanna, as well as reform within the Public Works Department (PWD) within the Ministry for Infrastructure and Public Utilities (MIPU).

This document outlines the draft design for the second phase of VTSSP. Support to transport infrastructure under VTSSP II aligns with Australia's new Sustainable Economic Growth Strategy, the first pillar of which is the achievement of sustainable transport infrastructure. Given the progress made during VTSSP I, it is proposed that under VTSSP II, MIPU/PWD needs to focus its limited resources over the next four years on achieving:

A demonstrated capacity to responsibly prioritise, plan, build and maintain road transport infrastructure within available national and donor resources.

Two outcomes will contribute to this aim:

- 1. **PWD Institutional Transformation:** The first outcome will be delivered by the MIPU/PWD and seeks that MIPU/PWD has the skills, systems, and resources necessary to plan and manage an agreed core mandate. This outcome builds on and continues the program of institutional strengthening and transformation enacted in VTSSP I through three outputs:
  - a. Output 1.1: Function Core strategy, budgeting, policy, oversight, and service delivery functions agreed and delivered;
  - b. Output 1.2: Systems Administration, finance, procurement and management information systems developed and maintained; and
  - c. Output 1.3: Skills Human resources managed and developed.
- 2. **PWD Service Delivery:** The second outcome will be delivered by PWD Operations & Management Unit, along with key private sector partnerships. Under this outcome PWD Operations will capably maintain key road transport infrastructure. The core outputs expected from Outcome 2 include:

- a. Output 2.1: Physical Works The physical works will expand to include Pentecost and may be extended to other islands in the three provinces and extend to SHEFA Province, pending implementation progress on the initial four islands. The PWD Operations Group will focus on core road network reconstruction and maintenance and priorities will be agreed through an Annual Work Plan.
- b. Output 2.2: Technical Services. PWD will increasingly enact the GoV's outsourcing agenda by maintaining prioritised transport infrastructure through local partnerships with communities and the private sector. To do this PWD will build the capacity of the community, as well as small to medium Island Based Contractors, so that these can eventually assume responsibility for routine and preventative maintenance through partnership contracts with the PWD.

VTSSP II is scheduled to commence in March/April 2013 and will require an investment of an estimated \$36.6 million over four years. Within this envelope infrastructure costs will be flexible, but it is proposed that AusAID make a provisional commitment of approximately \$5.5m per year (\$22m overall). The delivery of new infrastructure will be about 60% of the total budget.

Enhanced mechanisms are proposed for the VTSSP II Direct Funding Agreement which will build on the gains made in VTSSP I, while strengthening accountability and oversight. Even so, the mechanisms remain consistent with GoA and GoV bilateral policy supporting those Paris Declaration principles concerning the use of Partner Government Systems.

It is proposed that the existing GfG Management Committee provide strategic oversight for VTSSP II and that an Implementation Service Provider be responsible for engaging specialists with the skills, experience, reputation and credibility to mentor the GoV.

The risks for the program need careful management but under most circumstances should prove manageable provided the technical assistance is both strategic and of good quality, there is solid commitment by the GoV to the proposed approach, and there is positive/strategic engagement between the GoV and the GoA.

# VANUATU TRANSPORT SECTOR SUPPORT PROGRAM - PHASE II

### Draft Program Design Document – September 2012

## **1** INTRODUCTION

- 1 In December 2007 the Government of Vanuatu (GoV) requested Australian support for the country's transport sector, Australia's response being a commitment to the fifteen-year Vanuatu Transport Sector Support Program (VTSSP). The \$16.9m<sup>2</sup> first phase of VTSSP (VTSSP I) commenced in September 2009, and late in 2011 was rescheduled to finish in July 2012<sup>3</sup>. VTSSP I focused on the maintenance and rehabilitation of priority roads on the islands of Ambae, Malekula and Tanna, as well as on the building of priority capacity and institutional reform within the Ministry for Infrastructure and Public Utilities (MIPU), in particular within its largest division, the Public Works Department (PWD). This initial phase was managed through AusAID's Governance for Growth Program (GfG) and overseen by the GfG Transport Coordinator. It was supported through a 34 month technical assistance contract with URS Corporation, as well as by a range of individual technical assistance facilitated by GfG.
- 2 The overarching inter-Government VTSSP Subsidiary Agreement (AusAID, 2009) specified that the design for the second phase of VTSSP should be completed by December 2011. In line with this, a concept paper for VTSSP II was drafted by GfG in mid-2011, and approved to proceed to full design by an AusAID Peer Review in August 2011. Then in November 2011 a design team<sup>4</sup> visited Vanuatu to prepare a draft design. This was completed in January 2012. However on-going delays and changing circumstances led to the design being updated and revised in June 2012. This design was assessed by an AusAID Peer Review Panel in August 2012 and approved for implementation. Pending successful contracting, VTSSP II is not expected to start until March/April 2013. Anticipating this delay, MIPU agreed with GfG in March 2012, to fund a suite of transition activities during the latter half of 2012, including the direct contracting of on-going technical support.
- 3 This draft design document consists of three sections.
  - *Analysis and Strategic Context* outlines the broad country and Government context; analyses the problems confronting the transport sector; clarifies the work already undertaken and the lessons learnt; and presents the rationale for VTSSP II;
  - *Program Description* outlines the strategic logic, as well as the key components and outcomes expected of VTSSP II. It proposes the type of assistance to be provided, and the overall budget and timing;
  - *Implementation Arrangements* outlines the management, oversight, monitoring, risk mitigation and evaluation procedures deemed necessary to keep VTSSP II on track.

 <sup>&</sup>lt;sup>2</sup> The GoV/GoA Subsidiary Agreement for VTSSP, signed in April 2009, incorrectly quotes the cost of the first phase as being \$17.3m. The \$400k difference is because it mistakenly included the cost of design (funded under a separate FMA).
 <sup>3</sup> The contract for VTSSP I Technical Assistance was due to finish on 7 September 2011, but was then extended by ten

months until 7 July 2012.

<sup>&</sup>lt;sup>4</sup> The design team included Peter Kelly (GfG Transport Sector Coordinator); Peter Smith and David Swete Kelly (Design Specialist). Inputs have also been provided by a suite of specialist studies undertaken over the last two years, in particular those of Charles Melhuish (Institutional Reform), Peter Heijkoop (Public Financial Management) and Margaret Bohn (Human Resources). Sincere thanks are also due to management, staff and advisers currently working within MIPU and PWD.

# 2 ANALYSIS AND STRATEGIC CONTEXT

### 2.1 COUNTRY AND TRANSPORT SECTOR CONTEXT

4 The Republic of Vanuatu is an archipelago of about eighty islands in the South Pacific, stretching some 1,300 kilometres from north to south. Table 1outlines some of the significant characteristics that limit development in Vanuatu – characteristics that are shared by many of Vanuatu's South Pacific island neighbours.

| Development Challenge                                      | Description  |
|--|--|
| Small land area  | Roughly 4,700 km <sup>2</sup> in total across 80 islands, but only 14 islands have a land area of over 100 km <sup>2</sup> .                                 |
| Small, largely rural, but<br>rapidly growing<br>population | Estimated at 254,020 in November 2011, of which 75% live rurally.<br>Annual growth in 2008 was 2.4 percent (VNSO, 2011).                                     |
| Dispersed population                                       | Ni-Vanuatu live on 64 of the 80 islands; 43 islands have a population of less than 1000; while only six islands have a population above 10,000 (VNS0, 2011). |
| Small economy  | In 2010 nominal GDP was \$721m; while per capita GDP was \$2,835.  |
| High vulnerability to<br>natural disasters                 | Vanuatu experiences regular eruptions, earthquakes, cyclones, and tsunamis – Vanuatu's "relative" risk index <sup>5</sup> is classified as "very high"       |
|  | (PreventionWeb, 2011).   |
| Remote islands with limited resources                      | Islands are also steep, with erodible soils, little permanent freshwater<br>and variable availability of road resource materials.                            |
| Shortage of Ni-Vanuatu                                     | National statistics show that:   |
| with the skills necessary                                  | • 47% of the population is 19 years old or less;   |
| to maintain a modern                                       | • Only 25% of the population has completed or advanced beyond their  |
| and growing economy  | Year 10 certificate;   |
|  | <ul> <li>Only 3% have a degree or vocational qualification<sup>6</sup>;</li> </ul>   |
|  | • 26% of the population are unable to read or write simple Bislama;  |
|  | <ul> <li>36% are unable to read or write simple English; and</li> </ul>  |
|  | • Rural areas are proportionally worse on all counts (VNSO, 2011).   |

5 Yet despite these developmental challenges, when compared with many of its South Pacific neighbours Vanuatu has been performing well in recent years. Over the last seven years it has, in fact, registered uninterrupted growth. This has been largely driven by sound macroeconomic management, political stability, foreign investment<sup>7</sup>, and by tourism. Nevertheless, in recent times, the global financial crisis along with growing political disharmony within the country, have eroded confidence in Vanuatu's stability, with the inevitable result that economic growth has slowed. Furthermore, past economic benefits have not been equitably distributed across the country. Most growth has been restricted to the two most important urban centres - Port Vila (on Efate) and Luganville (on Espiritu Santo) - while livelihoods in the outer islands continue to be largely based around subsistence agriculture. Moreover, such dichotomous development has contributed to increasing urbanisation, with all of its concomitant problems. Nevertheless, the GoV still aspires to equitable, broad based growth and effective service delivery for the country as a whole.

<sup>&</sup>lt;sup>5</sup> Risk per capita

<sup>&</sup>lt;sup>6</sup>This 3% includes the generally better educated biracial children of Ni-Vanuatu and expatriate parents, 87% of whom live on the islands of Efate or Espiritu Santo, but who make up only 2% of the population.

<sup>&</sup>lt;sup>7</sup> This has been particularly driven during the housing boom in the early 2000's by an increase in private sector investment in the housing sector, and since the mid 2000's by an increase in donor funded capital works projects.

- 6 For equitable growth to be achieved, however, one of the foundations must be in the provision of an efficient and integrated land, sea and air transport system. Good transport infrastructure reduces the cost of doing business, and improves access to markets and social services. Yet as already noted in Table 1, Vanuatu's islands are widely dispersed, small in size and prone to disaster, and along with the other characteristics mentioned, the GoV is faced with major revenue constraints when planning and budgeting for the necessary infrastructure investment.
- 7 Nevertheless, transport infrastructure is already Vanuatu's single largest asset in terms of overall value. Even so, an updated inventory of this infrastructure shows that the country has only a modest stock of assets compared to its need (see Table 2). Furthermore, recent assessments confirm the public perception that even this limited stock is very run down.

| Form of<br>Transport | Inventory of Assets   |
|----------------------|---|
| Roads                | 1,850km of which: 150km are paved, 1,300km are gravel, and 400 km are earth.  |
| Airports             | 26 commercial air strips: four of which are sealed, five are coral, and seventeen are grass. In addition there are three international airports (Bauerfield, Pekoa and White Grass), maintained by Air Vanuatu Ltd  |
| Seaports             | Two port facilities (Port Vila and Luganville): these are the responsibility of the Ports<br>Authority, although operated by a private sector company under contract. Other<br>maritime infrastructure includes 36 small wharves, jetties and landing stages. |

Table 2: Inventory of Vanuatu Transport Sector Infrastructure<sup>8</sup>

#### 2.2 PARTNER GOVERNMENT POLICY AND INSTITUTIONAL CONTEXT

8 Thus far, the GoV's efforts to coherently and effectively respond to the problems facing its transport sector has resulted in a hierarchy of national, sectoral and agency policy and planning documents. These are summarized in Table 3.

| Hierarchy of document                  | Government of Vanuatu policy document                                     |
|--|---|
| National                               | Priorities Action Agenda 2006 – 2015                                      |
|  | Planning Long, Acting Short 2009 – 2012                                   |
|  | Government of Vanuatu 2011 Priorities                                     |
| Transport Sector                       | 1999 Vanuatu Infrastructure Master Plan (update to commence in late 2011) |
|  | 1989 National Transport Development Plan                                  |
| Transport Agency (Corporate plan)      | MIPU Corporate Plan 2011-13   |
| Transport Agency (Annual<br>Work Plan) | MIPU Business Plan 2011 updated in line with annual budget                |

#### Table 3: GoV Transport policy and planning documents

9 The *Priorities Action Agenda 2006 – 2015* (PAA) (GoV, 2005) articulates the development vision, priorities and strategies of the GoV at the broadest level. The relevant section of the PAA notes that:

Reliable and competitively priced economic infrastructure and utilities are essential services needed to support national development...[but]...poor transport and communication services, their high costs, and poor maintenance of infrastructure assets, particularly (but not only) in rural areas, have been identified as major constraints to development (GoV, 2005).

10 In response to this priority the Government's *Planning Long Acting Short: Action Agenda for 2009-2012* (GoV, 2008) identifies seven short term objectives for the transport sector:

<sup>&</sup>lt;sup>8</sup> PWD 2006 Road inventory update, and PWD 2005 Statement.

- Institutional reform and capacity building programs in place;
- Better infrastructure policies and implementation plans;
- Improved corporate planning and reporting regimes within all Directorates;
- Increasing resources committed to road and wharf maintenance;
- Increasing role of the private sector in local service delivery;
- Increasing role of local communities and island based contractors (IBC) in road and wharf maintenance, generating increased employment in rural areas; and
- Improved shipping, wharf and storage facilities.
- 11 Most analysts agree that these objectives encapsulate the most critical issues the country faces. Nonetheless, sectoral plans fail to reflect this national agenda regrettably, the *Vanuatu Infrastructure Master Plan* (GoV, 2001) was last framed eleven years ago, and the *National Transport Development Plan* a full 23 years ago. Furthermore, in their day both were overly ambitious, and consequently proved well beyond the capacity of the Government to resource and manage. Clearly, then, these documents need pragmatic and urgent updating<sup>9</sup>.
- 12 Given the absence of up-to-date plans, the Department of Strategic Planning and Coordination was tasked to provide the Government's priorities for 2011/12, against which all Ministries have since based their Corporate and Business Plans.
- 13 The 2011/12 priority set for the infrastructure sector by the Department of Strategic Planning and Coordination was *"reliable and accessible infrastructure services"*. This included four transport objectives:
  - Up-grading of domestic airstrips;
  - Review of airspace/upper space agreements;
  - Improved shipping, wharf and storage facilities; and
  - Strengthening the institutional capacity of the transport sector.
- 14 These transport sector objectives are the responsibility of the Ministry for Infrastructure and Public Utilities (MIPU). MIPU's Corporate Vision is to:

Contribute significantly to Vanuatu's social and economic development through the provision of professional and efficient transport infrastructure and services. (MIPU, 2011)

15 Yet the achievement of this vision is a considerable challenge for MIPU, not least because it holds parallel responsibilities for five Departments/Units, and seven Statutory Bodies (see Box), and although most of these key responsibilities revolve around road, sea and air transport, it is still a complex and somewhat confusing portfolio. For instance, MIPU's PWD not only has responsibility for upgrading and maintaining roads, jetties, airstrips, buildings, and drainage structures, but also has responsibility for urban water supply networks, as well as servicing the Government vehicle fleet. All of the physical works for this portfolio are managed by PWD through six Provincial Works Divisions.

#### **MIPU Departments/Units**

- Corporate Services Unit (CSU)Public Works Department
- (PWD) • Meteorology and Geo-hazards
- (VMGH) • Ports and Harbours Dept. (P&H)
- Civil Aviation Authority (CAAV)

#### MIPU Statutory Bodies

- Air Vanuatu
- Vanuatu Post Ltd
- Northern Island Stevedore Co. Ltd
- Ifira Wharf and Stevedoring
- Telecommunications and Radio Regulator

<sup>&</sup>lt;sup>9</sup> In 2011/12, with support from the Pacific Regional Infrastructure Facility (PRIF), the Government plans to start updating the 1999 Vanuatu Infrastructure Master Plan with the preparation of the Vanuatu Infrastructure Strategic (10year) Investment Plan.

- 16 Given its broad mandate, it is unsurprising that PWD accounts for the majority of MIPU's Budget - 68% in 2011 or VT960m (including a VT500m maintenance fund)<sup>10</sup>. Yet while this budget is significant for such a small country, it has proven insufficient to meet the maintenance requirements for current infrastructure, let alone the needs of new investments. However, while there is certainly considerable scope for more cost effective use of these funds, in reality, the national road, sea and air network needs a level of investment that is well beyond the GoV's current fiscal and delivery capability.
- 17 As such, it is inevitable that Vanuatu will continue to depend on donors to support both the development and rehabilitation of its major transport infrastructure. This, however, does not preclude the GoV from having to face some tough decisions. Knowing this, the GoV plans to work with all stakeholders to revise the outdated *National Infrastructure Master Plan*, and develop an associated *Infrastructure Strategic (10 Year) Investment Plan*. The key challenge will be to define a core transport network for the country that is both affordable and justified by transparent and internationally accepted criteria for economic and social benefit.
- 18 Once completed, the *Vanuatu Infrastructure Strategic (10 year) Investment Plan* will not only increase donor co-ordination, but help integrate GoV policies, strategic priorities, and implementation efforts. However, a particular challenge for the GoV will be the scale of the costs involved, and the consequent need to increase recurrent budgets to ensure it can effectively maintain both its current and any future core assets.
- 19 In summary: the poor quality, unreliability and high cost of basic transport infrastructure in Vanuatu are major constraints to broad-based economic growth, poverty reduction, and service delivery. Because of its small size, Vanuatu has difficulty generating sufficient internal revenue to finance the construction and maintenance of the infrastructure necessary to support the delivery of basic services, and underpin the growth it desires. Delivering an affordable and sustainable multi-modal transport network in Vanuatu will require long term coordinated investment by both Government and donors.

#### 2.3 PROBLEM ANALYSIS

- 20 In order to gain a more detailed understanding of the problems facing the transport sector in Vanuatu, and thereby clarify the options available to it, both the GoV and AusAID (under VTSSP I and other GfG funded mechanisms) have undertaken a number of studies over the last two years (see Annex 1). These studies have provided insight into the problems confronting the transport sector in a number of key areas including:
  - Roads;
  - Maritime;
  - Aviation;
  - Institutional Capacity;
  - Private Sector Capacity; and
  - Emerging Social Issues.

#### 2.3.1 ROADS

21 The management of the roads in Vanuatu is particularly challenging. When decades of underfunding are combined with the deleterious impacts of an aggressive physical environment, the result is not only a road system in major disrepair, but one rapidly nearing the end of its economic life. In 2011, the PWD assessed the pavement condition of 123 km of urban roads in Port Vila and Luganville, finding that 80% of the urban network was in poor or very poor condition. Outer island roads are in even worse shape.

<sup>&</sup>lt;sup>10</sup> This converts to approximately A\$10m overall with a little over A\$5m for maintenance.

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

- 22 A recent desktop analysis of funding needs for Vanuatu's 1800 km of National and Provincial roads, indicates that at least A\$120m would be required just to restore the existing network to maintainable condition (rehabilitation, re-gravelling and resealing). This does not include the additional costs of any upgrading of surfaces, nor any provision for bridge and drainage structures (typically a major cost). Moreover, a conservative estimate of the annual maintenance cost of the road network once restored is an on-going A\$20m per year (if administered efficiently). It is understandable then that, with an annual road maintenance budget of no more than VT500m (about A\$5m), only a fraction of roads are currently being maintained, let alone rehabilitated. Furthermore, recent studies have shown that even these limited GoV funds are often used inefficiently, or allocated outside of established procedures and financial regulations.
- 23 Yet even if the funding was to become available, the current implementation capacity within both the PWD and the private sector is insufficient to build, manage and maintain assets. Compounding this is the very high cost of road construction and maintenance in Vanuatu. Under VTSSP I, the costs for road rehabilitation on three of the outer islands was three times higher than expected due to:
  - the harsh environment;
  - the high value of the Vatu;
  - limited private sector competition;
  - the difficulty in accessing the outer islands;
  - a scarcity of reliable sources of suitable road making materials; and
  - the worse than expected state of the roads.
- 24 In many cases, refurbishment actually amounted to reconstruction, with an associated escalation of time and expenses. Further detail on the affordability of road works in Vanuatu is provided in Annex 3.<sup>11</sup>
- 25 Yet to address all of these constraints would require long term financing on a grand scale, as well as extensive institutional reforms. Hence the already stated need for the Government to make some hard decisions regarding the quality and location of the road services that it can, in fact, afford to both provide and sustain. In this context, Australia, as the primary donor to Vanuatu, must have open and frank discussions with the GoV regarding the inherent unsustainability of the road infrastructure in Vanuatu. It is quite apparent that even a modest system will require on-going and significant ODA support.

#### 2.3.2 MARITIME

26 Inadequate and unreliable international and domestic shipping services are an additional significant constraint on rural economic growth. Vanuatu's geographical location, combined with underdeveloped international transport linkages, significantly increase the challenge of importing goods (see Figure 1). UNCTAD's Liner Shipping Connectivity Index<sup>12</sup> shows that Vanuatu, like many South Pacific countries, has relatively poor connectivity to global shipping networks. Shipping connectivity, however, is not the only challenge. Turnaround times at the international container terminal in Port Vila (the Star Wharf) are slow, while the high cost of port fees, inspection, services, freight forwarding, and

<sup>&</sup>lt;sup>11</sup> The expected costs were derived from engineers' estimates based on countries at similar levels of development. Yet recent Vanuatu experience includes: a) Upgrading roads to sealed surface: at least 41mVT (A\$400,000) per km (2 lane); b) Periodic maintenance of unsealed roads delivered through local contractors: 15mVT (A\$150,000) per km; and c) Routine maintenance of unsealed roads delivered through the PWD Force account: 0.77mVT (A\$8,000) per km.

<sup>&</sup>lt;sup>12</sup> The United Nations Conference on Trade and Development (UNCTAD) "Liner Shipping Connectivity Index (LSCI) aims at capturing a country's level of integration into global liner shipping networks (<u>www.unctad.org</u>).

stevedoring in Vanuatu adds to the challenges of importing goods<sup>13</sup>. As a result, the average cost to import a 20ft container of goods into Vanuatu (USD1,465) is the second highest of any country in the East Asia Pacific region (second only to the landlocked Lao PDR)<sup>14</sup>, and much higher than all of its South Pacific neighbours. In a partial response, the GoV has sought AusAID assistance to design an upgrade of the Star Wharf, along with the necessary port management reforms. GoV is now in final negotiations with the Government of Japan to secure a soft loan to finance construction of the new port.

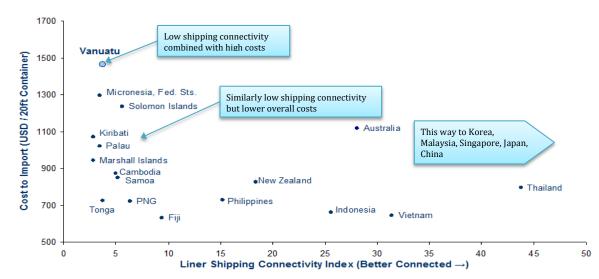


Figure 1: Liner Shipping Connectivity and Average Cost to Import a 20ft Container (2010)<sup>15</sup>

27 Domestic shipping faces even greater challenges. The Government has recently approved the ADB loan/NZAID grant funded Vanuatu Inter-island Shipping Project<sup>16</sup>. This aims to address problems of frequency, reliability, regularity, transit time, capacity, and institutional management.

#### 2.3.3 AVIATION

28 Likewise, domestic and, to a lesser extent, international air infrastructure services are also in disarray. Analysis shows that if air safety is to be assured, and efficient use made of the limited human and financial resources available, then current asset management practices and management arrangements will need to be reformed. To this end, AusAID is increasingly engaging with the two relevant state owned enterprises - Air Vanuatu and Airports Vanuatu Limited – being aware that for any investment in Vanuatu's aviation sector to be effective, it will need to take place against a backdrop of reform and good governance within these institutions. Other donors are also engaged in the sector. L'Agence Française de Développement has recently funded the upgrading of two of the 26 airports in the outer islands. There remains, however, a priority need to improve the safety and maintenance on all airstrips and, ideally, upgrade selected airstrips in order to better utilise the existing Air Vanuatu operating fleet. In view of this, AusAID has recently supported a PWD-led Scoping Study on Aviation infrastructure maintenance and safety needs. This found that the major international airports were safe, but that Bauerfield required significant runway resurfacing. Currently however, there are no accepted minimum design or maintenance standards being applied to the outer island aerodromes.

<sup>&</sup>lt;sup>13</sup> DTIS 2008. The current Star Wharf is also frequently used by cruise ships, forcing commercial vessels to "stand off" at these times with delays in turn-around.

<sup>&</sup>lt;sup>14</sup> World Bank, Doing Business project (<u>http://www.doingbusiness.org/</u>)

<sup>&</sup>lt;sup>15</sup> United Nations Conference on Trade and Development & World Development Indicators

<sup>&</sup>lt;sup>16</sup> MOU signed in August 2011.

Consequently, safety at the outer island aerodromes varies considerably. The study team therefore proposed a set of aerodrome categories, each with separate standards and benchmarks, against which to assess each aerodrome. These standards are in the process of being formally adopted they will be used for future aerodrome safety audits.

#### 2.3.4 GOV INSTITUTIONAL CAPACITY

- 29 Within MIPU, PWD is responsible for ensuring that public infrastructure contributes to economic and social development throughout its full expected design life. PWD, however, struggles not only to plan, design, procure and deliver services, but to effectively manage its existing national budget resources. There are several reasons for this, including: an outdated structure that cannot cope with the demands of delivery; a limited budget; inadequately trained staff; and poor remuneration packages (salary, allowances and study opportunities). Further complicating this is the extremely competitive market place for skilled staff, with the result that there are few incentives for the best graduates to join the public workforce. It is not surprising therefore to learn that PWD's challenging work environment has resulted in a 30% vacancy/acting rate for its 127 permanent positions.
- 30 A recent Skills Gap Audit and Training Needs Assessment under VTSSP I revealed that, although most MIPU Departments are staffed by officers with qualifications or in-service training corresponding to their Job Descriptions, this is not the case for the PWD. The skills that are lacking run the full gamut of possibilities. Skills need strengthening in: the management of legislative amendments, strategic and corporate planning capability (both financial and technical), human resource development, procurement, policy development, and engagement with both the private and commercial sectors. A comprehensive institutional strengthening and capacity building program is therefore needed.
- 31 The demands on the staff (not just of PWD but within any GoV Unit) are further compounded when donor funds for large projects are added to the resources needing management. Inevitably, these exceed the absorptive capacity of the institution, and capture scarce resources by diverting staff from their primary tasks.
- 32 Recognising the need for the better management, resourcing and coordination of large donor funded infrastructure projects, the GoV has taken two steps:
  - Firstly, roles within the PWD have been segregated: a Project Support Unit now handles recurrent rehabilitation works; while an "Operations and Maintenance Unit" handles preventative maintenance;
  - Secondly, a Vanuatu Major Projects Unit (VMPU) has been proposed for the Prime Minister's Office to administer those donor-funded infrastructure projects requiring design, construction and supervision capacity well beyond the core mandate of the line departments. The VMPU will operate through tenders that outsource all feasibility, design, construction, supervision and handover tasks for the development of key infrastructure.
- 33 These proactive steps by Government provide some confidence that the institutional capacity constraints which impacted significantly upon VTSSP I's implementation progress have been recognised and addressed as far as currently possible.

#### 2.3.5 CAPACITY OF THE PRIVATE SECTOR

34 Currently in Vanuatu, there are about fifteen medium scale building and civil works contractors who are capable of performing road maintenance works. However, most of

these are based on Efate or Santo and will only mobilise to outer islands if a significant premium is incorporated into the costings<sup>17</sup>.

- 35 Foundational work by the ADB<sup>18</sup> has shown that, because of economies of scale, South Pacific Nations (including Vanuatu) do not have a private construction sector capable of delivering large and complex infrastructure services in a timely and efficient manner. VTSSP I's experience<sup>19</sup> with contractor prequalification and the tendering of road works has clearly demonstrated that the existing market for construction and engineering services in Vanuatu remains shallow, and consequently cannot provide services at a sustainable cost. Moreover, it is expected to take up to ten years to build the market.
- 36 Initially, VTSSP I significantly overestimated the capacity and robustness of private sector infrastructure contractors. As a result, the planned VTSSP I tendering process was unsuccessful, and the delivery strategy required a rethink. In consequence, VTSSP I introduced simple Equipment and Operator Hire contracts, and supplemented these with engineering and supervision technical assistance. Whilst the PWD retains more of the commercial risks under this system, it has proven to be a pragmatic approach that has enabled urgent road rehabilitation on the outer islands.
- 37 Additionally, a key focus of VTSSP I was to develop the capacity of Island Based Contractors (IBCs) through the assisted contracting<sup>20</sup> of small scale road maintenance works. Yet whilst sustained support for the IBCs is sound, and should eventually lead to a strengthened contractor marketplace, it will take at least five years to have significant market impact. In the interim, the use of foreign consultant and contractor expertise will be necessary to supplement and mentor local capacity (both government and private sector), if the anticipated infrastructure works program is to be delivered in an affordable and timely manner. It is quite clear from discussions held with the private sector that a GoV outsourcing policy combined with a clear Infrastructure Master Plan (and Investment Strategy) would provide the confidence needed for local companies to invest in their businesses.
- 38 Pleasingly, VTSSP I engagement of local IBCs and community labour in operations and maintenance tasks, closely aligns with Vanuatu's new National Skills Development Policy. This calls for any provincial infrastructure projects to include the training<sup>21</sup> and employment of local labour in skilled and semi-skilled positions. However, future work also needs to integrate with of the national Technical Vocational Education and Training (TVET) program (also supported by AusAID), the impact and reach of which are increasing considerably. This will provide a useful resource to supplement skills development in the outer islands, both technical and managerial.

<sup>&</sup>lt;sup>17</sup> An assessment of local contractor capacity was completed as part of the VTSSP I and is on file with the PWD. A summary of this is included in Annex 3. In addition the contractor prequalification report for VTSSP I is held on file. <sup>18</sup> Refer to ADB : RETA 6477: Preparing a Response in the Pacific to High Prices, October 2008

<sup>&</sup>lt;sup>19</sup> VTSSP I openly prequalified eight nationally registered contractors. A total of nine bids were received from five contractors (including two large multinational contractors) for the three large packages of work tendered under National Competitive Bidding (NCB). However, all bids received were unaffordable, exceeding the engineers' cost estimates by more than 300%. An estimated AUD6m contract for the three packages resulted in a lowest tender price of AUD21m. This highlights the low competition, the logistical complexity, and the high risk - and consequently the high costs - associated with civil works in the outer islands. After a complex evaluation process, only two NCB contracts of reduced scope were awarded under VTSSP I. The third was abandoned as a failed tender.

<sup>&</sup>lt;sup>20</sup> Assisted contracting under VTSSP I included the provision of expert training , mentoring and close supervision of 28 small island based contractors competitively selected, and supported through a staged program of small works.

<sup>&</sup>lt;sup>21</sup> Training provided should meet the standards prescribed by the Vanuatu National Training Council (VNTC).

#### 2.3.6 Emerging Social/Gender Impacts of Improved Transport

- 39 Interventions that improve all-weather road access, reduce travel time, and improve passenger transport services generate a range of social and economic benefits for poor people. Specific benefits include: improved access to health and education (as well as to other government services such as veterinary services and agricultural extension), expanded livelihood opportunities, increased domestic productivity, and enhanced emotional wellbeing. Preliminary assessment of VTSSP I outcomes demonstrate some of these impacts. For example, the completion of road improvements on Tanna Island resulted in the commencement of passenger bus services to the inner island area of Middlebush for the first time. The service has halved the one-way cost of trips to market from VT600 to VT300V. Yet for such benefits to be captured not just by a minority, but by the whole of the community men, women, boys, girls, the elderly and the handicapped the specific needs, particularly of the more vulnerable groups, need to be better understood and targeted.
- 40 In particular, the negative impacts of improved transportation systems on women cannot be ignored. It is well known that the arrival of construction gangs, the advent of trucking and other transport delivery services, and increases in tourism, all lead to increased exploitation, prostitution and health risks for local women and girls.
- 41 The prevalence of HIV/AIDS in Vanuatu is estimated to be low. However, there is a very high rate of other Sexually Transmitted Infections<sup>22</sup>, associated with a limited surveillance system, inadequate testing, and cultural stigmas that impede open discussion and suggest the potential of even higher incidence. Such a prevalence of proxy indicators, plus the presence of many at-risk groups (e.g. commercial sex workers, mariners, and migrant labourers) suggest that Vanuatu is increasingly vulnerable.
- 42 VTSSP I included a study of social and gender impacts following the improved trafficability of roads on the islands of Ambae, Malekula and Tanna. However, this study was only tendered in late 2011, and results are not yet available. All the same, it is envisaged that future support must not only incorporate the findings of this study, but extend it wherever necessary. In particular, future support must consider how to minimize the negative impacts of improvements in transportation not just on the status of women, but on all the vulnerable, including the aged and the handicapped. For instance, VTSSP I works incorporated the simple provision of road entry ramps to ensure that aged, disabled and infirm persons could easily access the improved roadways. The general aim must always be to safeguard the status of the vulnerable in the short term, and improve it in the long term.
- 43 It is important to note that, from a broader perspective, the GoV is a signatory to the Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW). It has made a particular commitment to the promotion of gender equality under Goal 3 of its Millennium Development Goals. A Department of Women's Affairs has also been established to promote gender equity and improve the status of Vanuatu's women. Furthermore, VTSSP, as part of the Partnership for Development between the governments of Australia and Vanuatu, is committed to improving gender equality. As of December 2011, VTSSP I activities have generated over 78,000 person days of employment, about 14% of which have been provided by women (i.e. almost 11,000 person days). For many of these women it was their first formal employment experience.
- 44 The improvement of transportation systems has had other detrimental social effects, the most important and immediate of which is road trauma. Unsurprisingly, as road networks

<sup>&</sup>lt;sup>22</sup> Chlamydia prevalence in women aged 16 – 24 is 25%.

have developed in the more populated areas (such as the recently sealed Efate Ring Road), there have been corresponding increases in vehicle numbers, speeds, and unregulated driver behaviour. This has a high risk of increasing fatalities and injury rates.

45 Hence support must be provided for a GoV response to road safety. This will require a combination of education, engineering and enforcement measures - the three E's - over a sustained period. The proposed introduction of two new Acts - a Public Roads Act and a Traffic Management Act – will be a step in the right direction. However, implementing the provisions of these Acts will present a significant institutional challenge.

#### 2.4 LESSONS LEARNED

- 46 VTSSP I revealed much about the fragility of Vanuatu's transport system, as well as the root causes of the issues confronting the sector. These are summarised in Figure 2.
- 47 Initially, VTSSP I struggled to gain momentum. It was confronted with a multiplicity of problems. It assumed wrongly that there was appropriate capacity within the PWD, competitiveness and capacity within the private sector, and also that the cost of refurbishment necessary to bring island roads up to a minimum standard would be containable. All proved to be wrong, and all required the crafting of flexible responses that delayed delivery.
- 48 Yet despite its sluggish beginnings, VTSSP I has recently made solid progress including:
  - Reconstruction of 68kms, and spot improvements to 76kms, of priority roads on Ambae, Tanna and Malekula. These works will now be completed by mid-2012;
  - The establishment of new road maintenance approaches. Regular maintenance of the 144kms of reconstructed priority road is now being undertaken (representing around 10% of the Vanuatu's unsealed road network);
  - The partial rebuilding of technical capacity in both the PWD and the private sector;
  - Improvements in government systems for contracting and payment of suppliers in the outer islands;
  - A 'stock take' of human resources within MIPU, and the development of an associated comprehensive training plan;
  - The revitalization of processes for annual planning and reporting, as well as policy updating; and most significantly perhaps
  - The generation of improved morale and a 'sense of purpose' amongst PWD staff. For the first time, PWD staff are beginning to believe that their prospects can indeed be changed for the better.
- 49 Given these developments, it is important that future assistance to the transport sector be based on a realistic footing. Especially that it assimilates the key lessons of VTSSP I, including the need for:
  - The rehabilitation of those essential transport links whose deterioration is becoming critical;
  - The establishment of several tiers of local private sector capacity in a way that allows for: community level maintenance; island based contracting; and national and international tendering;
  - Institutional strengthening of the PWD. The priority need is to efficiently, effectively and transparently use its national budget for the maintenance of transport systems, including outsourcing in cases where private sector capacity is more efficient. It is only once the PWD has been sufficiently strengthened, that it can take on more work from donor sources;
  - Transparent reporting of expenditure and implementation progress to provide both governments with timely and accurate information;

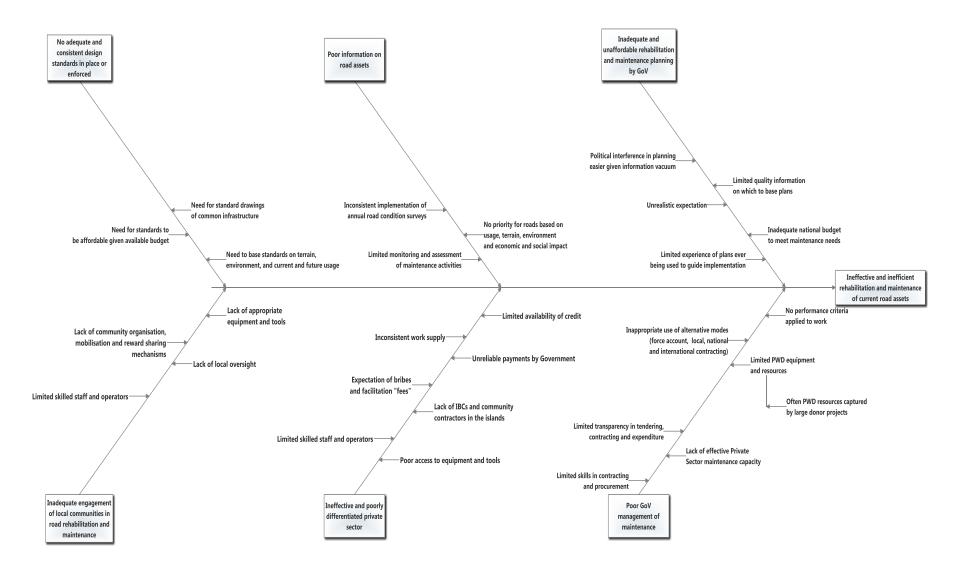


Figure 2: Cause and Effect Diagram Summarising Current Constraints to the Transport Sector

- Sound criteria and credible analysis that prioritises infrastructure investments that deliver optimal economic and social growth;
- Direct support to government policy positions, by ensuring any investments support broader government objectives (such as those articulated in the proposed National Infrastructure Strategic Investment Plan): and
- Careful alignment of assistance with GoV decision-making processes (this being quite distinct from decisions as to whether to use GoV systems for procurement).

#### 2.5 CONSISTENCY WITH EXISTING AUSAID AND OTHER DONOR PROGRAMS

- 50 In the past, too much donor assistance to the transport sector in Vanuatu has either been adhoc, or has failed to build on the lessons of the past. In the worst cases, donor assistance has not only been short sighted and clearly unsustainable<sup>23</sup>, but has lacked regard for long-term systemic reform. VTSSP I, with all of its associated studies and investments, has currently established Australia as the primary donor in the transport sector in Vanuatu. As such, there is a huge responsibility for Australia to model effective infrastructure development. The PfD acknowledges and addresses this need in one of its five outcomes. This particular outcome aims for a more integrated, long-term, and sector wide approach to the provision of infrastructure that supports economic growth and enhances service delivery. More specifically, the PfD calls for:
  - Improved management and accountability within the PWD, in order to restore confidence in its performance<sup>24</sup>;
  - Rehabilitation and improved maintenance of high priority roads; and
  - Progress on reform to improve maritime and aviation transport.

VTSSP is the PfD's primary mechanism to deliver these transport sector outcomes.

- 51 To further strengthen donor coordination, it is planned that future phases of VTSSP will be funded by AusAID through the Pacific Region Infrastructure Facility (PRIF)<sup>25</sup>. PRIF is a multi-partner financing mechanism that allows for greater levels of donor coordination in the funding of South Pacific infrastructure projects<sup>26</sup>.
- 52 Furthermore, Australia has established strong links with three parallel transport related initiatives proposed by the ADB, NZAID, and JICA (Table 4), and plans significant co-contributions to several of these investments. Future phases of VTSSP will not only need to build on these links, but ensure on-going coordination and collaboration.

| Development<br>Initiative   | Donor        | Funding   | Timing  | Aims  |
|---|--------------|---|---|---|
| Inter-Island<br>Shipping<br>Support Project                           | ADB<br>NZAID | \$26.82m<br>(\$10.82m ADF<br>loan; \$12.6m<br>NZAID; \$3.4m<br>GoV financing) | Start early<br>2012                             | The project will deliver better access to<br>markets and social services in outer island<br>project areas, stronger safety regulations<br>and compliance, and improved shipping<br>infrastructure |
| International<br>Multi Modal<br>Port at Star<br>Wharf in Port<br>Vila | JICA         | \$60m soft loan   | Start 2013<br>(expected<br>delivery in<br>2016) | Construction of a new wharf, container yard<br>and facilities at the Star Terminal in Port Vila<br>to improve efficiency at the existing<br>international wharf.                                  |

<sup>&</sup>lt;sup>23</sup> e.g. the introduction of a computerised asset management system in the PWD.

<sup>&</sup>lt;sup>24</sup> This statement was confirmed during August 2011 PfD talks.

<sup>&</sup>lt;sup>25</sup> PRIF membership includes: AusAID, NZAID, the ADB, the World Bank Group, the European Commission and the European Investment Bank.

<sup>&</sup>lt;sup>26</sup> VTSSP I was also funded through PRIF, although with a later additional contribution from the Australian International Climate Change Adaptation Initiative (ICCAI) that allowed for the integration of adaptation measures into the program of road works.

| Development<br>Initiative                 | Donor         | Funding   | Timing            | Aims   |
|---|---------------|---|-------------------|--|
| Port Vila Urban<br>Development<br>Project | ADB<br>AusAID | US\$39.16m<br>(\$5.00m ADF<br>loan; \$31m<br>AusAID grant;<br>and \$3.16m<br>GoV financing) | Start mid<br>2012 | This supports economic growth by<br>improving drainage, roads, and sanitation<br>systems in Port Vila and adjacent urban and<br>peri-urban areas in Shefa Province. The<br>project will implement the<br>recommendations of the Drainage and<br>Sanitation Master Plan. A future phase of the<br>project will extend coverage to Luganville. |

Table 4: Current and planned donor supported transport programs in Vanuatu.

- 53 Support to transport infrastructure in Vanuatu under VTSSP I has been aligned with both AusAID's Infrastructure for Growth Initiative (2007-12), and its successor the Economic Infrastructure Initiative (2009-2014). Future assistance under VTSSP II is expected to align with Australia's new Sustainable Economic Growth Strategy, the first pillar of which is the achievement of sustainable transport infrastructure. The Sustainable Economic Growth Strategy challenges any Australian assistance to foreign transport sectors to:
  - move towards fewer, broader sector programs;
  - act as a catalyst for innovation;
  - work in collaboration with partner government systems;
  - promote improved road safety in design and through advocacy work; and
  - consider the likely impacts of climate change on any work undertaken, mitigating risks through the design of efficient and well planned transport systems, with infrastructure that can survive extreme weather events and coastal erosion.

#### 2.6 RATIONALE FOR AUSAID INVOLVEMENT

- 54 To achieve the changes envisaged, a sustained program of support is needed that is closely aligned with, and responsive to, GoV-led policy initiatives. Such a long term focus has been shown to deliver real capacity improvements, as evidenced by the impact of other long term initiatives on GoV Ministries such as Finance and Economic Management.
- 55 VTSSP has always been envisaged as a long-term (15 year) engagement that will iteratively reflect and evolve through a series of phases. The expected long term impact pathway is outlined in Figure 3:

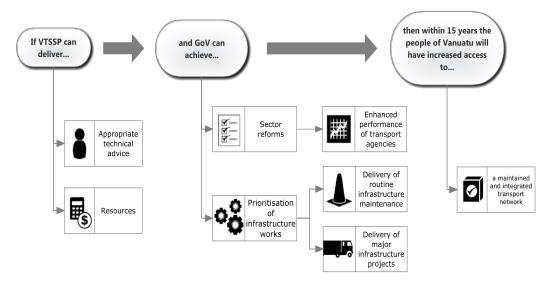


Figure 3: Long-term (15 year) impact pathway for VTSSP

- 56 The context analysis has however outlined the significant challenges facing Vanuatu if it is to achieve this ambitious agenda. The analysis presents the stark reality of the challenges facing the roads, maritime and aviation sectors, as well as the limitations presented by poor national planning, inadequate resources, shallow Government and Private Sector capacity, and emerging social impacts.
- 57 Over the last four years under VTSSP I, PWD has certainly improved its capacity, its professional staffing and its focus. But it is only now consolidating its vision and redefining its capacity so that it can focus on basic road maintenance services. While VTSSP I has made satisfactory to good progress, it is apparent from its experience in the road sector, along with the parallel studies undertaken by the GfG program of aviation and marine requirements, that the needs remain significant and that the vision of an integrated transport system is still many years off.
- 58 It is thus very apparent that the next stage of VTSSP needs to be modest in its goals and focus on getting the foundations in place. Initially it was envisaged that the second phase of VTSSP may expand beyond road transport to include marine and aviation engagements. However it is clear that much is still required to consolidate the core road functions across the country. There is compelling evidence that VTSSP II should not expand too quickly but instead focus on consolidating PWD's fledgling road rehabilitation and maintenance program and bring this to the national level.
- 59 It is pleasing to note that, partly because of the studies supported by Australia's GfG program, that the aviation and maritime sectors are the focus of some small but significant engagements by other donors. This relieves some of the pressure on VTSSP to expand.
- 60 Given this, the recommended pathway for VTSSP II is to support MIPU/PWD to responsibly prioritise, plan, build and maintain road transport infrastructure within available national and donor resources. To do this VTSSP II should focus on two key Outcomes:
  - Firstly, on the on-going process of institutional transformation within PWD so that it improves its policy, oversight, resourcing, planning and coordination capacity for the road sector; and
  - Secondly, on supporting PWD to expand both routine and periodic road maintenance to the national level along with the resources and partnerships needed to sustain these services.
- 61 The simple and logical impact pathway that delivers against these two Outcomes in the medium term is reflected in Figure 4 and forms the basis for VTSSP II. This focus will however require that the AusAID GfG Transport Adviser maintain a strategic overview of all engagements and builds integration where necessary.

# **3 PROGRAM DESCRIPTION**

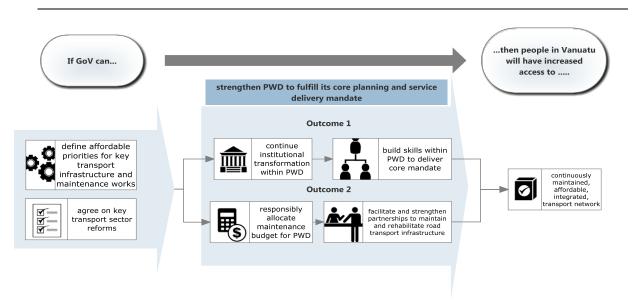
#### 3.1 GOAL AND PURPOSE

62 It is proposed that the current long-term Goal of the VTSSP Program be slightly modified to:

People in Vanuatu have increased access to a well maintained, affordable and integrated transport network.

- 63 This broad statement better reflects that the ultimate beneficiaries are all the people in Vanuatu (citizens and non-citizens alike) who rely (directly or indirectly) on transport services in order to realise social and economic benefits. In addition, the goal frames the development challenge in terms of a sustainable and well maintained transport network that is affordable i.e. within the combined resources of the GoV and its donor partners. Finally, the goal recognises the importance of a transport system in Vanuatu that integrates road, air and sea linkages to the greatest extent possible given Vanuatu's geography. The fifteen-year 'theory of change' of VTSSP is depicted in Figure 3.
- 64 The Purpose for Phase II of the VTSSP over the next four years is that:

The GoV demonstrates capacity to responsibly prioritise, plan, build and maintain road transport infrastructure within available national and donor resources.



#### Figure 4: Impact Pathway anticipated over the next four years of VTSSP II

65 Critically, this purpose includes some conditional implications for VTSSP II.

• The analysis in Section 2.2 shows that that MIPU is an organisation with broad and somewhat disparate responsibilities. Furthermore, PWD itself is ostensibly responsible, not only for upgrading and maintaining roads, but also for jetties, airstrips, buildings, drainage structures, urban water supply networks, as well as servicing the Government vehicle fleet. It is widely appreciated that PWD has insufficient capacity or resources to undertake all these tasks. In fact it is apparent that the majority of work of the Operations and Maintenance Unit already relates to roads and other mandates are

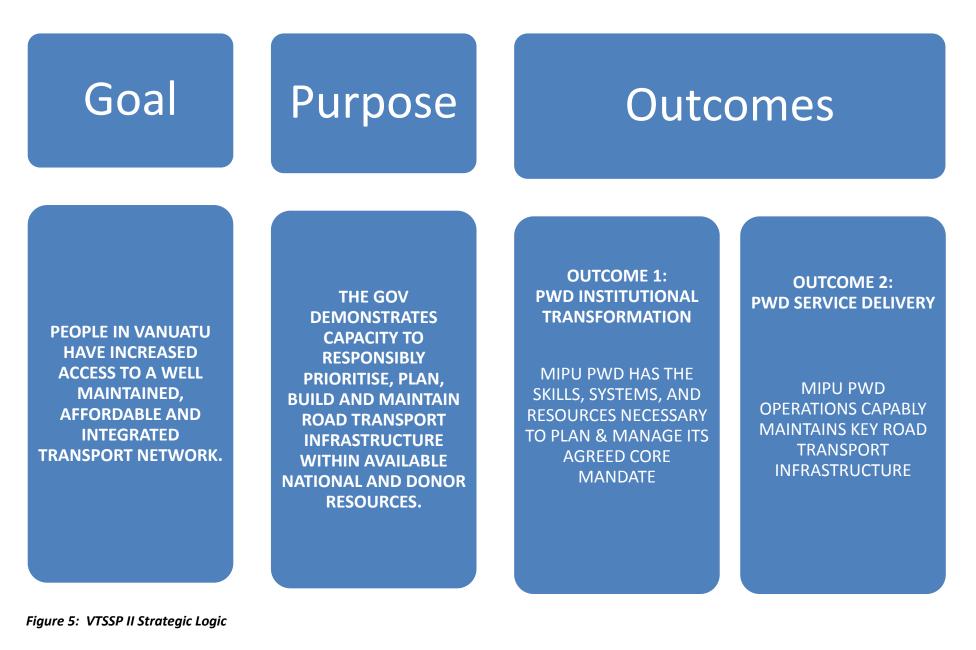
poorly serviced. PWD must rationalise its mandate and provide Government with a realistic assessment of its capacity and the necessary resources.

- Unless the GoV can demonstrate a responsible approach to managing its road transport infrastructure over the next four years, then the fundamental justification of Australia's fifteen year commitment to the VTSSP needs to be reviewed, and other delivery mechanisms to achieve the Goal considered.
- The prioritisation of road transport infrastructure must be a whole-of-government undertaking, involving all of the MIPU, as well as the Council of Ministers and other government stakeholders.
- Given the capacity constraints faced by the GoV technical, institutional, human and financial capacity building must remain a core agenda of the program.
- Finally, the purpose recognises the importance of responsible transport sector oversight that transparently prioritises those works that are not only affordable, but can be maintained within the known resources of the GoV, the private sector and the communities.

#### **3.2** EXPECTED OUTCOMES

- 66 Given this, for VTSSP II to achieve its purpose, two outcomes are needed. Each defines a key dimension of the GoV's 'responsible capacity' to deliver and maintain road transport infrastructure (Figure 4). Furthermore, each outcome reflects different stakeholders.
- 3.2.1 OUTCOME 1: PWD INSTITUTIONAL TRANSFORMATION: MIPU/PWD HAS THE SKILLS, SYSTEMS, AND RESOURCES NECESSARY TO PLAN & MANAGE ITS AGREED CORE MANDATE
- 67 This Outcome will be delivered by the MIPU/PWD and targets the skills, systems, and resources necessary for MIPU/PWD to plan and manage an agreed core mandate. Outcome 1 must consider all of PWD's roles with a view to rationalisation but the majority of the transformation process must focus on the skills, systems and processes necessary to service the rehabilitation and maintenance of priority roads.
- 68 This outcome builds on and continues the program of institutional strengthening and transformation enacted in VTSSP I. Of particular importance to Phase II will be:
  - Output 1.1: Function Core strategy, budgeting, policy, oversight, and service delivery functions agreed and delivered: This output requires that the GoV agrees on the PWD's core strategy, budgeting, policy, oversight and service delivery functions, and that these are resourced, implemented and maintained. The most important aspect of this output will be the rational agreement and balancing of core functions and available resources. MIPU's Corporate Services Unit (and particularly HR) will need to work with PWD. Advisory support to the MIPU HR Unit will ensure activities within PWD are consistent with Ministry Policy. Considerable technical assistance has already been dedicated to the analysis needed for PWD to narrow and transform its function. These studies propose that the PWD focus its scarce resources on the planning and maintenance of priority assets, primarily through outsourcing. However, the PWD and MIPU in general are only partially on-board<sup>27</sup> with this approach, and it will require consistent reform within MIPU over many years for it to become a reality. Output priorities will be reviewed, negotiated and agreed on an annual basis, as part of VTSSP II Work Planning.

<sup>&</sup>lt;sup>27</sup> Several changes to appointments made by the Director General of MIPU throughout 2011 have disrupted the reform momentum already in progress, and introduced uncertainty in the pace and direction of transport sector management reform.



Over the first year it is proposed that:

- MIPU and PWD deliberate on PWD's vision and mission and track a plan for the organisations transformation in line with the Government's outsourcing agenda;
- MIPU and PWD significantly revise and update the 2011 MIPU Corporate Plan to reflect the agreed transformation and the changes anticipated over the coming four years;
- PWD prepares a quality 2013 PWD Annual Work Plan as well as Annual and Interim Reports. The Work Plan should reflect the evolving transformation of the organisation in line with its outsourcing agenda;
- The PWD audit all operational policies, procedures and associated structure;
- The PWD rationally undertake budget planning and management within the strict limitations of national & VTSSP II resources; and
- The PWD develops a National Inventory & Policy for the use of natural resources for road building. This will deliver an inventory of the national stock of suitable road building materials, as well as a policy for community negotiation, community compensation, material extraction and quarry use.
- Output 1.2: Systems Administration, finance, procurement and management information systems developed and maintained: The second output will be that the GoV administration, management and information systems must be agreed, installed, used and maintained. Already significant support under VTSSP I has strengthened the Contract Management System. Furthermore, work on the Financial Management System has identified major areas where immediate reform is needed so that fiscal responsibility is ensured. Similarly, Information Management and IT systems need significant upgrading. Output priorities will be negotiated and agreed on an Annual basis as part of VTSSP II Work Planning.

Over the first year it is proposed that:

- The PWD improves its Road Maintenance Planning and Monitoring System through the immediate revival and regular updating of the Transport Network Asset Management System and the establishment of a Transport Infrastructure Information System (TIIS)<sup>28</sup>; and
- The PWD continue to improve Procurement & Contract Management by strengthening and standardising the improvements already made to the Contract Management System and implementing improved procedures for procurement<sup>29</sup>.
- *Output 1.3: Skills Human resources managed and developed:* The final output will be the establishment of sustainable skills within the PWD that support its core mandate. A chronic shortage of professional graduates, significant market competition for skilled staff, and bureaucratic appointment processes, all contribute to the current severe HR problems experienced by the PWD. Staff vacancies and "acting" appointments have severely undermined the sustainability of VTSSP I activities. However, the problems are complex, and solutions will take significant time to not only institute but take effect. The long awaited PSC approval of the current interim structure is an important first step. On-going review is, however, needed, as it is most important that VTSSP build upon an affordable, workable, and agreed structure as a precondition for later investments in capacity building.

Yet while its interim structure will allow permanent appointments to progress, the PWD should also be giving consideration to its aging workforce and significant training needs,

<sup>&</sup>lt;sup>28</sup> See Section 4.4 and Annex 7.

<sup>&</sup>lt;sup>29</sup> See Section 3.3.1 and Annex 2.

as well as to ways in which it can retain its skilled staff. Current HR analysis has proposed the basis for a long term strategy. Options include a graduate intern program. The PWD will, however, need to finalise its HR Strategy and begin immediate implementation of agreed reforms if it is to deliver its mandate in a timely manner. VTSSP II may also need to consider supporting in-line specialist positions as a short to medium-term measure. Output priorities will be negotiated and agreed on an Annual basis as part of VTSSP II Work Planning.

Over the first year it is proposed that:

- MIPU/PWD reconsider PWD's interim structure to ensure it can deliver on its mandate;
- MIPU/PWD implement their proposed HRD Strategy;
- MIPU/PWD resource the implementation and evaluation of the proposed PWD Capacity Building Program, covering planning, management, administration and technical skills<sup>30</sup>; and
- The PWD supplement its service delivery capacity by establishing a Standing Panel of local consultants to enable more efficient outsourcing of technical expertise (e.g. contracting of design, supervision, and management of contracted road reconstruction and/or maintenance works). Services from this panel will in part be funded from the *Supplementary Technical Contracts Grant Fund*.
- 69 To support the delivery of all three Outputs required for Outcome 1, advisory support will be provided in the following areas:
  - A Team Leader/Institutional Development Specialist (TL/IDS) and a Public Financial Management Specialist (PFMS) will work within the PWD to define core planning, budgeting, policy, oversight, and service delivery functions.
  - A Senior Roads Maintenance Planning Engineer (SRMPE), a Contracts Management Specialist (CMS), and the PFMS will assist the PWD to install and implement appropriate administration, finance, procurement and management information systems.
  - A Human Resources Development Specialist (HRDS) will support the PWD in the articulation and implementation of their HRD Strategy and PWD Capacity Building Program.
- 3.2.2 OUTCOME 2: PWD SERVICE DELIVERY: *MIPU/PWD OPERATIONS CAPABLY MAINTAINS KEY ROAD TRANSPORT INFRASTRUCTURE*
- 70 This Outcome will be delivered by the PWD's Operations and Maintenance Unit in partnership with key private sector actors. This Outcome targets the capable maintenance of key road transport infrastructure by PWD operations.
- 71 This outcome purposefully separates the implementation of prioritised transport maintenance works from the planning and oversight covered by Outcome 1. This aligns with current recommendations that would see the PWD transform over time into a planning and oversight agency, with service delivery functions progressively outsourced. This transformation will, however, take at least ten to fifteen years to fully achieve.
- 72 Importantly, Outcome 2 directly addresses the new National Skills Development Policy. This policy now requires the training of a skilled and semi-skilled community and private sector workforce within the Provinces, to assist with the operations and maintenance of any improved infrastructure.

<sup>&</sup>lt;sup>30</sup> See Annex 4

- 73 Hence, over the next four years core outputs expected from Outcome 2 include:
- *Output 2.1: Physical Works PWD Operations Group undertake core road network reconstruction and maintenance:* The physical works will be progressively implemented in the three provinces of (Penama, Malampa and Tafea), where works will continue on the existing three islands, expanding out to Pentecost in the Penama province continued expansion into other islands and provinces will be dependent on progress on the existing three islands, and Pentecost. A preliminary schedule of works is outlined in Table 5. By the completion of VTSSP II it is expected that the following will be achieved:
  - Basic and sustainable Routine Maintenance on an annual basis of the target network of 350km of road across four islands;
  - Sustainable Periodic Maintenance of the target network of 350km of road across four islands;
  - Drainage and road improvements for 350km road by year 4;

The annual priorities will eventually be driven by the proposed National Infrastructure Strategic Investment Plan. However, until this is finalised, priorities will be guided by both the Corporate Plan and the Annual Implementation Plan of MIPU/PWD. All proposed physical works undertaken by the PWD under VTSSP II will be confirmed on an annual basis by Australia and Vanuatu during VTSSP II Work Plan negotiations. This includes the decision to expand works into other islands. The proposed processes for screening roads under VTSSP II are outlined in Annex 5. It must be stressed however, that maintenance of the roads already rehabilitated/upgraded under VTSSP I must receive priority funding under this outcome.

PWD will increasingly establish local contractual partnerships with communities and the private sector (small to medium IBCs) to outsource road rehabilitation and maintenance (see Output 2.2).

The PWD and AusAID have agreed that in its first year physical works outputs will include:

- Review and finalise the draft road screening and selection process (provided in Annex 5) and implement it in Pentecost;
- Undertake the Year 1 Physical Works outlined in Table 5. A more detailed description of the work envisaged is provided in Annex 5;
- Procure small plant and equipment to be used by IBCs and community labour for the four target Islands in Year 1 (see Annex 5). PWD is to store and issue to the IBCs on a hire basis; and
- Contract the design, supervision, and management of projected road reconstruction and maintenance works using Grants funds.

| VTSSP II Physical Works – Proposed Phasing |                               |  |
|--|-------------------------------|--|
| Year 1Year 2Year 3 and 4                   |                               | Year 3 and 4                             |
| Four Islands:                              | Four Islands:                 | Four Islands                             |
| Malekula;                                  | Malekula;                     | Malekula;                                |
| Tanna;                                     | Tanna;                        | Tanna;                                   |
| Ambae; and                                 | Ambae;                        | Ambae;                                   |
| Pentecost.                                 | Pentecost; (with possible     | Pentecost; (with possible                |
|  | inclusion of one more island) | inclusion of more islands) <sup>31</sup> |

<sup>&</sup>lt;sup>31</sup> In years 2,3 and 4, there is a possibility to extend works to other islands in a staged process, dependent on progress and achievement of objectives on the existing 3 VTSSP islands, and Pentecost. This decision will be made jointly by PWD and AusAID and shall be endorsed by the management committee.

| VTSSP II Physical Works – Proposed Phasing   |  |  |  |  |
|--|--|--|--|--|
| Year 1   | Year 2   | Year 3 and 4   |  |  |
|  |  |  |  |  |
| <ul> <li>Routine Maintenance:</li> <li>Total approximately 200km</li> <li>At least 50km/yr/island across 4 islands</li> <li>Using Island Based Contractors (IBCs).</li> <li>Including roads rehabilitated under VTSSP 1</li> </ul> | <ul> <li>Routine Maintenance:</li> <li>At least 50km/yr/island<sup>32</sup><br/>across 4 islands</li> <li>Using IBCs</li> <li>Including all roads<br/>rehabilitated in Year 1</li> <li>Total approximately 250km</li> </ul>        | <ul> <li>Routine Maintenance:</li> <li>At least 50km/yr/island<br/>across 4 islands</li> <li>Using IBCs</li> <li>Including all roads<br/>rehabilitated in Year 2<br/>(and Year 3).</li> <li>Total approximately<br/>350km</li> </ul>                           |  |  |
| <ul> <li>Periodic Maintenance:</li> <li>Aim total 132 km</li> <li>33km/island across 4 islands</li> <li>Use PWD Force Account,<br/>Equipment Hire Contracts (EHC)<br/>or National Competitive Bidding<br/>(NCB).</li> </ul>        | <ul> <li>Periodic Maintenance:</li> <li>Aim total 165 km</li> <li>33km/island across 4<br/>islands.</li> <li>Use PWD Force Account,<br/>EHC or NCB.</li> </ul>   | <ul> <li>Periodic Maintenance:</li> <li>Aim total 198 km (Yr 3) – 4 islands (possibly more)</li> <li>Aim total 231 km (Yr4) – 4 islands (possibly more)</li> <li>33km/island</li> <li>Use PWD Force Account, EHC or NCB.</li> </ul>                            |  |  |
| <ul> <li>Drainage and Road Improvements:</li> <li>For selected sections of road</li> <li>Using IBCs and for larger works NCBs,</li> <li>200 km of road</li> </ul>  | <ul> <li>Drainage and Road<br/>Improvements:</li> <li>For selected sections of road<br/>using IBCs and for larger<br/>works NCBs,</li> <li>IBC contracts include<br/>routine maintenance works.</li> <li>250 km of road</li> </ul> | <ul> <li>Drainage and Road</li> <li>Improvements: <ul> <li>For selected sections of road using IBCs and for larger works NCBs,</li> <li>IBC contracts include routine maintenance works.</li> <li>250 km in Year 3 and 250 km in Year 4</li> </ul> </li> </ul> |  |  |

Table 5: Anticipated phasing of Physical Works (to be confirmed each year via the PWD Annual Work Plan)

• *Output 2.2: Technical Services.* It is essential that the PWD can implement whatever physical works it undertakes, either through its own internal technical service capacity, or by establishing appropriate partnerships with private sector or community based agents. These will supplement and gradually replace existing PWD workforce arrangements. Hence, as private sector/community capacity improves, VTSSP II will increasingly enact the GoV's outsourcing agenda (using a combination of PWD government budget, VTSSP and other donor funds). Over time it is planned for more and more of the physical works to be outsourced, while the PWD itself assumes a greater role for oversight, supervision and quality assurance. However, this will be a gradational change that requires the PWD to initially maintain some operational capacity, while at the same time working with potential partners to build their capacity to deliver technical services. Output priorities will be negotiated and agreed on an Annual basis as part of Work Planning.

Over the next year it is proposed that:

- The PWD enact necessary outsourcing procurement and contracting protocols (developed under Output 1.2) to undertake the physical works identified for Year 1;
- The PWD enhance, establish, support and train a cohort of small scale Island Based ISPs on the current three islands as well as Pentecost;

<sup>&</sup>lt;sup>32</sup> KM of roads to be maintained may change depending on number of islands and allocated budgets.

- The PWD continue the mentoring and supervision of IBCs on the current three islands and establish IBCs on Pentecost; and
- The PWD Engage supplementary technical services from the Standing Panel and funded through the *Supplementary Technical Contracts Grant Fund* to:
  - undertake design, supervision, management and Quality Assurance work as required for Year 1 physical works; and
  - Commence pavement research.
- 74 To support the delivery of outputs under Outcome 2 advisory support will be provided in the following areas:
  - An international Senior Road Maintenance Planning Engineer; and
  - Three international Road Maintenance Engineers.

#### 3.3 FORM OF AID PROPOSED

- 75 The design proposes VTSSP II continue the already established "program approach" used in VTSSP. A program approach allows for the phasing of implementation, as well as for regular review; it is also more flexible and responsive than most other approaches all of which are necessary to allow for delivery mechanisms that can evolve over time. This evolutionary capability is necessary to cope with the uncertainties caused by:
  - a dynamic and highly complex institutional, policy and political context,
  - the need for Australia's development cooperation to remain responsive and in a position to build on existing relationships where traction for doing so exists (and to downscale activities where there is little traction);
  - The small size and limited absorptive capacities of Government, civil society and private sector agencies;
  - The fact that most investments in the transport sector are, by nature, highly political. They are therefore vulnerable to a range of risks that require flexibility. In this way assistance can be reassessed as priorities change;
  - The anticipated need to frequently depend on key individuals within Government to drive and champion change; and
  - The uncertainty of budgets, both Government and donor. In the case of AusAID it is possible that budgets may increase significantly over the coming years.
- 76 Furthermore, VTSSP II is to be owned by the Government of Vanuatu, and a "program" approach aligns well with the Government's own long term commitment to achieving an improved transport system.
- 77 A Program approach also enables joint oversight by both the GoV and the GoA (through AusAID). Such joint governance will allow the program to more easily respond to changing circumstances a need clearly embedded in the bilateral PfD. However, a program approach also assumes that Australian commitment will continue in the longer term (provided, of course, that the established partnerships demonstrate progressive engagement, and make a clear contribution to outcomes). Australia would thus become the lead donor in assisting the GoV to make headway with transport reform, while at the same time facilitating effective donor coordination, in particular opportunities for the co-financing of various aspects of the VTSSP as it evolves.

#### 3.3.1 FUNDING MECHANISM

Funding for VTSSP II will be through two streams (see Table 9). Firstly, AusAID will engage the services of an Implementation Service Provider to support and mentor MIPU and PWD. This contract will include funding for technical services and operational support. Secondly AusAID will deliver funds directly to the GoV through the Ministry of Finance and Management's (MFEM) Development Fund Account. Funding will include seven Grants as follows:

- Routine Maintenance Grant;
- Periodic Maintenance Grant;
- Road and Drainage Improvement Grant;
- Procurement of Small Plant , equipment and tools Grant;
- Equipment Workshop Grant;
- Impact Evaluation Study Grant; and
- Supplementary Technical Contracts Grant.
- 79 Funding and fiduciary control mechanisms proposed for the above VTSSP II Grant funds under the MFEM's Development Fund Account build on the disbursement and accountability lessons arising from VTSSP I. Detailed analysis of the VTSSP I experience (Annex 2) is summarised in Table 6.
- 80 The design analysed different options. The recommendation is that VTSSP II AusAID Grant funds will be placed in the GoV Development Fund Account, and that procurement and disbursement occur through GoV accounting and reporting systems (as for VTSSP I). However, unlike VTSSP I, this will now be supported by reinforced processes. These are detailed in Annex 2 and include provision for:
  - AusAID funds transfers;
  - GoV reporting against the VTSSP Project Account and the Development Fund Account;
  - Development Fund Account and PWD VTSSP audits;
  - PWD, VTSSP & MFEM financial delegations oversight; and
  - PWD, VTSSP procurements under VT5m.

| Funding Level                   | Issues identified   |  |
|---------------------------------|---|--|
| <b>Development Fund Account</b> | GoV auditing of the DFA has been minimal over the past decade.          |  |
| (DFA)                           | GoV reporting of the DFA has recently become more detailed.             |  |
|                                 | Funds transfers between GoA, the DFA and the AusAID Project Accounts    |  |
|                                 | needs to be monitored to ensure that the time taken, exchange rates and |  |
|                                 | fees are all appropriate.   |  |
| VTSSP Fund Oversight            | GoV, GfG and PWD have tripartite management and oversight               |  |
|                                 | responsibilities requiring effective communications and engagement      |  |
|                                 | strategies. In this way key management/ oversight functions are not     |  |
|                                 | overlooked.   |  |
|                                 | GoV accounting mechanisms are robust and can to be used to record       |  |
|                                 | transactional data and management reports.                              |  |
| VTSSP Fund Management           | GoV disbursement mechanisms are generally less robust and require       |  |
|                                 | joint risk management.  |  |
|                                 | GoV procurement arrangements for amounts in excess of VT5m are          |  |
|                                 | robust, and the modifications made for VTSSP I and agreed with GoV,     |  |
|                                 | expedite their use.   |  |
|                                 | PWD procurement arrangements for amounts of less than VT5m are not      |  |
|                                 | robust, and require specific oversight arrangements to ensure the       |  |
|                                 | effective use of funds.   |  |

#### Table 6: Assessment of VTSSP Financial and Fiduciary control mechanisms.

- 81 The VTSSP II Direct Funding Agreement will supersede the existing VTSSP Subsidiary Agreement. Obligations outlined in Annex 2 must be included to ensure that both the VTSSP II and the GoV systems are functioning as required.
- 82 The proposed funding mechanisms build on the gains made in VTSSP I, and are consistent with GoA and GoV bilateral policy supporting those Paris Declaration principles concerning the use of Partner Government Systems. Furthermore, they require minimum change to the existing procedures of the PWD and VTSSP I, and hence have the operational advantage of being well understood by both the PWD and MFEM.

#### 3.4 ESTIMATED PROGRAM BUDGET & TIMING

- 83 The proposed four-year life-span of VTSSP II is necessary to ensure that the institutional transformation being introduced is sustainable. It is also highly likely that over the course of four years:
  - Local private sector contractors will have strengthened their capacities in response to increased market opportunities;
  - There will be improved efficiencies in the supply chains for road maintenance resources; and
  - The cost and efficiency of road maintenance will have significantly improved.
- 84 It is estimated that VTSSP II will require an investment of \$36.6 million over four years (see Table 7, Table 8 and Annex 6). Within this envelope infrastructure costs will be flexible, but it is proposed that AusAID make a provisional commitment of approximately \$5.5m per year (\$22m overall). In which case, the delivery of new infrastructure will be about 60% of the total budget.
- 85 The running costs of VTSSP II will also include the heavy cost of the specialist inputs needed to build capacity. International specialists will account for 19% of the total budget.

| Item  | Year 1         | Total VTSSP II  |
|---|----------------|-----------------|
| Outcome 1: PWD Institutional Transformation | \$1,529,900    | \$5,424,920     |
| Outcome 2: PWD Service Delivery             | \$6,748,120    | \$27,166,080    |
| Management Fees                             | \$1,034,753    | \$4,073,875     |
| GRAND TOTAL                                 | \$9,312,773.00 | \$36,664,875.00 |

Table 7: Estimated VTSSP II Project Costs by Outcome (AUD\$ million)

| Summary of Costs                          | Year 1      | <b>GRAND TOTAL</b> | Percentage |
|---|-------------|--------------------|------------|
| PHYSICAL WORKS                            | \$5,459,000 | \$22,003,000       | 60%        |
| Rehabilitation, maintenance and equipment | \$4,859,000 | \$19,683,000       | 54%        |
| Contractors                               | \$600,000   | \$2,320,000        | 6%         |
| STAFFING                                  | \$2,446,550 | \$8,988,100        | 25%        |
| International Specialists                 | \$1,775,350 | \$6,789,100        | 19%        |
| National Specialists                      | \$116,000   | \$464,000          | 1%         |
| Short Term Specialist Pool                | \$555,200   | \$1,735,000        | 5%         |
|   |             |                    |            |
| EQUIPMENT                                 | \$174,000   | \$318,000          | 1%         |
| TRAINING/WORKSHOPS                        | \$175,000   | \$700,500          | 2%         |
| OTHER                                     | \$146,470   | \$581,400          | 2%         |
| Operating Costs                           | \$146,470   | \$581,400          | 2%         |
| Management Fees                           | \$1,034,753 | \$4,073,875        | 11%        |
| TOTAL VTSSP II Budget                     | \$9,435,773 | \$36,664,875       | 100%       |

#### Table 8: Estimated VTSSP II Project Costs by Item (AUD\$ million)

86 The funding will be managed through two major accounts (Table 9).

- Firstly an Implementation Service Provider Account that will cover the costs of Long Term Advisers, Short Term Advisers, Equipment, Training & Workshops, Miscellaneous Costs and Management Fees.
- Secondly a VTSSP II Grant Funds Account managed through the Ministry of Finance's Development Fund Account (DFA) that will cover grant funds to be used for Routine Maintenance, Periodic Maintenance, Road and Drainage Improvement, Procurement of

Small Plant & Equipment, Equipment Workshop, Impact Evaluation Study and Supplementary Technical Contracts.

| Fund Account           | Item                              | Outcome 1   | Outcome 2    | Cost (AUD)   |
|------------------------|-----------------------------------|-------------|--------------|--------------|
| Implementation         | Reimbursable Fees                 |             |              |              |
| Service Provider       |                                   |             |              |              |
|                        | Long Term Personnel               | \$2,491,200 | \$3,894,400  | \$6,385,600  |
|                        | Short Term Personnel              | \$1,353,300 | \$1,249,200  | \$2,602,500  |
|                        | Equipment                         | \$54,000    | \$264,000    | \$318,000    |
|                        | Training/Workshops                | \$663,500   | \$37,000     | \$700,500    |
|                        | Other                             | \$262,920   | \$318,480    | \$581,400    |
|                        | Management Fees                   | \$678,115   | \$3,395,760  | \$4,073,875  |
|                        | SUB-TOTAL                         | \$5,503,035 | \$9,158,840  | \$14,661,875 |
| <b>IDA Grant Funds</b> | Routine Maintenance Grant         | \$0         | \$3,300,000  | \$3,300,000  |
|                        | Periodic Maintenance Grant        | \$0         | \$5,808,000  | \$5,808,000  |
|                        | Road and Drainage Improvement     | \$0         | \$8,800,000  | \$8,800,000  |
|                        | Grant                             |             |              |              |
|                        | Procurement of Small Plant,       | \$0         | \$1,225,000  | \$1,225,000  |
|                        | equipment and tools Grant         |             |              |              |
|                        | Equipment Workshop Grant          | \$0         | \$550,000    | \$550,000    |
|                        | Impact Evaluation Study Grant     | \$0         | \$320,000    | \$320,000    |
|                        | Supplementary Technical Contracts | \$600,000   | \$1,400,000  | \$2,000,000  |
|                        | Grant Fund                        |             |              |              |
|                        | SUB-TOTAL                         | \$600,000   | \$21,403,000 | \$22,003,000 |
| TOTAL                  |                                   | \$6,103,035 | \$30,561,840 | \$36,664,875 |
| MIPU PWD               | GoV Contribution to road          | <b>\$0</b>  | \$5,319,149  | \$5,319,149  |
| Maintenance            | rehabilitation and maintenance    |             |              |              |
| Fund                   |                                   |             |              |              |

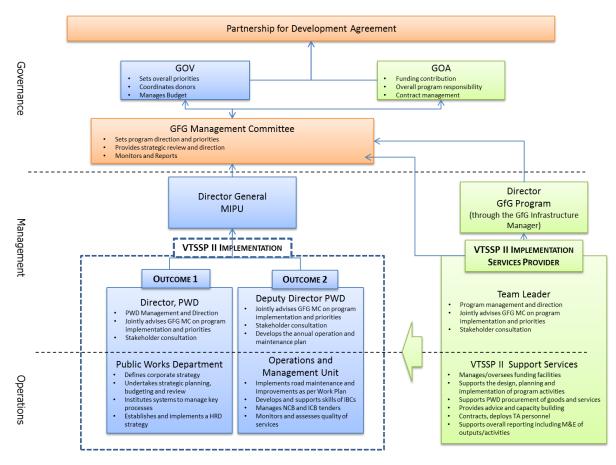
Table 9: Allocation of GoA and GoV Funds to VTSSP II Accounts

## 4 IMPLEMENTATION ARRANGEMENTS

87 The VTSSP II approach requires an annual dialogue between the GoV and the GoA, to be conducted on a full and frank basis. This will review past achievements and set subsequent annual work plans that match GoV's known priorities for road transport infrastructure and institutional reform. This requirement is consistent with the GfG Program philosophy of remaining flexible and responsive to emerging needs, while consistently addressing high level objectives. However, to be effective it requires integrated mechanisms for governance, management and implementation.

### 4.1 VTSSP II GOVERNANCE ARRANGEMENTS

- 88 It is proposed that the existing GfG Management Committee provide strategic oversight for VTSSP II. This Committee includes representatives of several key agencies, including: the Ministry of the Prime Minister, the Ministry of Finance and Economic Management, and the Ministry of Foreign Affairs. It also includes an AusAID representative. Moreover, as far as VTSSP II is concerned, discussions could easily be expanded to include the Directors of MIPU and the Prime Minister's Department. Figure 6 shows the proposed structure of VTSSP II governance, as well as the links to its management arrangements.
- 89 The GfG Management Committee will:
  - Meet quarterly to consider VTSSP II progress and challenges;
  - Provide strategic advice to the annual VTSSP II Work Plan;
  - Leverage support for VTSSP II activities from relevant Ministries or agencies;
  - Monitor progress and propose options to improve the effectiveness of the program; and
  - Receive and consider VTSSP II technical, management and financial reporting including audits of VTSSP II accounts.
- 90 One of the lessons of VTSSP I is that VTSSP II will require more oversight and guidance from the GFG Management Committee than was experienced by VTSSP I. As such, VTSSP II includes innovations to ensure the GfG Management Committee can provide this oversight. These include the following:
  - The GfG Program has strengthened its strategic infrastructure management capacity by divesting itself of many of the responsibilities associated with the implementation of VTSSP I, including technical, M&E, management and contracting responsibilities. To this end, the GfG has abolished the role of the Transport Coordinator, and replaced this with an Infrastructure Adviser who has a more strategic mandate.
  - Past VTSSP I management roles undertaken by the Transport Coordinator will instead be entrusted to a VTSSP II Implementation Services Provider (ISP) (Figure 6). This ISP role will be undertaken by an internationally qualified organisation directly contracted by AusAID/GfG. This will provide specialist advisory services at three levels:
    - Support to **governance** (strategy and oversight);
    - Enhanced administrative services program areas to be particularly strengthened include: fiduciary control, M&E capacity, reporting, communications, promotion, and adviser performance management (see Section 4.2); and
    - Support to **operations** (see Section 4.2).
  - To support VTSSP II governance, the ISP will engage a highly qualified Team Leader. This person will:
    - provide support to the GfG Management Committee to enable it to effectively oversight VTSSP II;
    - $\circ$  support transport sector directors within MIPU in the management of VTSSP II;
    - $\circ$  lead, supervise and manage the performance of the ISP Team in Vanuatu; and
    - $\circ$  be the primary point of contact with the ISP for all matters relating to VTSSP II.



#### Figure 6: VTSSP II implementation arrangements

#### 4.2 VTSSP II MANAGEMENT AND OPERATIONS ARRANGEMENTS

- 91 As outlined in Section 3, VTSSP II will deliver Outcomes through two distinct partnerships Outcome 1 will engage with MIPU/PWD to strengthen the PWD; while Outcome 2 will improve the rehabilitation and maintenance of existing transport infrastructure.
- 92 Given the capacity constraints faced by the PWD (technical, institutional, human and financial) capacity building must remain a core agenda of the program. The Implementation Service Provider (ISP), will work alongside the PWD and support them to implement VTSSP II. The basic principle of the ISP's role is to ensure that PWD has in place the internal skills, institutional ability and resources to undertake its core road planning, oversight, rehabilitation and maintenance responsibilities sustainably. As such activities under the ISP's scope that clearly align with PWD's long term responsibilities must be undertaken in partnership with PWD with the intention that PWD will develop significant capacity to undertake these tasks within the term of the Contract. Conversely, ISP activities that are not aligned with the core responsibilities of the PWD, but simply complement them (e.g. donor reporting, special studies, etc) should be undertaken as efficiently and quickly as possible and not divert PWD staff from their core roles.
- 93 The ISP will be responsible for engaging specialists with the skills, experience, reputation and credibility to mentor the GoV, and will also be responsible for managing the performance of these specialists. However, in all of its performance management decisions, the ISP must liaise closely with the PWD. The various levels of advisory support needed for VTSSP II are shown in Table 10.

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

|   | SP II Function  | PWD Personnel  | ISP Personnel   |
|---|---|--|---|
| VTSSP II<br>Leadership and<br>Oversight                 | Define core planning,<br>budgeting, policy, oversight,<br>and service delivery<br>functions for PWD                   | <ul> <li>Director General MIPU</li> <li>Director PWD</li> <li>Public Service<br/>Commission</li> </ul>   | <ul> <li>VTSSP Team<br/>Leader/Institutional<br/>Development Specialist</li> <li>Public Financial<br/>Management Specialist</li> </ul>  |
|   | Technical Oversight and<br>Delivery including quality<br>assurance of all outputs                                     | <ul> <li>Director General MIPU</li> <li>Director PWD</li> <li>Project Support Unit</li> </ul>  | • VTSSP Team<br>Leader/Institutional<br>Development Specialist  |
|   | Maintenance of a close<br>responsive relationship<br>with GfG   | • Director General MIPU<br>• Director PWD  | • VTSSP Team<br>Leader/Institutional<br>Development Specialist  |
| VTSSP II<br>Administration<br>and Management            | Install and implement<br>appropriate administration,<br>finance, procurement and<br>management information<br>systems | <ul> <li>Manager<br/>(Administration)</li> <li>Project Support Unit</li> </ul>   | <ul> <li>VTSSP Team<br/>Leader/Institutional<br/>Development Specialist</li> <li>Contracts Management<br/>Specialist (CMS)</li> <li>Communications<br/>Specialist (ST)</li> </ul>         |
|   | Adviser appointment and<br>Performance Management   | <ul><li>Project Support Unit</li><li>PWD Director</li></ul>  | <ul> <li>VTSSP Team<br/>Leader/Institutional<br/>Development Specialist</li> <li>ISP Administrator</li> </ul>   |
|   | Articulation and<br>implementation of their<br>HRD Strategy and PWD<br>Capacity Building Program                      | <ul> <li>MIPU HRD Unit</li> <li>Manager<br/>(Administration)</li> </ul>  | • Human Resources<br>Development Specialist<br>(HRDS)   |
|   | Public relations,<br>information, document<br>management  | • Manager<br>(Administration)  | • Communications<br>Specialist (ST)   |
|   | Oversight of GoV use of<br>Donor Funds  | <ul><li>Director General MIPU</li><li>Director PWD</li></ul>   | • Auditor (ST)  |
|   | Monitoring and Evaluation   | • Director PWD<br>• GoV M&E Unit   | <ul> <li>Monitoring and<br/>Evaluation Specialist<br/>(ST)</li> </ul>   |
| VTSSP II<br>Implementation -<br>Support to<br>Outcome 1 | Support to institutional change in MIPU PWD   | <ul> <li>Director General MIPU</li> <li>Director PWD</li> <li>Deputy Director –<br/>Admin &amp; Procurement</li> <li>Deputy Director –<br/>Operations &amp;<br/>Maintenance Unit,<br/>Project Support Unit,</li> </ul> | <ul> <li>VTSSP Team<br/>Leader/Institutional<br/>Development Specialist</li> <li>Public Financial<br/>Management Specialist</li> <li>Human Resource<br/>Development Specialist</li> </ul> |
|   | Assistance to delivery of maintenance   | • Deputy Director –<br>Operations &<br>Maintenance Unit  | <ul> <li>Senior Road<br/>Maintenance Planning<br/>Engineer</li> </ul>   |
|   | Information Systems   | <ul> <li>Manager<br/>(Administration)</li> </ul>   | Information Systems     Analyst   |
| VTSSP II<br>Implementation -<br>Support to<br>Outcome 2 | Road Rehabilitation and<br>Maintenance  | <ul> <li>Deputy Director –<br/>Operations &amp;<br/>Maintenance Unit</li> <li>Principal Engineer<br/>(Maintenance Planning<br/>and Monitoring</li> <li>Divisional Engineers</li> </ul>                                 | <ul> <li>Senior Road<br/>Maintenance Planning<br/>Engineer</li> <li>Road Maintenance<br/>Engineer (3)</li> </ul>  |
|   | Supplementary Services  | • As required  | <ul> <li>Short Term Advisers as<br/>approved annually</li> </ul>  |

\_\_\_\_\_

#### Table 10: Support services proposed for VTSSP II

94 Detail related to Advisory Support is outlined in the Resource Schedule and Budget (see Annex 6). Alignment of VTSSP II advisory support with the PWD organisational structure is shown in Annex 10. Position descriptions for major roles are reflected in Annex 11.

|            | Position   | Status                        | Mont<br>hs |
|------------|--|-------------------------------|------------|
| Long-Term  | Team Leader/Institutional Development Specialist   | International                 | 48.0       |
|            | ISP Program Administrator  | National                      | 48.0       |
|            | Public Finance Management Specialist   | International                 | 48.0       |
|            | Senior Road Maintenance Planning Engineer  | International                 | 48.0       |
|            | Human Resource Development Specialist  | National                      | 48.0       |
|            | Road Maintenance Engineers   | International                 | 144.0      |
| Short Term | Contract Management Specialist   | International                 | 15         |
|            | Monitoring and Evaluation Specialist   | International                 | 7.0        |
|            | Information Technology Specialist  | International                 | 3.0        |
|            | Short Term Specialist Pool<br>(specialists to address Labour Based Road Technology,<br>Engineering, communications, gender, environmental<br>concerns and social/cultural constraints) | International and<br>National | 50.0       |
| Summary    | Long term International  | International                 | 288.0      |
|            | Long term National   | National                      | 96.0       |
|            | Short Term Advisers  | International and<br>National | 75.0       |

Table 11: Advisory Support proposed for VTSSP II

- 95 To engage whatever skills are necessary to achieve VTSSP II aims, the program will include provision for a Short Term Specialist Pool to be accessed responsively by the VTSSP II Team Leader upon approval by the GfG Program Director. A number of skills have already been identified as necessary for effective implementation. However, depending on the skill sets of the appointees to the above VTSSP II team positions, additional skills may be needed to support:
  - Labour Based Technologies innovative road construction that optimises use of local labour
  - Communications Establish a Communications Plan for VTSSP II;
  - Training & Curricula support may be needed to develop curricula for vocational skills development;
  - Gender Assessing and responding to gender needs of the program;
  - Business Development support may be needed for IBC business development; and
    High-level Technical Expertise the Roads Adviser, although technically skilled, may
  - High-level Technical Expertise the Roads Adviser, although technically skilled, may require additional engineering support.
- 96 The identification of advisory support to be funded from the Short Term Specialist Pool may arise from VTSSP II itself or may be requested by the AusAID Infrastructure Adviser working with the GfG program to enable GfG to undertake complementary transport infrastructure assessments related to VTSSP.
- 97 The pool allows for the engagement of International or National specialists to meet the identified needs of the program. There are considerable long-term development benefits of using ni-Vanuatu advisers and consultants for these roles, including that they can provide greater value for money, as national advisers are cost effective; they can increase efficiency, as local advisers already have an intimate knowledge of the context and can assist more readily in creating and implementing programs that are well-suited to the local conditions.

## 4.3 TRANSITION PLANS

- 98 This section discusses the key considerations/risks to be managed during the transition between the completion of Phase I of VTSSP and the commencement of Phase II. As of December 2011, the VTSSP I grant budget of AUD14.8m was 95% committed, with AUD7.3m already disbursed. Physical works not completed by December 2011, have also been rescheduled to be completed by July 31, 2012. However, if further TA inputs are still required to support the PWD to complete VTSSP I activities (e.g. "defects period" oversight, financial acquittal and reporting), then these inputs can be contracted directly by the GfG Program through the novation of existing Adviser contracts.
- 99 VTSSP II is scheduled to commence in March/April 2013. This timing will maintain the current delivery momentum as well as the existing stakeholder relationships. It will also provide lead time for work plan preparation and approval prior to the commencement of the "construction season" in May 2013 (i.e. the beginning of Vanuatu's dry season).
- 100 However, the timing also requires that the first year work plan be finalised by officials from both Governments, and that the formal agreement for this is obtained at the Partnership for Development dialogue in July 2012. To enable this process, this design incorporates the currently proposed activities for the first year of VTSSP II.
- 101 The key drivers needing to be managed in relation to the timely commencement of VTSSP II necessarily include the completion of the following preparatory activities:
  - Finalisation and peer review of the design by 30 July, 2012;
  - Approval of the Year 1 Work Plan in time to allow for the formal agreement to proceed between GOA and GOV at the annual Partnership for Development dialogue by the end of 2012;
  - Scoping and contracting of the ISP by early 2013; and
  - Execution of the Direct Financing Agreement for grant components of the program by early 2013.

#### 4.4 MONITORING AND EVALUATION ARRANGEMENTS

102 This section summarises the expected outputs, outcomes and longer term impacts to be delivered by VTSSP II over four years. Further details regarding the M&E Arrangements for VTSSP II can be found in Annex 7. The key risks associated with achieving the outputs, outcomes and impact are provided in Annex 8. These risks will be proactively monitored as part of the M&E arrangements.

### 4.4.1 *OUTPUTS:*

103 The performance question relating to program outputs will be:

Is VTSSP II delivering key program outputs on time, within budget and of sufficient quality?

- 104 The basic data to track the progress and quality of output delivery will be enabled by establishing a Transport Infrastructure Information System (TIIS). This system will use database and Geographic Information System (GIS) capability to integrate the disparate data gathering mechanisms, and thus record all relevant works supported by VTSSP II.
- 105 The TIIS will enable monitoring of program progress relative to PWD annual work plans, and VTSSP II annual plans. Indicative "output" monitoring targets for the PWD will include:

#### **PWD INSTITUTIONAL TRANSFORMATION**

- A training needs assessment and capacity building schedule developed for all PWD staff in the Provincial and Central offices and including management, technical and administrative staff.
- An annual training plan conducted and monitored against the capacity building schedule. Annual reports prepared on the training plan including achievements and shortfalls.
- At least five formal training events (minimum three days each event) are to be held each year for PWD Provincial staff (minimum group of eight participants).
- PWD institutes a framework for implementation and monitoring of cross-cutting issues including environmental protection, HIV/Aids awareness, gender equity and fraud and anticorruption minimisation.
- Selected PWD staff participate in at least one international event each year.
- PWD documentation is reviewed and updated including any proposals for changes and additions. Documentation to cover the areas of technical, administration, financial, procurement and operations for PWD.
- VTSSP website is established as part of GoV Web presence and regularly updated with news and progress. Media broadcasting and public education campaigns are carried out.

#### **PWD SERVICE DELIVERY**

- Basic and sustainable Routine Maintenance on an annual basis of the target network of 350km of road across seven islands. 200 km (Year 1) to 350 km (Year 4).
- Sustainable Periodic Maintenance of the target network of 350km of road across seven islands. 66% of the target network each year - 132 km (Year 1) to 231 km (Year 4).
- 275 km of road per year receive surface and drainage improvements.
- 20,000 Labour days per year generated.

106 The TIIS will become increasingly valuable over the life of the program. A baseline will be established for each of the performance indicators at commencement of VTSSP II. Datasets will accumulate and become more capable of supporting ad hoc information requests from the GoV and the GoA concerning the transport sector. The TIIS will ultimately be handed over to the PWD.

#### 4.4.2 OUTCOMES

107 Two outcomes will contribute to VTSSP II's purpose. The performance questions related to each of the outcomes are:

*Is the PWD demonstrating stronger institutional performance in delivering the department's corporate plan?* 

Is the PWD effectively facilitating local infrastructure maintenance, including the increasing use of community and private sector partners?

108 The methods to accrue answers to these performance questions include:

- Joint Annual Capacity Appraisal (JACA): The first outcome question is concerned with the institutional strengthening of the PWD. That said, measuring changes in institutional 'capacity' is a universally challenging area. VTSSP II will work with the M&E Unit and the PWD to develop and implement a Joint Annual Capacity Appraisal (JACA) process<sup>33</sup> that meets both the internal reporting needs of the GoV, and the information needs of VTSSP II. The JACA will be based on the concept of 'Progress Markers' that track institutional performance along an agreed trajectory<sup>34</sup>. The JACA will be implemented as a semi-structured interview/dialogue with selected PWD staff at strategic, tactical and operational levels, and will be administered by the GoV M&E Unit (with support from VTSSP II).
- *Infrastructure Monitoring:* The second outcome question is concerned with the delivery of transport infrastructure in target localities. PWD staff will be supported by VTSSP II to establish a simple and appropriate regime of ex-post monitoring of infrastructure works. This will include monitoring methods such as road traffic counts, road surface roughness measures, etc. The data collected through the monitoring processes will be maintained in the TIIS.
- Independent Progress Review (IPR): To provide better insights into the effectiveness of PWD work at the local level, as well as the efficacy of institutional strengthening support, and the progress of outsourcing reform, two independent progress reviews (IPRs) will be commissioned for around November 2014 and at the end-of-program. These IPRs will focus on the achievements of/challenges facing transport infrastructure works from the standpoints of all involved provincial PWD staff, private sector contractors and relevant civil society actors. Findings will be reported to the GfG Management Committee, and circulated to all key stakeholders.

109 Indicative targets for VTSSP Outcomes include:

#### **PWD** INSTITUTIONAL TRANSFORMATION

- At least 90% of all participants of any formal training course complete the course.
- Updated and comprehensive manuals, guidelines, and forms in use by PWD at Central and Provincial offices (English and Bislama).
- Biennial performance reviews of all PWD staff demonstrate significant skills and competency improvements

#### **PWD SERVICE DELIVERY**

- PWD Plant utilization rates increases by 20% each year.
- New IBCs working independently after the first 12 months training and support.
- IBCs, national and international service providers report sound working relationships with PWD.
- Reduce payment time to IBC and communities to less than 14 days and

<sup>&</sup>lt;sup>33</sup> The MCA road program attempted to implement an 'institutional scorecard' for tracking PWD capacity development, but the process broke down because key stakeholders felt 'audited' and withdrew their support. Hence it is important to note that the proposed JACA is fundamentally different to this: i) it is a joint process; ii) it supports/enhances internal GoV M&E/annual reporting processes; iii) it is a learning and management decision-making tool rather than an audit tool; iv) it tracks progress along an agreed trajectory (it is forward looking) rather than an externally imposed set of standards. <sup>34</sup> Currently, participants periodically assess progress against progress markers defined as 'expect to see', 'like to see' and 'love to see'.

of 80% of staff.

- PWD management pro-actively responds to priority issues and concerns instituting corrective actions and any follow up that may be required.
- PWD Force Account km of roadwork increases by 20% each year.
- PWD recurrent fund proportion for maintenance works increases by 5% each year.

NCBs less than 30 days.

- PWD prepares regular on time monthly/quarterly progress reports detailing physical and financial progress and including work plan, cash flow diagram, list of issues and planned activities by each Divisional Manager.
- Transport Network Asset Management System developed including the sequence for data collection, performance monitoring, analysis of maintenance options and programme optimisation, project selection and implementation, and monitoring and review. Outputs used to determine annual and 5/10 year work plans.
- Minimum plant utilisation rates established, monitored and reported quarterly by Divisional Managers.

#### 4.4.3 IMPACT

110 VTSSP II will use both primary and secondary data sources to evaluate its impact, including:

• *Household Income & Expenditure Survey (HIES) Data:* Secondary data from the National Statistics Office (NSO) Household Income and Expenditure Survey (HIES) will be used to gather evidence regarding progress towards the VTSSP II goal35. The questionnaire used by the NSO includes a range of questions related to transport (see Table 12). The survey undertaken in November 2010 will constitute the baseline dataset. A repeat survey planned by NSO for 2015 will provide evidence of the preliminary impact of both phases of VTSSP, thereby enabling measurement of changes in the transport-related indicators.

| Area of Enquiry             | Relevant HIES Questions |
|-----------------------------|-------------------------|
| Access to water             | Questions H16 – H19     |
| Access to health facilities | Questions H22 – H24     |
| Transport                   | Questions H27 – H30     |
| Access to markets           | Questions H31 – H35     |
| Transport procurement       | Question H61 – 67       |
| Freight                     | Question H73 (2)        |
| Sales revenue               | Question H76 – H81      |

#### Table 12: Vanuatu HIES Transport Questions

The HIES uses a 10% population sample frame. A subset of the national sample that aligns with program target areas will be used for VTSSP II purposes. Analysis will involve a range of descriptive/inferential statistics to document any significant changes in beneficiary circumstances. This information will inform the wider debate regarding the development merits of investing in regional transport infrastructure. It will also enable AusAID to report against the 'Sustainable Economic Development' strategic goal of the Australian Government's aid program.

<sup>&</sup>lt;sup>35</sup> The survey data will be disaggregated by gender, location and other stratifying variables to enable meaningful interpretation of positive and negative impact.

- Longitudinal Case Studies ('Annual Snapshots'): To supplement the NSO quantitative analysis described above, primary data will be collected by VTSSP II in the form of qualitative 'snapshots' of beneficiary circumstances. This will involve a series of longitudinal case studies. The first will be conducted as soon as possible after program approval and will provide baseline snapshots. Subsequent case studies will be carried out on a yearly basis to inform annual reporting to the GfG Management Committee and other stakeholders. The information collected will cover many of the HIES criteria but will particularly aim to measure progress against the following indicative targets for roads maintained and rehabilitated under VTSSP II:
  - 20,000 Labour days per year generated;
  - Traffic Growth increases by 20% each year;
  - Travel times before and after construction each year recorded and indicates reduced times;
  - Frequency of public transport services (number per day) increases by 20% each year;
  - Cost of public transport services (vt/km) reduces each year;
  - Cost of freight road transport services (vt/km) reduces each year;
- 111 The M&E arrangements proposed in this design require the management oversight of a M&E Specialist. A greater proportion of inputs will be required early in the life of the program in order to more precisely develop the M&E tools and protocols that can only be broadly outlined in this document. Thereafter inputs will be both intermittent and timed to support key M&E processes (e.g. the JACA, IPR, annual 'snapshots' etc.). There will also be a need to invest in the capacity building of counterparts, in particular the GoV M&E Unit. The M&E Specialist will be supported by an Information System Analyst. The Information System Analyst will develop and support the TIIS.
- 112 The direct costs of M&E for VTSSP II include: the salaries of personnel, specialists, and contractors; the survey costs; and the costs of reporting. Provision also needs to be made for the program to support the GoV's central M&E Unit. However, the final cost of this will depend on the extent of the internal capacity constraints that the Unit faces, as well as on the extent to which it is in a position to support the program's needs. Some investment in the NSO will also be required to ensure that the HIES data meets program impact evaluation needs. Direct M&E costs are estimated to be \$0.67m, or just under 2% of the overall program costs.

#### 4.5 SUSTAINABILITY ISSUES

113 The sustainability of infrastructure investments in Pacific small island nations is an ongoing concern for governments and donors. It is also a major challenge for the Pacific Regional Infrastructure Facility and has been highlighted in AusAID's recent Infrastructure Strategy (Nov 2011). The sustainability of VTSSP investments exemplifies the challenges. Sustainability of VTSSP II is intrinsic to the program and is considered from seven perspectives (Table 13). As can be seen VTSSP directly addresses all of these issues to some extent. However the achievement of sustainability is a dynamic and evolutionary process and it is inevitable that on-going risks and challenges to sustainability will remain.

| Sustainability<br>Dimension | Key issue   | How will VTSSP II Address this                             |
|-----------------------------|---|--|
| Policy                      | • Are the infrastructure<br>aspirations of the country<br>reasonable given its population,<br>development needs and rights? | • Policy to prioritise road infrastructure within Vanuatu. |

Table 13: VTSSP II mechanisms to address the different dimensions of sustainability

| Sustainability<br>Dimension | Key issue  | How will VTSSP II Address this   |
|-----------------------------|--|--|
| Technical                   | • Is the infrastructure technically<br>fit for purpose throughout its<br>design life?  | <ul> <li>Infrastructure designs will indicate the expected design life, along with the maintenance schedules and projected costs.</li> <li>Survey of road material resources.</li> <li>Improved access agreements with communities for road materials.</li> <li>Improved road materials in use.</li> <li>More efficient road construction techniques.</li> <li>Improved drainage structures.</li> </ul>                  |
| Economic                    | • Are there sufficient funds<br>available (from Government,<br>donors, and users), that if used<br>efficiently, are able to meet the<br>on-going needs of rehabilitation,<br>maintenance and new<br>infrastructure?                                      | <ul> <li>More efficient use of limited GoV<br/>Maintenance Fund.</li> <li>Clear priorities of national roads.</li> <li>Capacity to more effectively engage with<br/>donors to fund priority roads.</li> </ul>  |
| Institutional               | • Are there efficient and effective<br>institutions set up with the<br>appropriate systems, processes<br>and skills necessary to manage<br>the construction, rehabilitation<br>and maintenance of key<br>infrastructure;                                 | <ul> <li>Institutional strengthening within PWD focused on transformation to an institution whose major focus is to manage the rehabilitation and maintenance of core national roads.</li> <li>Extensive HRD program within PWD.</li> <li>PWD staff will gradually take on the full ongoing management of the transport infrastructure planning and road maintenance processes from the VTSSP II specialists.</li> </ul> |
| Skills                      | • Are there sufficient skills within<br>Government, the Private Sector<br>and Communities to plan, build<br>and maintain the infrastructure<br>required;   | <ul> <li>Improved packages and incentives for<br/>professional staff within PWD.</li> <li>Improved training and HRD within PWD.</li> <li>Creative engagement with the private sector<br/>and communities through IBCs, NCB, ICB and<br/>Equipment Hire.</li> <li>Building the skills of IBCs and communities</li> </ul>  |
| Environmental               | • Is the infrastructure designed to meet the "no regrets" impacts of climate change? Can natural resources be supplied and construction undertaken, in an environmentally sustainable manner?  | <ul> <li>infrastructure design takes into account the demands of a disaster-prone environment</li> <li>Climate Change safe guards to realign and strengthen roads where vulnerable.</li> <li>Improved materials.</li> <li>Improved drainage.</li> <li>Improved maintenance.</li> </ul>   |
| Social                      | • Are there necessary mechanisms<br>in place to help communities<br>capture the maximum benefit<br>from their infrastructure, as well<br>as the essential safeguards to<br>mitigate any negative social<br>impacts from the supply of<br>infrastructure? | <ul> <li>Road selection based more clearly on<br/>development cost/benefit.</li> <li>Advocacy for reform of the traffic act.</li> <li>STD awareness in construction sites.</li> <li>Greater community engagement in planning<br/>and implementing infrastructure projects.</li> </ul>  |

114 It is clear that some of the critical areas of sustainability are impacted by circumstances outside the control of VTSSP. Some of these necessitate a fundamental rethinking of country aspirations and the partnership with donors. Of fundamental importance in this regard is the interaction between political aspirations and economic reality.

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

- 115 Because of its small size, Vanuatu has difficulty generating sufficient internal revenue to finance the construction and maintenance of the infrastructure necessary to support the delivery of basic services, and underpin the growth it desires. The management of the roads is particularly challenging. As outlined in Section 2.3.1, when decades of underfunding are combined with the inefficient use of these funds and the deleterious impacts of an aggressive physical environment, Vanuatu is confronted by a road system in major disrepair. While PWD accounts for the majority of MIPU's Budget and receives VT500m in maintenance funds these resources would only meet 25% of the cost of well executed maintenance, let alone the needs of new investments. As such, Vanuatu will continue to depend on donors to support both the development and rehabilitation of its major transport infrastructure. This, however, does not preclude the GoV from having to face some tough decisions. The key challenge will be to define a core transport network for the country that is both affordable and justified by transparent and internationally accepted criteria for economic and social benefit.
- 116 Essentially the GoV will always be challenged in its capacity to adequately resource road rehabilitation and maintenance. The only long-term option is for donors and the GoV to agree on an on-going package of support that meets the needs by supplementing GoV resources with donor funds.

#### 4.6 OVERARCHING POLICY ISSUES

- 117 Australia is committed to ensuring that VTSSP II is effective and equitable, and that it achieves the best possible outcomes for the transport sector in Vanuatu. Specific AusAID policies and strategies ensure that the program will meet international agreements and high performance standards. Policies of particular relevance include:
  - Gender *Promoting Opportunities for All Gender Equality and Women's Empowerment* (November 2011);
  - HIV/AIDS: HIV: Intensifying the Response: Halting the Spread (2009);
  - Disabilities *Development for All: Towards a Disability-Inclusive Australian Aid Program* 2009–2014 (November 2008);
  - Anti-corruption Tackling Corruption for Growth and Development Policy (2007);
  - Environment and Climate Change (draft 2009); and
  - Disaster Investing in a Safer Future: A Disaster Risk Reduction Policy for the Australian Aid Program (June 2009).
- 118 Performance management will include specific measures to integrate these issues, ensuring that each is taken into account in both the design and the implementation of the transport activities. Table 14 lists examples of how these issues can be incorporated into activities. Specific indicators will be developed for the monitoring of progress in addressing these issues.

| Policy   | Action   |
|--|--|
| Environment, climate change and<br>disaster risk reduction:<br>Australia recognises the convergence<br>of approaches necessary to address<br>environmental, disaster and climate<br>change issues. All transport activities<br>must comply with the Environment<br>Protection and Biodiversity<br>Conservation (1999) Act and with a<br>range of international environment | <ul> <li>Work always within GoV's environment legislation.</li> <li>Assess the risks of natural disasters as an integral part of vulnerability assessment and adaptive planning.</li> <li>Undertake environmental impact assessments on all major infrastructure works;</li> <li>Ensure that assessment methods recognise the interdependence of people and natural systems, and include analysis of the vulnerabilities of both these to disaster and climate change;</li> <li>Ensure the designed service life of transport infrastructure incorporates allowances for the harsh environment, likelihood of disaster, and the potential impacts of medium</li> </ul> |

#### VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

| agreements.<br>Australia is committed to ensuring the<br>best possible outcomes for people and<br>their environments by:<br>• Building resilience in vulnerable<br>communities<br>• Greening growth<br>• Protecting natural resources and<br>ecosystems that sustain<br>livelihoods  | <ul> <li>term climate change.</li> <li>Incorporate appropriate management and maintenance processes to manage these impacts;</li> <li>Encourage the engagement of specialist environment expertise; and</li> <li>Flag adaptation responses involving infrastructure and other action with potentially high environmental impact.</li> </ul>   |
|--|---|
| Gender and vulnerability:<br>Australia is committed to ensuring<br>that development assistance is<br>socially equitable and inclusive,<br>protecting and advancing the rights of<br>women and vulnerable groups. VTSSP<br>II strategies for gender and people<br>with disabilities will guide both the<br>assessment of risks and the<br>engagement of all groups so that they<br>can benefit equitably. | <ul> <li>Standard vulnerability assessments must analyse the different vulnerabilities of all groups - men, women, boys, girls, people with disabilities, and any more specifically disadvantaged groups;</li> <li>Ensure that women are included at all stages and all levels of vulnerability assessment: community, government and civil society;</li> <li>Ensure equal opportunity employment and work practices within every activity;</li> <li>Ensure activities are designed to deliver inclusive and fair outcomes for all groups, in particular that no group is actively disadvantaged by an activity; and</li> <li>Disaggregate baseline and monitoring data by sex and social group.</li> </ul> |

#### Table 14: Integration of cross-cutting issues

119 More specific safeguards related to social, anti-corruption and environmental concerns are discussed below.

#### 4.6.1 SOCIAL SAFEGUARDS

- 120 During the inception phase of VTSSP II a Social Safeguards Framework (SSF) will be prepared in close consultation with the stakeholders. This will serve as the program's umbrella document, setting out VTSSP II's strategy regarding the implementation of social safeguards. The SSF will be governed by AusAID's social guidelines, and will also comply with all relevant GoV regulations and laws. It will address issues related to gender equality, child protection and labour, HIV, and road/transport accessibility for the disabled.
- 121 To ensure full implementation of the SSF measures, VTSSP II will include training on social sensitization in all its capacity building activities. The Team Leader, in collaboration with the Human Resource Adviser, will have overall responsibility to ensure adherence to the SSF.
- 122 Of special note, the SSF of VTSSP II will support the Australian Government's international development strategy for HIV/AIDS. Activities under VTSSP I have already initiated HIV awareness raising and support activities, including mandatory education programs, and access to both condoms and HIV testing within all construction contracts. It must be ensured that under VTSSP II these activities are not only advanced, but are monitored to ensure they remain appropriate for the Vanuatu context.

#### 4.6.2 ANTI-CORRUPTION SAFEGUARDS

123 Program specific anti-corruption mechanisms and procedures will be formulated by the ISP during start-up of VTSSP II as part of an Anti-Corruption Action Plan (ACAP). The ACAP will ensure transparency, accountability, and the efficient and effective use of available

resources. The ACAP will be based on the mechanisms and measures put in place under VTSSP I to both prevent corruption occurring, and deal with corruption if it does occur. Legally sound and proven standard contract documentation, systematic work quantity assessment, approved bidding and contract award procedures, factual and transparent payment procedures, and effective quality control are the particular measures that will need contextual fleshing out. A draft outline for the ACAP is presented at the end of Annex 2.

124 Particular attention will be given under VTSSPII to ensure transparency and accountability throughout the entire program, but in particular for the contracting of the physical works. VTSSP II will take an innovative approach to this at an operational level by encouraging the participation of the Vanuatu Chapter of Transparency International in the conduct and monitoring of procurement. The participation of VTI - which has a prominent public profile in Port Vila - could include the presence of observers on high profile or random procurements.

#### 4.6.3 Environmental and Climate Change Safeguards

- 125 The Department of Environment (DoE) under the Ministry of Lands has the responsibility for ensuring that environmental impact assessments (EIA) or initial environmental examinations (IEE) are conducted wherever necessary and that Environmental Management Plans (EMPs) are prepared and implemented in response. EIA and EMP requirements are legislated in Vanuatu by the Environmental Management Conservation Act 2002, and hence there is a legal requirement for delivery agencies to collaborate with DoE. Yet because of capacity constraints within both the DoE and the PWD, environmental issues have not always been properly addressed when road improvement and maintenance works have been undertaken. Similarly, provincial government administrations have often failed to address the environmental management requirements of the civil works they are responsible for.
- 126 To address this challenge, VTSSP I developed and adopted a DoE approved Environmental Management System (EMS) which meets the requirements of both the GoV and the GoA. A copy of the VTSSP Environment Management System Referral Report (June 2010) is available upon request, and is included in the suite of program reference documents. It will be the responsibility of the VTSSP II ISP to support the GoV in the proper implementation of the EMS for all Australian-funded activities. However, given the established processes and relatively straightforward nature of the EMS, no Environmental Specialist Adviser will be required. Instead, the Senior Road Maintenance Planning Engineer will assume the responsibility for adherence to all requirements. On the other hand, the PWD will engage local Environmental Management Consultants (as required from the Supplementary Technical Contracts Grant Fund) to implement the EMS for those activities within the approved VTSSP II work plan.
- 127 With regards to climate change, the Climate Change Office of the GoV has developed a National Climate Change Adaptation Program of Action (NAPA). An electronic version of this NAPA is available on the website of the UNFCCC<sup>36</sup>. The NAPA both prioritises Vanuatu's climate change adaptation needs, and identifies ways to monitor the implementation of these adaptation measures. As outlined in the NAPA, the majority of the outer islands of Vanuatu are facing serious impacts from climate change, including: increased precipitation and flooding, more intense wave action, and coastal road erosion resulting from sea level rise. Due to their critical economic and social value as a lifeline for vulnerable communities along island coastlines, it has been agreed that a focus issue for

<sup>&</sup>lt;sup>36</sup> United Nations Framework Convention on Climate Change see <u>www.unfccc.int/resource/docs/napa/vut01.pdf</u>

Vanuatu is to increase the resilience of key coastal roads. Where necessary this will include the realignment of highly vulnerable sections.

- 128 In July 2010, the International Climate Change Adaptation Initiative (ICCAI) of AusAID allocated A\$3m to the GoV to integrate adaptation measures into VTSSP's program of road rehabilitation and maintenance. An additional A\$1m was allocated in 2012 as part of the transition funding phase between VTSSP I and II. The climate proofing component of VTSSP I has provided some valuable experience. Not only has it funded adaptation measures to increase road resilience, more importantly perhaps it has worked to increase the understanding of PWD staff regarding both climate change impacts in general, and the more specific ways in which the PWD can ensure the protection of its transport infrastructure. The ICCAI grant under VTSSP I has also been used to sensitize government decision-makers regarding the need to integrate climate change concerns into long term transport planning and budgetary processes.
- 129 A more recent 'Country Risk Profile' for Vanuatu, has been undertaken as part of a Pacific catastrophe risk assessment. This report serves to underline the vulnerability of Vanuatu's transport infrastructure to extreme climatic events, which are forecast to increase in both intensity and frequency.
- 130 VTSSP II will establish and maintain close liaison with the Pacific-Australia Climate Change Science and Adaptation Program that commenced in 2011. This program liaises closely with relevant GoV agencies, as well as with those AusAID-funded programs (such as VTSSP) likely to be directly impacted by climate change. One example of past support has been coastal infrastructure vulnerability mapping in populated coastal zones.
- 131 For budgeting purposes, the VTSSP II design has used a unit-cost rate for island road rehabilitation works that is significantly higher than the unit-cost rate adopted by the VTSSP I budgets. This reflects the generally felt need for more robust road construction (including the provision of adequate structures for drainage, slope stabilization, and the hard paving of those critical road sections most vulnerable to climate change impacts). It also reflects the need to directly incorporate 'climate proofing' requirements into road design (e.g. more and/or larger lateral and cross-drains to ensure the safe and quick disposal of surface water run-off).
- 132 The VTSSP EMS includes the environmental screening of all proposed sub-projects based on a generic check-list. This checklist, provided in Annex 8 will ensure that environmental safeguard considerations are integrated into all sub-project identification, planning, design and implementation processes.

#### 4.7 CRITICAL RISKS AND RISK MANAGEMENT STRATEGIES

- 133 This section outlines the possible risks that could affect the achievement of the objectives and targeted outcomes of the VTSSP II Program. The key risks are not only considerable, but may well be realised if significant detrimental changes occur within Vanuatu's political, physical and/or economic environment. Nevertheless, under most circumstances the risks should prove manageable provided the technical assistance is both strategic and of good quality, there is solid commitment by the GoV to the proposed approach, and there is positive/strategic engagement between the GoV and the GoA.
- 134 Drawing upon the past experiences of the GfG Program, of VTSSP I, and of similar programs throughout the region, the design has identified those VTSSP management actions required to minimize/mitigate the key risks. The identified risks and the proposed response strategies and actions are listed in the Key Risk Assessment Matrix in Annex 9.

- 135 One key risk is VTSSP II's ability to assist the GoV to responsibly manage road transport infrastructure within the available resources this will be critically dependent on the GoV's commitment to transport sector reforms.
- 136 Perhaps an even more fundamental risk is that the active engagement of the GoV cannot be assumed. Certainly in the past there have been significant instances of its active interest, and there are current indications of positive intent. Nevertheless the risk is increasing, largely due to Vanuatu's current political instability. This is not only imposing on-going distractions and disruptions upon the executive level of government, but is likely to intensify in the lead up to national elections expected around November 2012.
- 137 This risk will be managed through policy dialogue, and by highlighting (whenever appropriate) the possible achievements of VTSSP II as demonstrated by the outputs of VTSSP I. A key risk management strategy will be the adoption of an annual planning process that specifies program inputs and outputs. This approach should enable the program to remain responsive, while ensuring alignment with the limited absorptive capacity of GoV's agencies.
- 138 The possible key risks associated with the achievement of the two program outcomes relate largely to GoV's ability to:
  - Approve and make adequate financial allocations to resource MIPU/PWD with the skilled staff, equipment and systems necessary to enable it to fully benefit from what the program offers;
  - Commit adequate Government and Donor resources to the rehabilitation and maintenance of a prioritised core road transport network, one that has been rationally and transparently identified.
  - Effectively plan and deliver annually agreed investments in road rehabilitation and maintenance through the PWD. New delivery methods and technologies introduced under VTSSP I should be employed wherever appropriate. Technical Assistance Specialist support should also be employed for the more complex tasks; and
  - Achieve the annual targets set for VTSSP II (during the PfD dialogue process) for all agreed transport infrastructure works and maintenance, as well as for the associated generation of employment opportunities.
- 139 Given the imminent commencement of several new donor infrastructure<sup>37</sup> programs, all to be implemented with PWD involvement, the limited absorptive capacity of the PWD will be stretched to its limits. Hence for VTSSP II to be a success, the PWD will require significant levels of technical assistance and capacity building. The design provides for this support, particularly by addressing the long term capacity constraints in the PWD through the resourcing of a training and scholarships support program.
- 140 The risk of misuse of the funds being channelled through the Vanuatu Development Fund Account is low, although there was one recorded instance of fund mismanagement in VTSSP I. Hence the design of VTSSP II has incorporated fiduciary risk control enhancements as identified in Annex 2. The tranched funding arrangements (with top-ups following acquittals, progress reports, and the requirement for a formal request for additional funding based on agreed work programs etc.) will help minimise the risks further funds will not be available until previous funding has been fully acquitted. Nevertheless, this approach is not without its risks. On the other hand, the returns are high - improving government systems with regard to VTSSP I funding, has the associated benefit of strengthening the GoV's use of its own finances.

<sup>&</sup>lt;sup>37</sup> The GoV is in the planning phases of the ADB/NZAID Inter-Island Shipping Support Project, the ADB/AusAID Port Vila Urban Development Project, and the JICA Star Wharf Redevelopment Project.

- 141 VTSSP is such a substantive and long term engagement between the GoV and the GoA in the transport sector in Vanuatu that it is unlikely to be lightly dismissed. The potential for additional resources reflecting good performance and progress are also incentives for the GoV to proactively manage those risks that relate to its own capacity.
- 142 Other important management, intervention and development risks are identified in Table 15. A detailed Risk Management Plan for the program, to build on the one currently in use for VTSSP I, will be prepared by the ISP during the inception period. This will address these less critical risks, while also updating the Key Risk Assessment Matrix prepared as part of this design.

| (those that affect the VTSSP Program Office):         Political:       Ambiguities in responsibilities under the PfD, Direct Funding Agreement Document affect the work of the program team.         Economic:       Program deliverables prove to be significantly more expensive than bud AusAID fund allocations to the program are less than planned.         Social:       Internal working relationships within the program office affect the qualitimeliness of program deliverables.         The breakdown of relationships with government and private sector sta affects the ability to produce key deliverables.         Legal:       Unforseen technical challenges affect program deliverables.         Ecological:       Significant weather events or natural disasters affect program operation         INTERVENTION RISKS       (those that affect MIPU/PWD, and other partners):         Political:       Competing political agendas or priorities affect MIPU/PWD's ability to d outcomes.         Economic:       PWD budget allocations are insufficient to support the government's obl under the program to fill vacant staff positions.         Cost increases prohibit private sector contractors delivering agreed outper financial mismanagement of activities affects the availability of GoA function of program outcomes.         Social:       Organisational cultural/motivational factors erode the performance of P inhibit achievement of program outcomes.         Relationships between the VTSSP Program Office and PWD deteriorate t eroding the efficacy of program deliverables (especially institutional stresting) <th></th>   |              |
|--|--------------|
| Document affect the work of the program team.         Economic:       Program deliverables prove to be significantly more expensive than bud         AusAID fund allocations to the program are less than planned.         Social:       Internal working relationships within the program office affect the qualitimeliness of program deliverables.         The breakdown of relationships with government and private sector state affects the ability to produce key deliverables.         Technical:       Unforseen technical challenges affect program deliverables.         Legal:       Legislative ambiguity or barriers constrain program deliverables.         Ecological:       Significant weather events or natural disasters affect program operation         INTERVENTION RISKS       (those that affect MIPU/PWD, and other partners):         Political:       Competing political agendas or priorities affect MIPU/PWD's ability to do outcomes.         Local political factors delay the prioritisation and approval of a priority on network.       PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.         Cost increases prohibit private sector contractors delivering agreed outperformance of Prinancial mismanagement of activities affects the availability of GoA fum.         Social:       Organisational cultural/motivational factors erode the performance of Prinhibit achievement of program outcomes.         Relationships between the VTSSP Program Office and PWD deteriorate tot program outcomes.  |              |
| Economic:• Program deliverables prove to be significantly more expensive than bud<br>AusAID fund allocations to the program are less than planned.Social:• Internal working relationships within the program office affect the qualitimeliness of program deliverables.<br>• The breakdown of relationships with government and private sector state affects the ability to produce key deliverables.Technical:• Unforseen technical challenges affect program deliverables.Legal:• Legislative ambiguity or barriers constrain program deliverables.Ecological:• Significant weather events or natural disasters affect program operationINTERVENTION RISKS<br>(those that affect MIPU/PWD, and other partners):Political:• Competing political agendas or priorities affect MIPU/PWD's ability to doutcomes.<br>• Local political factors delay the prioritisation and approval of a priority on network.Economic:• PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.<br>• Cost increases prohibit private sector contractors delivering agreed output<br>• Financial mismanagement of activities affects the availability of GoA functional factors erode the performance of P<br>inhibit achievement of program outcomes.<br>• Relationships between the VTSSP Program Office and PWD deteriorate to the program outcomes.  | t or Design  |
| <ul> <li>AusAID fund allocations to the program are less than planned.</li> <li>Social:         <ul> <li>Internal working relationships within the program office affect the qualitimeliness of program deliverables.</li> <li>The breakdown of relationships with government and private sector stat affects the ability to produce key deliverables.</li> </ul> </li> <li>Technical:         <ul> <li>Unforseen technical challenges affect program deliverables.</li> </ul> </li> <li>Legal:             <ul> <li>Legislative ambiguity or barriers constrain program deliverables.</li> </ul> </li> <li>Ecological:             <ul> <li>Significant weather events or natural disasters affect program operation <i>INTERVENTION RISKS</i> (those that affect MIPU/PWD, and other partners):</li> </ul> </li> <li>Political:             <ul> <li>Competing political agendas or priorities affect MIPU/PWD's ability to d outcomes.</li> <li>Local political factors delay the prioritisation and approval of a priority on network.</li> </ul> </li> <li>Economic:         <ul> <li>PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.</li> <li>Cost increases prohibit private sector contractors delivering agreed outper financial mismanagement of activities affects the availability of GoA functional mismanagement of activities affects the availability of GoA functional mismanagement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate to the program outcomes.</li> </ul> </li> </ul>  |              |
| Social:• Internal working relationships within the program office affect the qualitimeliness of program deliverables.<br>• The breakdown of relationships with government and private sector state affects the ability to produce key deliverables.Technical:• Unforseen technical challenges affect program deliverables.Legal:• Legislative ambiguity or barriers constrain program deliverables.Ecological:• Significant weather events or natural disasters affect program operationINTERVENTION RISKS<br>(those that affect MIPU/PWD, and other partners):Political:• Competing political agendas or priorities affect MIPU/PWD's ability to do<br>outcomes.<br>• Local political factors delay the prioritisation and approval of a priority of<br>network.Economic:• PWD budget allocations are insufficient to support the government's obl<br>under the program to fill vacant staff positions.<br>• Cost increases prohibit private sector contractors delivering agreed out<br>• Financial mismanagement of activities affects the availability of GoA functionSocial:• Organisational cultural/motivational factors erode the performance of P<br>inhibit achievement of program outcomes.<br>• Relationships between the VTSSP Program Office and PWD deteriorate to<br>teriorate to <br< th=""><th>lgeted.</th></br<>  | lgeted.      |
| <ul> <li>timeliness of program deliverables.</li> <li>The breakdown of relationships with government and private sector state affects the ability to produce key deliverables.</li> <li>Technical:</li> <li>Unforseen technical challenges affect program deliverables.</li> <li>Legal:</li> <li>Legislative ambiguity or barriers constrain program deliverables.</li> <li>Ecological:</li> <li>Significant weather events or natural disasters affect program operation <i>INTERVENTION RISKS</i></li> <li>(those that affect MIPU/PWD, and other partners):</li> <li>Political:</li> <li>Competing political agendas or priorities affect MIPU/PWD's ability to do outcomes.</li> <li>Local political factors delay the prioritisation and approval of a priority on network.</li> <li>Economic:</li> <li>PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.</li> <li>Cost increases prohibit private sector contractors delivering agreed outperformance of Prinancial mismanagement of activities affects the availability of GoA functional factors erode the performance of Prinhibit achievement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate to the program office and PWD deteriorate</li></ul>  | ·.           |
| affects the ability to produce key deliverables.Technical:Unforseen technical challenges affect program deliverables.Legal:Legislative ambiguity or barriers constrain program deliverables.Ecological:Significant weather events or natural disasters affect program operationINTERVENTION RISKS(those that affect MIPU/PWD, and other partners):Political:Competing political agendas or priorities affect MIPU/PWD's ability to d<br>outcomes.Local political factors delay the prioritisation and approval of a priority on<br>network.Economic:PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.Cost increases prohibit private sector contractors delivering agreed output<br>Financial mismanagement of activities affects the availability of GoA functionSocial:Organisational cultural/motivational factors erode the performance of P<br>inhibit achievement of program outcomes.Relationships between the VTSSP Program Office and PWD deteriorate to   |              |
| Technical:Unforseen technical challenges affect program deliverables.Legal:Legislative ambiguity or barriers constrain program deliverables.Ecological:Significant weather events or natural disasters affect program operationINTERVENTION RISKS<br>(those that affect MIPU/PWD, and other partners):Political:Competing political agendas or priorities affect MIPU/PWD's ability to d<br>outcomes.Local political factors delay the prioritisation and approval of a priority of<br>network.Economic:PWD budget allocations are insufficient to support the government's obl<br>under the program to fill vacant staff positions.Social:Organisational cultural/motivational factors erode the performance of P<br>inhibit achievement of program outcomes.Relationships between the VTSSP Program Office and PWD deteriorate t   | keholders    |
| Legal:• Legislative ambiguity or barriers constrain program deliverables.Ecological:• Significant weather events or natural disasters affect program operationINTERVENTION RISKS<br>(those that affect MIPU/PWD, and other partners):Political:• Competing political agendas or priorities affect MIPU/PWD's ability to d<br>outcomes.• Local political factors delay the prioritisation and approval of a priority of<br>network.Economic:• PWD budget allocations are insufficient to support the government's obl<br>under the program to fill vacant staff positions.• Cost increases prohibit private sector contractors delivering agreed outp<br>• Financial mismanagement of activities affects the availability of GoA fundSocial:• Organisational cultural/motivational factors erode the performance of P<br>inhibit achievement of program outcomes.• Relationships between the VTSSP Program Office and PWD deteriorate to  |              |
| Ecological:       Significant weather events or natural disasters affect program operation         INTERVENTION RISKS       (those that affect MIPU/PWD, and other partners):         Political:       Competing political agendas or priorities affect MIPU/PWD's ability to d outcomes.         •       Local political factors delay the prioritisation and approval of a priority onetwork.         Economic:       •         •       PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.         •       Cost increases prohibit private sector contractors delivering agreed output of Financial mismanagement of activities affects the availability of GoA fund         Social:       •         •       Relationships between the VTSSP Program Office and PWD deteriorate to the prioritical factors and program outcomes.   |              |
| <ul> <li>INTERVENTION RISKS         <ul> <li>(those that affect MIPU/PWD, and other partners):</li> </ul> </li> <li>Political:         <ul> <li>Competing political agendas or priorities affect MIPU/PWD's ability to d outcomes.</li> <li>Local political factors delay the prioritisation and approval of a priority onetwork.</li> </ul> </li> <li>Economic:         <ul> <li>PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.</li> <li>Cost increases prohibit private sector contractors delivering agreed output Financial mismanagement of activities affects the availability of GoA functional factors erode the performance of P inhibit achievement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate to the performance of P inhibit achievement of program outcomes.</li> </ul> </li> </ul>   | 1S.          |
| (those that affect MIPU/PWD, and other partners):         Political:       • Competing political agendas or priorities affect MIPU/PWD's ability to do outcomes.         • Local political factors delay the prioritisation and approval of a priority of network.         Economic:       • PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.         • Cost increases prohibit private sector contractors delivering agreed output of Financial mismanagement of activities affects the availability of GoA functional factors erode the performance of P inhibit achievement of program outcomes.         • Relationships between the VTSSP Program Office and PWD deteriorate to the financial mismanagement of activities affects and priority of the performance of P inhibit achievement of program outcomes.  |              |
| <ul> <li>Political:         <ul> <li>Competing political agendas or priorities affect MIPU/PWD's ability to d outcomes.</li> <li>Local political factors delay the prioritisation and approval of a priority onetwork.</li> </ul> </li> <li>Economic:         <ul> <li>PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.</li> <li>Cost increases prohibit private sector contractors delivering agreed outperformance of Prinancial mismanagement of activities affects the availability of GoA functional factors erode the performance of Prinhibit achievement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate to the performance of Prinhibit achievement of program outcomes.</li> </ul> </li> </ul>  |              |
| network.         Economic:       PWD budget allocations are insufficient to support the government's oblunder the program to fill vacant staff positions.         Cost increases prohibit private sector contractors delivering agreed outperformance of activities affects the availability of GoA functional factors erode the performance of P inhibit achievement of program outcomes.         Relationships between the VTSSP Program Office and PWD deteriorate to the performance of the perf   | eliver VTSSP |
| <ul> <li>and a stage classifier of a stage of the sta</li></ul> | core road    |
| <ul> <li>Financial mismanagement of activities affects the availability of GoA functional</li> <li>Organisational cultural/motivational factors erode the performance of P inhibit achievement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate to the terms of terms of terms of the terms of terms of</li></ul>          | ligations    |
| <ul> <li>Social:</li> <li>Organisational cultural/motivational factors erode the performance of P inhibit achievement of program outcomes.</li> <li>Relationships between the VTSSP Program Office and PWD deteriorate t</li> </ul>  | puts.        |
| <ul><li>inhibit achievement of program outcomes.</li><li>Relationships between the VTSSP Program Office and PWD deteriorate t</li></ul>  | ds.          |
| Relationships between the VTSSP Program Office and PWD deteriorate t   |              |
|  | thereby      |
|  |              |
| <ul> <li>Relationships with private sector actors break down and inhibit achieve program outcomes.</li> </ul>  |              |
| <b>Technical:</b> • PWD staffing levels and staff skills prove to be inadequate to fully realise outcomes.   | e program    |
| <ul> <li>Private sector contractors lack the technical capacity to adequately deliv<br/>acceptable quality road works.</li> </ul>  | /er          |
| <ul> <li>Diminished availability of suitable local natural road making materials reworks non-viable in some islands</li> </ul>   | enders road  |
| Legal: • Legal or legislative impediments or SLO capacity constraints affect the ti quality of PWD engagement of private sector contractors.   | imeliness or |
| <b>Ecological:</b> • Significant weather events or natural disasters affect the progress of isla improvement work plans.   | and road     |
| DEVELOPMENT RISKS  |              |
| (those that affect Transport sector agencies, road contractors and communities)  |              |
| Political: • Lack of political will affects the ongoing prioritisation and resource alloc  | cation for   |
| transport service improvements.  | _            |
| Political intervention around PWD's selection of sub-project roads based   | d on a       |

| Table 15: VTSSP II Management, | Intervention and Development Risks Events |
|--------------------------------|---|
|--------------------------------|---|

## VANUATU TRANSPORT SECTOR SUPPORT PROGRAM – PHASE II

|             | prioritised core network delays implementation   |
|-------------|--|
| Economic:   | <ul> <li>Budget allocations are insufficient to support adequate and regular maintenance of roads improved under the Program.</li> <li>Local private sector contractors unable to mobilise sufficient resources for plant and</li> </ul>       |
|             | staff necessary to participate in delivery of road works.  |
|             | <ul> <li>Improved island road trafficability does not translate into increased economic activity.</li> </ul>   |
| Social:     | <ul> <li>Local landowner attitudes and rent seeking approaches towards gravel royalty payments results in delayed or cancelled road works</li> </ul>   |
|             | • Lack of entrepreneurship inhibits extent to which the development of IBCs can be sustained.  |
|             | <ul> <li>Social inequities inhibit involvement of women, disabled, youth or other<br/>marginalised groups to derive social or economic benefits from improvement to<br/>priority roads and the associated employment opportunities.</li> </ul> |
| Technical:  | • Local geology on some islands makes road building without suitable materials unaffordable or unsustainable.  |
|             | <ul> <li>Local communities lack skill required to maintain local roads following<br/>rehabilitation.</li> </ul>  |
| Legal:      | <ul> <li>Impediments to securing adequate insurance of works and workers limits capacity<br/>to reform road maintenance delivery systems</li> </ul>  |
| Ecological: | <ul> <li>Significant weather events or natural disasters destroy or damage roads after<br/>rehabilitation.</li> </ul>  |

\_\_\_\_\_

## Annex 1. Work Undertaken by AusAID Technical Advisors to the MIPU/PWD Reform Program Agenda

Over the last two years Australia has been supporting the Government of Vanuatu with the development of their VTSSP I initiative. As part of this support considerable studies have been undertaken. This Annex lists the major studies in order that the VTSSP II will be aware of the information generated. Copies of all studies are available from the Governance for Growth Team or through the Ministry of Infrastructure and Public Utilities.

- 1. *MIPU Corporate Plan 2011-2013*. Launched in March 2011 this critical government planning document, developed with TA support under VTSSP I, represented a renewal of lapsed corporate strategic planning and reporting within MIPU.
- 2. **National Infrastructure Master Plan**. With technical support from PRIF (AusAID funding) MIPU have commenced work to update the National Infrastructure Master Plan which was last revised in 1999.
- 3. *Identification of Road Investment Priorities.* Supporting the Infrastructure Master Plan initiative the current *Priority Roads Study* aims to identify methodologies for targeting and identifying critical socio-economic transport links to be targeted within a constrained budget context. Study outcomes due in early 2012.
- 4. **Exploring Road Maintenance Financing Options.** MIPU has prepared a discussion paper identify options to increase the revenue available for road maintenance including an increased emphasis on user cost recovery.
- 5. **Road Sector Management Reform Plan**. MIPU has prepared a discussion note identify a mid to long term strategic plan for the institutional reforms necessary for more effective road sector management arrangements including establishment of a new Public Road Act. Draft.
- 6. *PWD Organisational Restructure Interim plan 2012-2013.* The Public Service Commission have approved an interim organisational structure for PWD with a view to filling vacant post and getting the right skills in place to better meet effective budget implementation needs. The submission, which represented the first PWD restructure since 2004, will support MIPU 2012 Budget submission.
- 7. **PWD Human Resource Development Strategy and Succession Plan.** A comprehensive plan has been prepared addressing the challenging HR issues facing MIPU including a depleted, unsuitably skilled and aging workforce.
- 8. **Outsourcing of Services Policy** A draft Policy aimed at formalising PWD's partnering with private sector for service delivery, has been prepared and awaits formal adoption.
- 9. *Outer islands Airport Maintenance Needs Scoping Study.* The study identified and prioritized safety and maintenance work needs for Vanuatu's 26 outer island airstrips.
- 10. *National Aviation Policy Framework.* MIPU have commenced the preparation of a framework for developing a National Aviation Policy. Draft policy framework due February 2012..
- 11. **Port Vila International Port Redevelopment Project Action Plan.** Through a partnership with GfG Program and the World Bank MIPU and MFEM have access to port management technical expertise for the implementation of planned regulatory and governance reforms of the stevedoring concession at Port Vila container terminal over the next 2 years.
- 12. **Port Vila Urban Road Renewal Scoping Study.** In February 2011 MIPU completed a scoping study of Port Vila urban road renewal needs. The study results were subsequently incorporated into the Port Vila Urban Development Project (PVUDP) VTSSP I.

## Annex 2. VTSSP Funding and Fiduciary Control Mechanisms

## LESSONS LEARNED FROM VTSSP I

VTSSP II funds flow management builds on the disbursement and accountability lessons learnt from VTSSP I and its Extension. These lessons can be summarised as follows:

- In VTSSP I, GoV, GfG and PWD/VTSSP have joint management and oversight responsibilities for VTSSP funds. This tripartite relationship requires effective communications and engagement strategies between the parties, otherwise key management or oversight functions may be overlooked;
- Funds transfers between GoA and GoV need to be monitored into the Development Fund Account (DFA) and the AusAID Project Accounts. Funds transfers between Reserve Bank of Australia and Reserve Bank of Vanuatu need to be oversighted by GfG to ensure reasonable foreign currency exchange costs are incurred; and that timely and accurate credits are made to the relevant AusAID Project Account in SmartStream<sup>38</sup>.
- *GoV procurement arrangements for amounts in excess of VT5m are robust and the modifications for VTSSP agreed with GoV expedite their use.* VTSSP II needs to use these procurement mechanisms for individual transactions valued at more than VT5m;
- *PWD procurement arrangements for amounts of less than VT5m are less robust and require specific oversight arrangements to ensure effective use of funds.* Matters to be addressed are the contractual terms developed for Small Works Agreements (SWAs); evidence of sufficient Budget availability checking is documented at the time of contract ratification; and ensuring correct Financial Delegations are held by SWA signatories. SWA signatories may include VTSSP Program Staff, where this is elaborated in the Subsidiary Arrangements and agreed and documented by the Director General MIPU.
- *GoV disbursement mechanisms can be less robust and require joint risk management.* Collaboration between PWD/VTSSP and MFEM is needed to ensure only properly authorised SWAs and LPOs are certified and paid by the MFEM Exchequers Section. This requires an effective level of engagement and shared oversight by MFEM and PWD/ VTSSP.
- *GoV accounting mechanisms are robust and can to be used to record transactional data and management reports.* This is consistent with GoV policy on developing a universal budget that manages and reports on all donor contributions; and Australia's commitment to Paris Declaration principles concerning use of Partner Government Systems;
- *GoV reporting of Development Fund Account has recently become more detailed.* This advance needs to be maintained and streamlined in VTSSP II.
- *GoV auditing has been minimal over the past decade.* Support for more robust, possibly outsourced, auditing of VTSSP II needs to be elaborated in the Direct Funding Agreement between Governments.

These lessons, combined with existing bilateral policy agreement that GoV systems are used to manage Australian development programs, means that the number of options for disbursement and accountability arrangements in VTSSP II are limited.

<sup>&</sup>lt;sup>38</sup> SmartStream is the term used to describe the automated GOV public financial management system that records and reports on all GOV financial transactions.

## NATURE AND TYPE OF VTSSP II FUNDS FLOWS

VTSSP II will support transport sector maintenance and MIPU organisational development requirements only. Major infrastructure procurements will be managed by the Vanuatu Major Procurement Unit in the Prime Minister's Office.

## **OPTIONS AVAILABLE FOR VTSSP II FUNDS FLOWS**

There are three options available for managing VTSSP II funds flows, these are:

- **Place VTSSP II funds in GoV DFA** and procure and disburse through GoV accounting and reporting systems (as for VTSSP I), but supported by effective oversight processes that include regular audit and are set out in the Subsidiary Arrangement;
- **Place VTSSP II funds in GoV DFA and GoV outsources management** of the disbursement and accountability functions to an agreed third party. This would need to be incorporated into the Subsidiary Arrangements and the outsourced manager subject to agreed GoV-AusAID oversight processes.
- **Place VTSSP II funds with an AusAID ISP** who will be responsible for all disbursement and accountability functions under a contract direct with AusAID. This would need to be incorporated into the Subsidiary Arrangements.

There are some variations within these options concerning roles and responsibilities that may produce a number of sub-options in each case. These are discussed in greater detail below.

## **OPTION 1 - PLACE VTSSP II FUNDS IN GOV DFA**

This option is a reinforced version of the funds flow arrangements established under VTSSP I. Reinforcement is proposed to processes and monitoring and evaluation for:

- AusAID funds transfers;
- PWD/ VTSSP & MFEM financial delegations oversight;
- PWD/ VTSSP procurements under VT5m;
- GoV reporting against VTSSP Project Account and DFA; and
- DFA and PWD/ VTSSP audits.

This option builds on the gains made in VTSSP I; is consistent with GoA and GoV bilateral policy supporting Paris Declaration principles concerning the use of Partner Government Systems; and has the operational advantage of being well understood by PWD and MFEM and requiring a minimum of change to the existing procedures of PWD/ VTSSP.

In summary, this option has considerable political capital invested in it. To propose a change to this approach will require substantial policy engagement between GfG and GoV and with MFEM in particular. This is because moving away from this approach calls for renegotiation of aid delivery principles in Vanuatu; and redrafting of the Subsidiary Arrangement. The lead time and goodwill that will need to be invested in realigning the AusAID program management away from this funds flows approach will be considerable.

#### Reinforced governance and M&E processes for funds flows using KPIs

Transparency and accountability of VTSSP funding can be reinforced by establishing a number of Key Performance Indicators (KPIs) that are incorporated into the Subsidiary arrangements and subject to quarterly reporting to the GfG Management Committee.

The VTSSP II Finance KPIs proposed for this funds flow option are designed to ensure that both VTSSP II project and GoV systems are functioning as required; and are as follows:

• **VTSSP II Workplan and Cash flow updated quarterly:** Prepared by VTSSP II Team Leader and VTSSP II Public Finance Management Specialist (PFMS) and submitted to GfG and attached to the GfG Management Committee Report.

- Days taken to receipt a funds transfer in SmartStream Project Account: GfG reconciles funds transferred from AusAID Canberra to SmartStream Project Revenue balances; and identifies days taken to credit each funds transfer. Days taken to receipt a funds transfer to a SmartStream Project Account must not exceed 10 working days from date of AusAID Canberra to date of SmartStream Revenue credit. GfG to provide AusAID Canberra transfer date and details; GfG to receive RBV Credit Advice for foreign currency exchange rates used and Vatu proceeds; and VTSSP II PFMS to advise date that the VTSSP II Revenue Allocation Journal was submitted to MFEM and the date the SmartStream Project Account is credited by MFEM.
- **Exchange rate margin on foreign currency transfers:** VTSSP II PFMS to compare the exchange rate used by the RBV with that available on the open market on the same date. This difference between these exchange rates needs to be 1.5% or less, as this represents a reasonable foreign currency conversion fee to the RBV.
- Sample test of SWAs for evidence of sufficient Budget availability checking and correct procurement procedures applied VTSSP II and PWD Recurrent budget: PWD TL/IDS and VTSSP II PFMS to test a representative sample of SWAs for VTSSP and PWD Recurrent Budget each month and ensure that the (a) 'Sufficient Budget availability' check has been conducted and is evidenced on each SWA and in PWD SWA Registers; and (b) that each is supported by evidence of correct procurement procedure being followed. Each monthly sample needs to indicate 100% compliance with these requirements of the GoV Financial regulations.
- Sample test of Financial Delegates signing SWAs & LPOs VTSSP II and PWD Recurrent Budget: PWD Technical Director and VTSSP II Finance Advisor to test a representative monthly sample of (a) VTSSP II SWAs & LPOs signed by PWD and compare the PWD signatories with the current DG MIPU authorised Financial Delegates. Each monthly sample needs to indicate 0% unauthorised Financial Delegates. A similar monthly representative sample needs to be taken of (b) PWD Recurrent Budget SWAs & LPOs and the same sample test result reported to GSC, which should also indicate 0% unauthorised Financial Delegates each month. PWD Technical Director needs to formally refer all unauthorised SWAs and LPOs to MFEM Exchequers Section for stoppayment and/ or procedural review. This referral by PWD needs to be reported to GfG Management Committee for all unauthorised Financial Delegations identified in the course of sample testing and the outcomes advised.
- **MFEM Quarterly Reporting for AusAID DFA Projects is available and accurate for Revenues:** GfG to confirm that (a) MFEM report received within 14 days of quarter-end; and (b) AusAID Project Revenues reflect for any AusAID funds transfers received in that quarter.
- **MFEM Annual Financial Statements include a Schedule for AusAID DFA balances and this is consistent with MFEM Quarterly reporting for AusAID DFA Projects:** GfG to confirm that Financial Statements and the associated DFA Schedule (a) are/ are not available for the June GfG Management Committee Meeting each year; and (b) have/ have not been provided to the Auditor General for his/ her audit opinion. GfG Management Committee Chair to refer any concerns to DG MFEM.
- **Months since last GoV audit of DFA and PWD/ VTSSP:** GfG to advise the number of months since the last Audit Report for (a) the DFA; and (b) PWD/ VTSSP operational procedures. This should not exceed 18 months in the normal course of auditing. GfG Management Committee Chair to refer any concerns to Auditor General.

#### Risks and risk mitigation mechanisms

The risks to AusAID funds under Option 1 for managing VTSSP II funds flows are shown in Table 16.

| RISK  | RISK MITIGATION  | ROLES & RESPONSIBILITIES  |
|---|--|---|
| Oversight coordination  |  |   |
| The VTSSP II tripartite monitoring process is not<br>effective and key oversight activities are either<br>overlooked, or delayed to the point where they<br>are ineffectual | VTSSP II finance performance KPIs to be<br>identified in the Subsidiary Arrangement.<br>GfG Management Committee to receive quarterly<br>reports that assess finance performance KPIs.<br>Report to be submitted to GfG Management<br>Committee at least 14 days before the quarterly<br>meeting.  | GfG to coordinate and compile the quarterly oversight<br>report, noting non-reporting stakeholders, and submit<br>to GoV for discussion.<br>Chair, GfG Management Committee to lead discussion<br>and recommend remedial actions for any unsatisfactory<br>KPIs.  |
| PWD Finance Section sustainability  |  |   |
| PWD Finance Section operational capacity is<br>diminished below sustainability by staff<br>departures and cannot support PWD/ VTSSP<br>financial functions as intended      | VTSSP II to support PWD Finance Section staff<br>development; monitor staff performance; and<br>report any staff movements to PWD.<br>Support PWD to recruit any replacements needed<br>in a timely manner.  | VTSSP II Finance Advisor to monitor PWD Finance<br>Section staffing and performance.<br>PWD Technical Director to support PWD Finance<br>Section staff development and timely recruitment, if<br>needed.  |
| Funds transfers   |  |   |
| Excessive delays in crediting AusAID funds<br>transfers to AusAID Project Revenue balances in<br>SmartStream  | Monitor days taken to credit AusAID funds<br>transfers to AusAID Project Revenues and report<br>to GFG and GOV. Needs to be <10 working days.  | GfG to monitor AusAID transfer & RBV Credit Advice.<br>VTSSP II Finance Advisor to monitor Revenue<br>Allocation Journal and related credit to AusAID Project<br>Revenues and report to GfG.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MFEM.  |
| Excessive foreign currency conversion fees<br>charged for AusAID funds transfers  | Monitor RBV exchange rate against market<br>exchange rate on the same day for all AusAID<br>funds transfers and report variations to GFG and<br>GoV Needs to be <1.5%.   | GfG to supply RBV Credit Advice to VTSSP II Finance<br>Advisor.<br>VTSSP II Finance Advisor to compare RBV rate with<br>open market rates on same day and report to GfG.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MFEM.  |
| Financial delegations   |  |   |
| Unauthorised PWD Financial Delegates sign<br>SWAs and/ or LPOs in breach of GoV Financial<br>Regulations  | PWD/ VTSSP sample test SAWs/ LPOs for both<br>VTSSP II and Recurrent Budget for correctly<br>authorised Financial Delegations and report to<br>GOV and GFG. Needs to be 0% unauthorised.<br>VTSSP II Finance Advisor can become Financial<br>Delegate for program funds if approved by DG<br>MIPU. | PWD Technical Director and VTSSP II Finance Advisor<br>to conduct sample testing and report to GfG. (PWD<br>Technical Director only would conducts tests if VTSSP II<br>Finance Advisor became an authorised PWD Financial<br>Delegate)<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MFEM. |

| RISK   | RISK MITIGATION  | ROLES & RESPONSIBILITIES   |
|--|--|--|
| MFEM Exchequers Section certifies payment of<br>LPOs not signed by authorised Financial<br>Delegates in breach of Financial Regulations  | PWD/ VTSSP refers all LPOs with unauthorised<br>Financial Delegates to MFEM Exchequer Section<br>for stop-payment. Exchequer Section needs to<br>certify 0% of unauthorised LPOs. Report all<br>referrals and outcomes to GFG and GOV to inform<br>GfG Management Committee. | PWD Technical Director and VTSSP II Finance Advisor<br>(if not a PWD Financial Delegate) to conduct sample<br>testing and report to GfG.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MFEM. |
| Procurements under VT5m  |  |  |
| PWD/ VTSSP does not consistently apply<br>Financial Regulations concerning checking of<br>budget availability before committing SWAs/<br>LPOs  | Sample test SWAs/ LPOs for checking of budget availability and report GFG and GOV. Needs to be 0% unchecked.   | PWD Technical Director and VTSSP II Finance Advisor<br>to conduct sample testing and report to GfG.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MIPU.                                      |
| PWD/ VTSSP does not consistently apply<br>Financial Regulations requiring correct<br>procurement procedures  | Sample test SWAs/ LPOs for authorised financial<br>Delegates as signatories and report to GOV and<br>GFG. Needs to be 0% unauthorised.   | PWD Technical Director and VTSSP II Finance Advisor<br>to conduct sample testing and report to GfG.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MIPU.                                      |
| Reporting  |  |  |
| MFEM does not provide quarterly AusAID DFA<br>Project Reports within 14 days of the end of each<br>quarter and the completeness, accuracy and<br>validity of reporting of AusAID DFA balances is<br>reduced as a result. | Provision of Quarterly AusAID DFA Project<br>Reports to be incorporated into the Subsidiary<br>Arrangements.<br>MFEM to be formally notified of any non-<br>reporting of quarterly AusAID DFA reports<br>within 21 days of the end of each quarter.                          | GfG to follow up any non-reporting with MFEM   |
| MFEM does not provide Annual Financial<br>Statements and DFA Schedule within three<br>months of the financial year-end, in breach of the<br>Finance Regulations.   | MFEM to be formally notified of any non-<br>reporting of Annual Financial Statements and the<br>DFA Schedule by 21 April, as appropriate.  | GfG to follow up any non-reporting with MFEM   |
| Audit  |  |  |

\_\_\_\_\_

| RISK   | RISK MITIGATION  | ROLES & RESPONSIBILITIES  |
|--|--|---|
| VNAO does not build capacity to conduct regular<br>whole-of-system audits that include DFA and<br>SmartStream DFA Project balances and<br>transactions; and does not build capacity to<br>outsource these tasks. | Support for outsourced auditing of the DFA<br>Account at RBV and DFA Project transactions in<br>SmartStream to be incorporated into the<br>Subsidiary Arrangements.<br>VTSSP II to support VNAO to conduct DFA and<br>SmartStream DFA Project audits, using<br>outsourcing, twinning and any other<br>complimentary arrangements, as appropriate.<br>VTSSP II to monitor months since last audit of<br>DFA and DFA Project accounts and report to GfG<br>Management Committee. | GfG to liaise with VNAO and MFEM on programs and<br>funding for audit capacity development.<br>Chair GfG Management Committee to formally refer any<br>concerns to DG MFEM. |

Table 16: Option 1, VTSSP II fund flows – Risks, Risk mitigation and role sand responsibilities

## OPTION 2 - PLACE VTSSP II FUNDS IN GOV DFA AND GOV OUTSOURCES MANAGEMENT

Option 2 becomes feasible where GoV and AusAID reach agreement that PWD cannot build the capacity to manage transport sector maintenance; and outsourcing the implementation of these functions is the most effective and efficient policy option for GoV going forward.

Option 2 is similar to Option 1 for funds transfers; with the proposed VMPU procuring VTSSP Maintenance Contractor(s) to deliver packages of maintenance services under contract; and PWD/ VTSSP developing major contract administration capacities to oversight the contract(s).

PWD may face the same capacity building and sustainability pressures under Option 2 as with their existing maintenance implementation role, with the exception that staff would be planning large scale maintenance and managing a few larger contractors.

#### POLICY REFORMS AND PRIVATE SECTOR CAPACITY ASSESSMENT

It needs to be noted that neither GoV nor AusAID have advanced an outsourcing policy position in recent High-Level Bilateral Consultations; and wide support for this policy would need to be built within GoV before it could be successfully adopted. Further, this policy reform may be difficult to accomplish by June 2012, when it would be needed for VTSSP II, in the lead-up to the 2012 general parliamentary elections.

Simultaneously with building the policy platform, GoV and AusAID would also need to conduct a detailed transport sector capacity analysis to properly identify Vanuatu commercial operators who are both technically capable and organisationally sound enough to deliver these services for GoV on a sustainable basis. This task may be complicated by concerns over possible private sector involvement in incorrectly documented SWAs being prepared and processed by PWD.

It may be more realistic from a timing and policy development perspective if VTSSP II is utilised to establish whether, or not, PWD can be built into a viable transport sector maintenance agency for GoV. The findings would inform GoV and AusAID if outsourcing polices represent a more effective service delivery model for GoV in VTSSP Phase III from 2016 onwards.

Accordingly, this option is not developed further, other than to identify the major risks and risk mitigation strategies that could be employed.

#### **RISKS AND RISK MITIGATION MECHANISMS**

Option 2 faces all the same risks as Option 1, plus those associated with activity outsourcing (see Table 17).

## **OPTION 3 - PLACE VTSSP II FUNDS WITH AN AUSAID ISP**

Option 3 requires a reversal of bilateral agreement to use GoV systems to manage Australian assistance; and reverts to the previous policy of using a ISP to manage funding and operational risks associated with the Australian development program in the transport sector.

Adopting Option 3 will also requires agreement to depart from GoV policy concerning a universal budget for recurrent and development funding, a step that is likely to be contested by MFEM as the implementing agency for this 2010 GoV policy decision.

| RISK   | RISK MITIGATION  | <b>ROLES &amp; RESPONSIBILITIES</b>  |  |
|--|--|--|--|
| Contractor performance management  |  |  |  |
| PWD unable to develop major contract<br>management skills; and performance<br>management of PWD Maintenance Contractors is<br>limited. Contractors do not deliver value for<br>money outcomes to VTSSP II and PWD.   | PWD Technical Director and VTSSP II technical<br>advisors establish a PWD supervisory development<br>program, with clear handover milestones.<br>PWD Technical Director supports PWD staff<br>recruitment and training to build this capacity, as<br>needed. | PWD Technical Director to lead and support<br>organisational change and staffing recruitment and<br>development that supports a transition to<br>maintenance planning and contractor performance<br>management a s core PWD skills.  |  |
| PWD sustainability   |  |  |  |
| PWD contractor performance management<br>capacity is reduced to levels that are not<br>sustainable by staff departures and cannot<br>support PWD/ VTSSP financial functions as<br>intended.  | VTSSP II to support PWD Technical Director with<br>staff development; monitor staff performance; and<br>report any staff movements to PWD.<br>Support PWD to recruit any replacements needed in<br>a timely manner.  | VTSSP II to monitor PWD staffing and performance.<br>PWD Technical Director to support PWD staff<br>development and timely recruitment, if needed.   |  |
| Budget sustainability  |  |  |  |
| GoV does not replace donor funding of major<br>maintenance contracts with Budget funding.<br>Continuity of PWD maintenance funding is not<br>assured and planned maintenance cannot be<br>delivered.   | PWD Technical Director and VTSSP II Finance<br>Advisor to monitor PWD Budget allocations to<br>ensure a transition to GoV Budget resourcing of<br>maintenance is built into the maintenance planning<br>model in a phased and scalable manner.               | VTSSP II Finance Advisor to monitor PWD Budget<br>Appropriations and Warrant releases on a quarterly<br>basis to determine the trend in GoV funding of<br>outsourced maintenance plans.<br>PWD Technical Director and DG MIPU to refer any<br>emerging issues to the Minister for referral to COM. |  |
| Accountability   |  |  |  |
| PWD staff are exposed to moral hazard<br>concerning resources allocation when they are<br>not directly accountable for delivering the<br>maintenance plan that they design. Inefficient<br>maintenance plans do not deliver value for<br>money outcomes to VTSSP II or PWD | PWD / VTSSP II to develop KPIs for efficient<br>maintenance planning and the cost implications of<br>these.<br>PWD/ VTSSP II to train PWD staff in these practices<br>and assess successive PWD Maintenance plans for<br>adherence to them.                  | VTSSP II technical and finance advisors to train PWD<br>staff in cost efficient maintenance planning.<br>PWD Technical Director and DG MIPU to promote<br>and enforce application of cost efficient and effective<br>maintenance planning.   |  |
| PWD staff are 'captured' by the interests of a few<br>major maintenance contractors that offer job<br>security outside GoV; and this adversely affects<br>contractor performance management.   | PWD/ VTSSP II to develop staff rotation and oversight processes that reduce this risk.   | VTSSP II technical and finance advisors to train staff<br>in ethics and accountability.<br>PWD Technical Director and DG MIPU to promote<br>ethics and accountability in PWD.  |  |

 Table 17: Option 2, VTSSP II fund flows – additional Risks, Risk mitigation and stakeholder roles.

\_\_\_\_\_

#### POLICY CHANGE NEEDED

As with Option 2, the policy change needed to implement Option 3 was not signalled at recent high-level, bilateral consultations and will require the investment of considerable political capital and goodwill by GfG to achieve this change in time to implement this funds flow option for VTSSP II in June 2012.

Option 3 is not as likely to be impacted by the lead-up to the 2012 general parliamentary elections, because this policy change has less direct impact on GoV in the short term.

Resistance may also emerge within AusAID to adopting a singularly different policy stance for managing VTSSP II funds flows compared with other bilateral programs. Where this resistance is encountered, GfG will need to make a strong justification for adopting Option 3. In the absence of any clear examples of mismanagement or financial losses in VTSSP I, it may be difficult to make this justification based on a risk management argument alone. The efficiency case is somewhat offset by the cost of ISP implementation of program funding, especially where the risk to AusAID funding is not demonstrably high.

Considerable effort would be needed to bring about these policy changes; and this option would need to secure a strong commitment from AusAID Vanuatu before it could be pursued.

#### RISKS AND RISK MITIGATION MECHANISMS

The risks associated with the use of an AusAID ISP are the traditional concerns associated with the appointment of an agent. These risks can be summarised as follows:

- ISP does not recruit effective staff and quality of work, including skills transfers and relationship building with PWD is adversely affected;
- ISP interposes itself between GfG and GoV transport sector and policy engagement is made more complex as a result; and
- ISP limits its work and focus to the terms of the contract, which is legally defensible and efficient from the ISP perspective, and broader engagement with PWD does not occur as a consequence.

In the case of PWD, there are additional risks associated with the move away from direct PWD involvement in VTSSP activities to a more stand-alone program structure that PWD has links to, but has no direct responsibilities over.

This decoupling of PWD and VTSSP II may lead to a lessening of PWD's ownership of VTSSP II and the risk that the program loses traction in its efforts to build capacity in transport sector maintenance by being seen to be "outside the tent". This may be detrimental at a crucial time in PWD's organisational development, being the June 2012 implementation of the PSC-approved restructure.

The risk mitigation strategy in this case would be to hold the ISP contractually accountable for supporting and delivering the PWD restructure; and maintaining effective relationships with PWD throughout this organisational transformation. It needs to be noted that ISPs are reluctant to link their contract performance to activities outside their immediate control, such as the PWD restructure, and contracting this level of ISP accountability may prove challenging for AusAID Vanuatu.

#### PREFERRED OPTION FOR VTSSP II FUNDS FLOWS

Option 1 offers significant advantages for VTSSP II funds disbursement and accountability. These advantages can be summarised as follows:

• it is consistent with existing GoV and AusAID policies concerning management of Australian development funding;

- it builds on the mechanisms established over 30 months for VTSSP I and so is well understood by PWD counterparts and is familiar to other stakeholders in GoV;
- all existing relationships with PWD and MIPU are expanded, not altered;
- all proposed reinforcements to M&E and reporting processes are operational in nature and do not require any policy or systemic change to be implemented. Further, these processes can be replicated to better oversight other donor programs functioning through DFA, including AusAID programs; and
- risk management of AusAID funds in the DFA is improved through clearer relationships and assignment of roles and responsibilities between the key stakeholders in the GoV PFM system.

Potential drawbacks to Option 1 are as follows:

- Proposed reinforcing of M&E processes expands in VTSSP II into joint assessments of PWD Recurrent Budget transactions, which may trigger concerns of a donor-led agenda for recurrent budget expenditures. This needs to be managed by recognising the PWD Technical Director as the manager of this process; and reporting the sample test results correctly and neutrally;
- GfG Management Committee, MFEM and GfG are all called on to take a more active role in VTSSP II oversighting, with the allocation of specific reporting and technical responsibilities. Consequently, VTSSP II may appear resource intensive compared to other ODA programs and consistent engagement of these stakeholders in the oversight process may be difficult to sustain. This perception can be addressed by GfG reinforcing the oversight role for all AusAID programs operating through the DFA. This will have the effect of raising the overall level of commitment to oversighting AusAID programs and VTSSP II would then appear consistent with these requirements.

# Option 1 is considered to be the most effective for VTSSP II funds disbursement and accountability and is recommended to AusAID.

Options 2 and 3 both have timing difficulties relating to the policy changes that each requires in order to be implemented. The concern is that policy agreement will need to be reached in 2011 if AusAID is to confidently go to tender for VTSSP II arrangements under Option 2 or 3 in time for mobilisation in mid-2012. As a worst case, GoV-AusAID policy agreement would need to be achieved by March 2012 following AusAID agreement to conduct an accelerated tender process in the case of VTSSP II.

In both cases, but more so for Option 2, the unknown factor is the impact that the lead up to the 2012 general elections would have. This factor could delay or even prevent policy dialogue and so cause implementation of VTSSP II to be deferred and the program momentum from VTSSP I lost as a result. Because of this, both Option 2 and 3 are considered higher risk from an engagement and timing perspective.

Further, the likely success of any policy dialogue entered into needs to be considered.

**Option 2** is likely to garner support from those in GoV who recognise the limited capacity that can be built in small public service, with mobile officers and where retention of specialist skills is regularly challenged by private sector and migration opportunities.

The most sustainable approach to transport sector maintenance may be to build a private sector capacity with a vested commercial interest in providing services to government. However, the time that will be needed to build support for this policy within GoV and in industry consultations indicate that it is more likely to be feasible after VTSSP II is concluded, and the findings around PWD capacity building better known, than as a model for VTSSP II implementation. Outsourcing of maintenance works could be trialled during VTSSP II and the

results used to inform policy dialogue in the design of VTSSP III. This option is more likely to be relevant to VTSSP III than it is for VTSSP II.

Developing policy support for **Option 3** faces greater hurdles than for Option 2. There will be limited GoV or AusAID support for a reversion to stand-alone programs managed by a ISP. This is because for some time AusAID and GoV have had an agreed policy to use GoV systems to manage Australian funds. Further, there is no evidence of financial losses or efficiency gains from VTSSP I that supports the case for making this policy change to implement VTSSP II. GfG would have to make a strong commitment to achieving this policy change; and shepherd it through GoV and AusAID. The level of resistance is likely to be high; and the gains made may be asymmetrical to the effort required to achieve them. **This option is not recommended.** 

## DRAFT OUTLINE ANTI-CORRUPTION PLAN

An operational Anti-Corruption Action Plan (ACAP) for VTSSPII will be formulated during the inception phase, in line with AusAID's Anti-Fraud and Anti-Corruption Policy directives. An initial outline of the anti-corruption plan is presented in this Annex. During implementation the ISP will monitor and report on the progress in relation to the Action Plan. Key elements of the ACAP are:

DISCLOSURE OF INFORMATION: To encourage a healthy sharing of information concerning subproject selection and implementation, the ISP will ensure that, in accordance with the AusAID's 2011 Transparency Charter for the Australian Aid Program, relevant information about VTSSPII will be made publicly accessible through established procedures, including the procurement plans and schedules, and contract information for large contracts.

COLLUSION MITIGATION: Special attention will be given to the planning and preparation of procurement processes in general and more specifically at the sub-project level, as this may entail different package types and sizes, different levels of responsibility, and different capacities in terms of process management and oversight.

MITIGATION OF FORGERY AND FRAUD: Forgery and fraud risks will be minimized by adherence to fiduciary management practices in accordance with agreed VTSSPII FMS procedures. The ACAP will outline measures such as payment validation procedures, documentation and reporting mechanism. Measures undertaken will include strict payment validation procedures that will be rigorously enforced. Project/sub-project filing/bookkeeping will be tightly controlled and subject to strict reviews. Special attention will be given to aspects that have proven vulnerable in previous projects, such as "soft" categories like training and workshops. The ISP will be supporting the VTSSP Program team and provide the necessary financial management expertise to ensure that the staff can perform its duties in this area.

COMPLAINT HANDLING: VTSSPII, as a program being funded by AusAID, will also be subject to the complaint handling mechanisms of AusAID. As such, there is no need to create a new system to handle complaints. The VTSSP Program team will also prepare and use a program communications strategy to avoid many of the complaints that misunderstandings or poor communications may cause.

## Annex 3. Review of Vanuatu Transport Sector Private Sector Providers & summary of road improvement costs

## CONTRACTOR CAPACITY ASSESSMENT

An capacity assessment of private sector infrastructure contractors was carried out during the 2009 VTSSP preliminary studies but mainly based on anecdotal evidence and a few sample interviews with contractors. Table 18 was prepared showing an indication of the type of contractors by speciality and estimated annual turnover<sup>39</sup>.

| Main local Vanuatu<br>contractors working with | Type of activity |              |              |              |              | Estimated turnover<br>(VT) |              |
|--|------------------|--------------|--------------|--------------|--------------|----------------------------|--------------|
| MIPU/PWD                                       | Hiring equip.    | Wharfs       | Bridges      | Road         | Building     | <100mVT                    | >100mVT      |
| Dominique Dinh                                 |                  |              |              |              | $\checkmark$ |                            | $\checkmark$ |
| Dinh Van Tan Trading                           |                  |              |              | $\checkmark$ |              |                            | $\checkmark$ |
| Dinh Van Tu                                    | $\checkmark$     |              |              |              |              |                            |              |
| Bramley Construction                           |                  |              |              |              | $\checkmark$ | $\checkmark$               |              |
| Perronnet Enterprise                           |                  |              |              | ✓            | $\checkmark$ |                            | $\checkmark$ |
| Fletcher                                       |                  |              | $\checkmark$ |              |              |                            | $\checkmark$ |
| Ifira Wharf (IGS)                              |                  | ✓            |              |              |              |                            |              |
| Earth Quip                                     | $\checkmark$     | $\checkmark$ |              |              |              |                            |              |
| Kwang Sing Ming                                |                  |              |              | ✓            |              |                            | $\checkmark$ |
| Unity Shell                                    | $\checkmark$     |              |              |              |              |                            |              |
| Wong Sze Sing                                  | $\checkmark$     |              |              |              |              |                            |              |
| Kuvu Noel                                      | $\checkmark$     |              |              |              |              |                            |              |
| LTC Trading                                    | $\checkmark$     |              |              | ✓            |              |                            | $\checkmark$ |
| Alpen Construction                             | $\checkmark$     |              |              | $\checkmark$ | $\checkmark$ | $\checkmark$               |              |
| Seaview Holdings                               |                  |              |              | ✓            |              | ✓                          |              |

Table 18: Summary of Vanuatu Private Sector Infrastructure Contractors (as of 2009)

As MIPU/PWD had not collected detailed prequalification and / or post-qualification data from its tenders, VTSSP decided to carry out a more detailed assessment of the local construction industry sector. A questionnaire was sent out to a sample group of ten medium to large scale contractors from Efate and Santo with the objective to better understand their existing capacity based on the following factors:

- Annual construction turnover and largest contract value;
- Specific experience in the road sector;
- Staffing; and
- Equipment.

Out of the ten contractors, six returned the form to PWD. The results are presented in the Table 19. Although the sample is relatively small (some 25% of the total number of medium to large scale contractors registered in Vanuatu), the replies to the questions show a few important lessons that are relevant for the VTSSP procurement of large scale road and bridge works:

- out of six contractors, five indicated an interest to bid for VTSSP road and bridge works (one contractor did not reply to this question);
- The contractors are experienced in building construction works and some road maintenance works but not to the scale foreseen under VTSSP;

<sup>&</sup>lt;sup>39</sup> Assessment made by MIPU/PWD staff

- Contractors are experienced in clearing, earthworks, bridges and culverts, but less so in road formation and bituminous surfacing aspects;
- The average annual construction turnover ranges from 29mVT to 249 mVT Some contractors with lower turnovers may find it difficult to bid alone for VTSSP projects; allowing them to bid under a joint venture (JV) arrangement would overcome this;
- Most of the contractors have managed contracts above a value of 7VT5m;
- The contractors have access to equipment but limited permanent staff qualified and experienced in road works. Most contractors would need to recruit specialist staff for road work contracts either nationally or on the regional market.

| List of main<br>contractors<br>known to<br>PWD<br>Note names<br>removed for<br>privacy<br>reasons   | Years of<br>experience<br>(yrs) | Average<br>Annual<br>Construction<br>Turnover (av<br>last 3 years in<br>mVT) | Largest<br>contract<br>value<br>(last 3<br>years in<br>mVT) | Relevant<br>road and<br>bridge<br>experience<br>(+/0/-) | Relevant<br>Technical<br>Staffing<br>(+/0/-) | Equipment<br>(+/0/-) | Interest<br>to bid<br>for<br>VTSSP<br>works? |  |
|---|---------------------------------|--|---|---|--|----------------------|--|--|
| Α   | Did not retur                   | n the form   |   |   |  |                      |  |  |
| B   | 4 (31)                          | 109  | 78  | +   | 0 / +  | +                    | Yes  |  |
| С   | Did not retur                   | n the form   |   |   |  |                      |  |  |
| D   | 8                               | 212  | 486   | n/a   | n/a  | n/a                  | Yes  |  |
| Ε   | 27                              | 246  | 524   | +   | +  | +                    | Yes  |  |
| F   | 14                              | n/a  | 75  | +   | -  | +                    | Yes  |  |
| G   | Did not retur                   | Did not return the form  |   |   |  |                      |  |  |
| Н   | Did not retur                   | Did not return the form  |   |   |  |                      |  |  |
| Ι   | n/a                             | 31   | 145   | +   | 0  | +                    | n/a  |  |
| J   | 3                               | 29   | 22  | -   | -  | -                    | Yes  |  |
| Legend:<br>+ Sufficient, few additional resources and limited training required for doing road works<br>0 Average, additional resources and modest training required for doing road works |                                 |  |   |   |  |                      |  |  |

Insufficient, substantial additional resources and intensive training required for doing road works

#### Table 19: Summary of 2009 Contractors Assessment

VTSSP I experience and anecdotal evidence from MIPU / PWD suggest that the larger firms based in Port Vila and Luganville are interested to bid for large scale road and bridge works under VTSSP if such works are packaged to a value of above 50mVT - even if this implies mobilisation to the islands.

Contractors have demonstrated in the past that they re-engage themselves in road contracts if the size of the contracts is sufficiently attractive; they would increase their staffing capacity by recruiting imported skills from Fiji, PNG and the Philippines. They would either hire or purchase additional equipment. Smaller firms may also decide to team up through a Joint Venture to be able to meet the qualification criteria for the projects.

### Key findings

The interviews with contractors and questionnaires returned demonstrate that due to the nature of the private sector and the economy of scale, contractors have mostly diversified into more than one sector. Road (maintenance) work is, if at all, is only a very small part of the portfolio of the larger Vanuatu registered contractors. The main share of work is in the building and tourism sector especially concentrated in Port Vila and Luganville. Where the limited existing capacity within the road sector has developed in the provinces, it has been erratic and mostly due to donor funded projects. These projects typically span a few years and thereafter close, ending further prospects for consecutive opportunities within the road sector. This uncertain market situation does not allow contractors to maintain specialised staffing and equipment for road works.

It is therefore not a surprise to see limited experience in road works. There are various reasons that can be identified:

- Maintenance works financed by the GoV tendered by the public sector (MIPU/PWD) are almost exclusively undertaken in-house through 'force account' or by subcontracting community groups;
- If investment works are contracted out to the private sector at all, contract values are too small to justify mobilization to the outer islands and attract larger firms from Efate and Santo. There has been some involvement of medium scale contractors to supply gravel and do some road works on Santo and Malekula;
- Larger donor funded projects (e.g. MCA, the Airport Rehabilitation Project) are packaged and tendered under International Competitive Bidding procedures with qualification criteria that are way beyond the capacity of local firms.

#### **Road Improvement Costs**

VTSSP 1 experience has enabled the following matrix of approximate unit rate costs to be assembled for the various treatments to achieve basic access.



## Appendix A - Hierarchy of road improvements versus existing ease of access

| Pre intervention access<br>level and  | intervention   | Intervention description  | Focus of work effort   | Indicative cost AuS of access<br>improvement per kilometre                        |
|---|--|---|--|---|
| Unimpeded access along<br>Road link   | Routine<br>(daily)to<br>periodic (yearly)<br>Maintenance | Exiting conditions permits adequate access  | Minor and emergency repairs that decelerate deterioration  | \$4000 (IBC) routine<br>\$8,000 IBC periodic                                      |
| Bottlenecks at certain<br>spots along the road link   | Spot<br>improvements                                     | Access improvements required at<br>selected positions along the road link   | Minor to major repairs of carriageway and/or<br>drainage.  | S8000 (Malekula, EHC PRV –<br>Vao)<br>S48000 (Ambae, EHC)                         |
| Access difficulties along<br>the entire road link   | Full<br>Rehabilitation                                   | Improvement required along full road<br>link and road bears a geometrical<br>resemblance of original form.            | Road cross section reinstated and re gravelled<br>where necessary, drainage structures repaired or<br>replaced   | \$120,000<br>(Malekula, NCB)  |
| Major access difficulties<br>along entire road link<br>and little evidence left of<br>engineered road | Re construction  | Improvement required along full road<br>length and where exiting road has lost<br>all original form                   | Road corridor re-established road geometry<br>reinstated and gravelled as necessary. New<br>stormwater drainage system installed                                   | \$110,000 (Tanna, taf F, 1BC +<br>EHC)<br>\$146,000<br>(Malekula Aop - Korna pt.) |
| Established vehicle track<br>but never engineered. No<br>or very limited access in<br>wet season      | Installation of<br>engineered<br>Construction            | Installation of a fully engineered road   | Major clearance, major earthworks, and new strom<br>drainage system  | \$139,000 (Tanna taf H, IBC +<br>EHC)   |
| Major impediments to<br>access and predicted<br>traffic demands<br>improved geometry                  | upgrade<br>construction                                  | Where road has lost all original form<br>and requires widening to permit safe<br>passage of predicted traffic volumes | Road corridor re-established road geometry<br>expanded to accommodate predicted traffic and<br>gravelled as necessary, new stormwater drainage<br>system installed | \$171,000 (Tanna Taf B, NCB<br>+ EHC + IBC)                                       |

## Annex 4. HUMAN RESOURCE DEVELOPMENT PROGRAM

PWD - Building People, Building Skills, Building the Economy, Building the Nation

## KEY HUMAN RESOURCE DEVELOPMENT CONSTRAINTS FOR MIPU

## BACKGROUND

As one of the most important Departments in the Vanuatu Government for the growth of the national economy through infrastructure provision and service delivery, the PWD in the Ministry of Infrastructure and Public Utilities (MIPU) needs to be strategically positioned, staffed and resourced to improve delivery of the Government's clearly stated strategic and policy directions.

Although the focus for PWD's perceived difficulties in delivery is lack of sufficient budget or equipment and the context of archipelagic operations, undoubtedly the lack of properly qualified people, in the right positions, in the right places is one of the most limiting factors for PWD in achieving its organisational objectives. There are many contributing factors for this:

- an understaffed organisational structure with 30% vacant posts;
- an out-dated structure that does not reflect delivery demands (PSC approved current structure in 2004);
- Public Service Commission responses to PWDHR needs & issues are slow;
- poor PWD remuneration packages (salary, housing travel, study opportunities) leading to issues with capability to attract, reward & retain staff;
- competition from the private & NGO sectors for qualified staff;
- too few graduates in areas of need returning to Vanuatu workforce;
- no regular institutional process in PWD for recognising & rewarding high performance.
- no in-house or in-country training aligned to Succession Planning.

In Vanuatu each year approximately 8,000 children enrol in the first year of primary. By the final year of secondary schooling approximately 150 students pass and are eligible for overseas tertiary study – a 98% "force out" rate created by the poverty of opportunity to quality education. Studies have shown a 21% failure to complete rate in regional institutions and 67% in universities in Australia and New Zealand. In 2011, the Vanuatu Training Scholarships Coordination Unit's (TSCU) data base forecasts 136 returning graduates (a 1.7% survival from entry at Year 1) and 121 graduates in 2012 (1.5% survival from Year 1).

Not surprisingly, competition for these graduates is keen between the private sector, the public sector and the increasing number of Non-Government Organisations and regional bodies operating in Vanuatu. Placing students in high priority areas for study has not been well-targeted by the TSCU without a National Human Resource Development Strategy as a guide. This leads to uneven supply of graduates, even in areas of obvious skill gaps. For example, Vanuatu currently only has a total of 11 engineers. In 2011, 21 Ni-Vanuatu will complete their law studies (38 completed in 2010) but only 2 engineers and 3 architects.

The background for this over-supply of law graduates and under-supply in other areas of high employability is that national examination results for Vanuatu are only released in February the following year but regional institution enrolment cut-off is November the previous year. With the University of the South Pacific Law Campus in Vila, many choose not to waste a year waiting for the next intake but to start law studies and to not to pursue scientific or technical studies such as science, engineering or medicine which are not offered in Vanuatu but offered regionally in Fiji, PNG NZ or Australia.

The Ministry of Infrastructure and Public Utilities (MIPU) consists of Departments that require technically qualified personnel:

- Corporate Service Unit (CSU)
- Public Works Department (PWD)
- Vanuatu Department of Meteorology and Geo-Hazards (VDMG)
- Ports and Harbours (P&H)
- Civil Aviation Authority Vanuatu (CAAV)

Therefore, the challenge for the Ministry of Infrastructure and Public Utilities is to implement a "Talent Acquisition" program to identify, attract and retain suitable qualified officers or to be more proactive by undertaking a planned, targeted Capacity Building Program and an awareness program of career opportunities in the Ministry.

A recent Skills Gap Audit and Training Needs Assessment of the Ministry revealed that the Corporate Services Unit, the Vanuatu Department of Meteorology and Geo-Hazards and the Civil Aviation Authority were staffed by officers with qualifications that corresponded to their Job Descriptions and/or had access to training opportunities. PWD did not.

The Department of Meteorology and Geo-Hazards has access to many regional and international training opportunities ie Climate Change Tsunami, Earthquake as well as its own very well equipped training centre for in country training once again delivered by regional organisations i.e. SOPAC. PWD traditionally does not have such opportunities.

Ports and Harbours has access to training regionally and internationally at specialist Maritime Colleges or Universities but in addition the well regarded Vanuatu Maritime College in Luganville offers courses ranging from entry level to specialist maritime training.

Civil Aviation is well catered for by the International Civil Aviation Organisation (ICAO) with regular training regionally, in-country and in Singapore. Historically PWD does not have this specialised access nor has it pursued possible training relationships recently.

#### RATIONALE FOR A PWD CAPACITY BUILDING PROGRAM

This lack of access to training opportunities alone would justify a well targeted, customised capacity building program. However, as well, the PWD Training Needs Analysis and Skills Gap Audit demonstrated that many PWD staff have a low academic entry level which can be expected from the nature of some of the work undertaken by Public Works Departments anywhere in the world ie labourer, grader operator, truck driver. Yet even these staff did not have the most basic qualification ie a legal driver's or operator's licence.

This is made worse by the fact that 30% of all positions in the PWD are vacant or held by an officer "acting" in the position (or holding down an "Acting" and a permanent post). The answers are that even when positions are advertised there are no suitably qualified and experienced Ni-Vanuatu who are interested in applying for a Public Service position with perceived poor remuneration, no clear career planning or training programs. This is exacerbated by the low number of graduates in areas of need for the PWD.

#### SMART DEVELOPMENT OBJECTIVE FOR PWD CAPACITY BUILDING PROGRAM

A SMART objective (Strategic, Measurable, Achievable, Realistic, Time-Bound) for a PWD focussed Capacity Building Program would follow the process to be pursued once the new PWD structure is fully approved by the Public Service Commission. Once a revised Succession Plan (previously devised against 2004 structure) can be devised against the new structures, officers

can be identified for training and the areas of study undertaken confirmed by the combination of Training Needs Analysis, Skills Gap Audit, Succession Planning and Performance Management & Review (PMR) along with the Ministry's over-arching Human Resource Development Strategy. Hard & soft copies of these documents are available from the Corporate Services Unit, MIPU.

Utilising the recent Training Needs Analysis and Skills Gap Audit, the priority Skills Gap areas may be targeted to build planning, management, administration and delivery ability in PWD. This has already been done for current staff. Progress can be tracked annually by successive Skills Gap Audits and quantified. Performance Management & Review Reports which would provide critical data on progress.

## EVALUATION OF SUCCESS OF CAPACITY BUILDING PROGRAM

The Ministry has developed a Corporate Plan 2011-2013 which guides the PWD Business Plan. A simple tracking exercise of the achievements of PWD against its Business Plan should demonstrate improved capacity in planning, management, administration and delivery ability in PWD. This is an exercise undertaken in the Ministry's Annual Report and in Monthly Director's meetings. With these reporting mechanisms, combined with the outcomes of PMR sessions, a report could be undertaken on achievements and remaining challenges. Use of the PMR process would be critical to assess and manage success and failures.

## KEY PRINCIPLE/APPROACH TO GUIDE THE CAPACITY BUILDING PROGRAM – PMR

The Public Service Commission (PSC) requires each Department to undertake two Performance Management and Review (PMR) annually – one in June and one in December. To date the PWD has never instituted a PMR cycle. In PMR, the officer's performance is rated against the Key Performance Indicators (KPIs) which are designed to achieve PWD's Business Plan and the objectives of MIPU's Corporate Plan.

PMR would be the key principle to guide and assess the proposed Capacity Building Program – in other words, the PMR sessions should track the improved performance of officers participating in the Capacity Building Program.

In addition, a Skills Gap Audit bi-annually should be able to quantify the closing of Skills Gaps – that is the gaps in skills between the required qualifications in each officer's Job Description and what each officer actually holds as a qualification or demonstrates as a skill.

## **KEY PROPOSED ACTIVITIES**

Target four levels of capacity building training:

- Planning
- Management
- Administration
- Technical Skills

A full report - "Capacity Building in PWD" (September 2011) - is available in hard and soft copy from the Corporate Services Unit. It provides full background details and previous studies to guide planning for a capacity building program for 2012 utilising:

- Public Service Commission's Human Resource Development Unit (HRDU);
- Contracts to Vanuatu National Training Council (VNTC) registered and accredited incountry training providers;
- Support for PWD officers to receive GoV and AusAID targeted scholarships;
- Support for applications for NZAid's Short Term Placement Scholarships;
- Creation of a PWD Academic Intern Program to proactively target, support and bond potential high performing under-graduates in a "Sandwich Degree" Program (study interspersed with holiday placement);

• Creation of a Site Inspectors Certificate Framework and training of 16 Site Inspectors (SIs) in 2012 and again in 2014 to cater for attrition of previously qualified SIs.

In addition:

- Support for senior officers to the Pacific Executive Program (PACE) based on PMR outcomes and Succession Planning;
- Training in Certificate IV Training & Assessment for one officer from each PWD Division to improve training sustainability.

## **RESOURCING FOR CAPACITY BUILDING PROGRAM**

It must be noted in developing a two year capacity building program, unforeseen retirement or loss of key staff i.e. to the public sector, may create urgent needs in Succession Planning and training. Therefore the draft budget must be flexible enough to respond to emerging priorities. In 2013, because of these possible changes, it is proposed to have a flexible fund to support emerging priorities and opportunities, the use of which could be mutually negotiated based on a Capacity Building Progress Report in December of 2012.

If two costing models were developed ie costing for married recipient vs single recipient, then the higher married recipient costs have been used. The Site Inspectors Certificate training saw a shorter program and a more intensive program. Once again the more costly intensive program has been used. Provincial delivery is more costly than Vila based but more cost effective per participating officer. Full costings of these alternatives are available in Capacity Building in PWD (September 2011) Report.

#### TECHNICAL ASSISTANCE COSTS

**Human Resource Development Specialist**: A four year input to assist the Human Resource Manager and Human Resource Officer of the Corporate Service Unit to implement the proposed Capacity Building Program "PWD - Building People, Building the Nation." In addition this TA should assist the other Departments of MIPU to implement the Ministry's HRD Strategy. The TORs for the HR TA could stipulate reports on outcomes of the PWD Capacity Building Program, review of Succession Planning, Skills Gap Audit, PMR and Training Needs into 2014 and 2015 based on emerging priorities. On arrival, the TA should prepare the two year delivery schedule, costs per month and delivery targets based on the 2011 PMR sessions and emerging needs. Travel Budget for visits to Provincial PWD Divisions should be included.

Costs included in Long Term Personnel.

*Australian Youth Ambassador*: The Succession Planning Feasibility Study (May 2011) proposed applying for an Australian Youth Ambassador to work with the Human Resource Manager in the Corporate Services Unit to develop a Policy and Procedures Manual for the proposed Academic/Professional Intern Program and models for a national Awareness Program to make school leavers undergraduates and graduates aware of career opportunities not merely in PWD but across the Ministry of Infrastructure and Public Utilities. A full application has been developed and is Appendix 10 to the Succession Planning Feasibility Study.

Costs: AYA will need desk, chair and desk top computer. CSU has desks and chairs. Computer: VT145,000

Travel & Per Diems = VT570,000

PowerPoint for use in provincial training VT100,000

An administrative & delivery costs budget for provincial airfares for training sessions for TA, AYA & VIDA and per diems should be allowed. NOTE: These are included in TA Costs

• Provincial flights VT35,000per flight

- VT10,000 a day per diems (PSC regulations)
- Stationery, printing expenses VT250,000 per annum

## PROPOSED BUDGET

Please refer to the following tables for possible budget support for an integrated capacity building program linked to the Corporate Plan for the Ministry and able to be linked to the PWD Business Plans derived from the Corporate Plan.

|   | Year 1 (VT) | Total (VT) |  |  |  |
|---|-------------|------------|--|--|--|
| Technical Assistance Support  | 495,000     |            |  |  |  |
| Graduate Scholarship Support Program<br>(Talent Acquisition)              | 2,000,000   |            |  |  |  |
| Certificate Programs (16 Site Inspectors)                                 | 4,814,000   |            |  |  |  |
| <b>Management Supervision &amp; Administration</b>                        | 3,000,000   |            |  |  |  |
| Programs (PWD all staff training)   |             |            |  |  |  |
| Annual Total  | 10,309,000  | 41,236,000 |  |  |  |
| Table 20: Year One Projected Cost of PWD Capacity Building Program (Vatu) |             |            |  |  |  |

#### CONCLUSION

A well-targeted Capacity Building Program may have other outcomes other than mere skills building. The Public Service Commission will not radically improve its remuneration framework but Ni-Vanuatu regard training opportunities as a hugely beneficial component of a salary/conditions package, especially when there are so few chances for in country training for PWD personnel. The impact on organisational morale should not be under-estimated.

In a Ministry where PWD staff have been the "Cinderella" as far as training and qualifications, this proposed PWD Capacity Building Program would redress the historical imbalance as well as progress PWD's stated objective of improving infrastructure for national service delivery and economic growth.

## Annex 5. VTSSP II WORK PLAN AND ROAD SELECTION CRITERIA

## OUTCOME 1: PWD INSTITUTIONAL TRANSFORMATION: WORK PLAN - FIRST YEAR.

The draft schedule described below lists the tentative institutional reform activities that would be supported with Technical Assistance and Grant funding under Outcome 1 in the first 12 month period of VTSSP II.

| #  | Theme /Objective                                    | Activity  | Output  | TA Inputs  | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment   |  |  |  |
|--|---|---|---|--|---|---|--|--|--|
| Output 1.1: FUNCTIONS - CORE STRATEGY, BUDGETING, POLICY, OVERSIGHT AND SERVICE DELIVERY FUNCTIONS |   |   |   |  |   |   |  |  |  |
| 1  | Plan for the organisations<br>transformation of PWD | MIPU and PWD deliberate<br>on PWD's vision and<br>mission in line with the<br>Government's outsourcing<br>agenda      | Long-term agreed plan<br>for organisational<br>transformation | 6pm TL <sup>40</sup><br>2pm PFMS <sup>41</sup><br>1pm HRDS <sup>42</sup><br>+ ST<br>Specialist<br>Pool |   | <ul> <li>Building off work<br/>already under VTSSP I<br/>including:</li> <li>Paper on Exploring<br/>Road Maintenance<br/>Financing Options</li> <li>Road Sector<br/>Management<br/>Reform Plan; and</li> <li>PWD Organisational<br/>Restructure -<br/>Interim plan 2012-<br/>2013.</li> </ul> |  |  |  |
| 2  | Revise 2011 MIPU Corporate Plan                     | MIPU and PWD<br>significantly revise the<br>Corporate Plan to reflect<br>the agreed transformation<br>and the changes | 2013 MIPU Corporate<br>Plan                                   | 1pm TL<br>2pm PFMS<br>2pm HRDS<br>+ ST<br>Specialist   |   | Revision of the MIPU<br>Corporate Plan will plot<br>the trajectory for PWD<br>transformation over<br>the next four years  |  |  |  |

<sup>&</sup>lt;sup>40</sup> TL = Team Leader/ Institutional Development Specialist

<sup>&</sup>lt;sup>41</sup> PFMS=Public Finance Management Specialist

<sup>&</sup>lt;sup>42</sup> HRDS= Human Resource Development Specialist (Local)

| #     | Theme /Objective   | Activity   | Output   | TA Inputs                         | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment   |
|-------|--|--|--|-----------------------------------|---|---|
|       |  | anticipated over the coming four years   |  | Pool                              |   | -   |
| 3     | Affordable Budget & Corporate Plan<br>& Timely Reporting   | Support budget and<br>corporate planning and<br>implementation (National<br>& VTSSP resources)   | Output based budget  | 1pm TL<br>8pm PFMS <sup>43</sup>  |   | PC & PFMS to both<br>support planning/<br>reporting activities<br>Internationally<br>experienced PFM<br>specialist  |
| 4     | PWD Policy audit and update  | Audit all operational policies and procedures  | Activity Work plan for policy renewal program  | 4pm TL + ST<br>Specialist<br>Pool |   | Program Coordinator<br>will be an institutional<br>strengthening<br>specialist and will<br>oversight all TA inputs. |
| 5     | Supplementary Technical Contracts<br>Grant Fund<br>(PWD roles for Natural Road<br>Building Resources National<br>Inventory & Policy development) | Support PWD to survey and<br>prepare an inventory of the<br>national stock of suitable<br>road building materials and<br>prepare a policy for their<br>extraction and use. | Inventory of Natural<br>Road Building Resources<br>& Natural Resources<br>Exploitation Policy. | Outsource to<br>Consultant        | 200,000   | Outsourced to<br>consultants to support<br>PWD survey and<br>consultation   |
| OUTPU | T 1.2: SYSTEMS - ADMINISTRATION, F   | INANCE, PROCUREMENT ANI  | D MANAGEMENT INFORMA   | TION SYSTEMS                      |   |   |
| 4     | PWD Road Maintenance Planning and Monitoring System.   | Support the revival and<br>regular updating of the<br>Transport Network Asset<br>Management System   | Functioning Transport<br>Network AMS   | 12pm<br>SRMPE <sup>44</sup>       |   | Internationally<br>experienced consultant   |
| 5     | Procurement & Contract<br>Management   | Strengthen and<br>standardised the Contract<br>Management System   | Functioning Contract<br>Register and<br>Management System                                      | CMS                               |   | Adviser position<br>refilled if necessary<br>after current CMS role<br>expires in June 2013.                        |

 <sup>&</sup>lt;sup>43</sup> PFMS=Public Finance Management Specialist
 <sup>44</sup> SRMPE=Senior Road Maintenance Planning Engineer

| #     | Theme /Objective  | Activity                                      | Output                                       | TA Inputs              | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment  |
|-------|---|---|--|------------------------|---|--|
| Outpu | t 1.3: SKILLS - HUMAN RESOURCE MA   | ANAGEMENT AND DEVELOPME                       | NT   |                        |   |  |
| 6     | Support MIPU/PWD Staff<br>development & training Plan<br>implementation                     | Support MIPU HRD<br>Strategy implementation   | Successfully<br>implemented HRD & CB<br>Plan | 9pm HRDS <sup>45</sup> |   | Draft plan to be<br>prepared under Phase<br>1        |
| 7     | Enable outsourcing of technical<br>expertise to supplement PWD<br>service delivery capacity | Establish Standing Panel of local consultants | PWD Consultant Panel                         | HRDS                   |   | LTTA team support for<br>tendering and<br>assessment |
|       | TOTAL AUD\$   |   |  |                        | 200,000   |  |

### Table 21: VTSSP II Work Plan for Outcome 1.

It is envisaged that there will be four (4) Long Term Technical Assistance (LTTA) Adviser roles as follows;

- Team Leader/ Institutional Development Specialist (TL/IDS) International
- Public Finance Management Specialist (PFMS) International
- Senior Road Maintenance Planning Engineer (SRMPE) International
- Human Resource Development Specialist (HRDS) Local

It is also envisaged that these core LTTA roles would need to be continued throughout the 4 year term of the Program. In addition there will be the need for a range of short term consultants

- Contracts Management Specialist (CMS) International<sup>46</sup>
- M&E Specialist
- Information Systems Specialist
- Short Term Specialists Pool

<sup>&</sup>lt;sup>45</sup> HRDS= Human Resource Development Specialist (Local)

<sup>&</sup>lt;sup>46</sup> CMS = Existing adviser James Guy (contract finishes June 2013 tbc). The CMS is currently funded by the Pacific Technical Assistance Mechanism (PACTAM). PACTAM is an Australian Government, AusAID initiative (managed by Australian Volunteers International) that responds to requests for technical assistance from Pacific governments and agencies by recruiting professionals from Australia and other countries for assignments that cannot be filled locally.

# OUTCOME 2: PWD SERVICE DELIVERY: WORK PLAN – FIRST YEAR

The schedule described below lists the activities that would be supported with Technical Assistance and Grant funding under Outcome 2 in the first 12 month period of VTSSP II.

| #   | Theme /Objective   | Activity  | Output   | TA Inputs                 | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment  |
|-----|--|---|--|---------------------------|---|--|
| PHY | SICAL WORKS  |   |  |                           |   |  |
| 1   | Routine Maintenance: Works includes<br>grass cutting, clearing side drains and<br>culvert inlets/outlets, excavation of new<br>drainage paths, earth filling of<br>embankment and pavement repairs | Routine Maintenance<br>activities for about<br>50km of<br>road/island/year<br>including roads<br>rehabilitated under<br>VTSSP 1 | <ul> <li>First year includes 4</li> <li>islands and about 200km</li> <li>of roads under routine</li> <li>maintenance using IBCs</li> <li>and community labour.</li> <li>(Budget Estimate</li> <li>AUD\$3,000/km)</li> <li>Funding allowance has</li> <li>been made for additional</li> <li>km of routine</li> <li>maintenance to coincide</li> <li>with works for Road and</li> <li>Drainage Improvement.</li> </ul> | TL/IDS and<br>SME and MEs | 600,000   | Contracted works<br>using IBCs with<br>community labour.<br>Following years will<br>include others islands<br>up to 7 outer islands of<br>Vanuatu and increase<br>in the km of roads<br>maintained (about<br>350km by end of<br>VTSSP II). |
| 2   | <b>Periodic Maintenance:</b> Works includes<br>reshaping road to standard profile,<br>excavation of side drains and turnouts,<br>and re-gravelling   | Periodic Maintenance<br>activities to keep road<br>open and in a<br>maintainable condition                                      | First year includes works<br>on 4 islands using PWD<br>Force Account. Works to<br>be taken up by NCBs<br>later in the Program<br>(Budget Estimate<br>AUD\$8,000/km)  | TL/IDS and<br>SME and MEs | 1,056,000   | Performance based<br>contracts to be used.<br>PWD heavy plant to be<br>used. Work output<br>rates based on works<br>completed and<br>includes all<br>operational,<br>maintenance and<br>repair costs                                       |

| # | Theme /Objective  | Activity  | Output  | TA Inputs                            | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment  |
|---|---|---|---|--------------------------------------|---|--|
| 3 | <b>Rehabilitation: Road and Drainage</b><br><b>Improvement:</b> Works includes<br>installation of cross drainage structures,<br>lining of side drains, earthworks,<br>protection works and pavement<br>surfacing (e.g. gravel, concrete and<br>bituminous).   | Road and Drainage<br>Improvement works to<br>coincide with routine<br>maintenance road<br>sections. Other<br>additional sections may<br>also be taken up prior to<br>routine maintenance<br>proceeding in the next<br>year.   | Undertake improvement<br>works on selected<br>sections of road using<br>IBCs and for larger scale<br>works by NCB. Road<br>sections contracted to<br>IBCs will include routine<br>maintenance using<br>community labour.<br>First year plan about<br>200km of roads<br>(50km/island). (Budget<br>Estimate<br>AUD\$7,800/km) | TL/IDS and<br>SME and MEs            | 2,200,000   | Contracted works<br>using IBCs with<br>community labour and<br>small construction<br>plant (tractors etc)<br>Larger scale<br>construction may be<br>contracted to NCBs in<br>subsequent years. |
| 4 | <ul> <li>Procurement of small plant and<br/>equipment and tools: Procurement of<br/>small plant such as compactors, concrete<br/>mixers, tractors and trailers and tractor<br/>attachments such as front bucket loader,<br/>static tow roller, water bowser, tow<br/>behind grader etc.</li> <li>Procurement of equipment and tools<br/>such as water pump and vibrator, plate<br/>and wacker compactors, all hand tools<br/>for construction, and mechanic's tools to</li> </ul> | Procurement of small<br>plant and equipment to<br>be used by IBCs and<br>community labour. PWD<br>is to store and issue to<br>the IBCs on a hire basis.<br>Includes costs to keep<br>secure and protected. In<br>addition, PWD<br>workshops to be<br>properly equipped and<br>able to carry out repairs | Procure of small plant<br>(Budget Estimate<br>AUD\$150,000/island).<br>Procure equipment and<br>tools, include initial set<br>up for new Islands (i.e.<br>current 3 plus Pentecost)<br>which also requires<br>compactors and hand<br>tools (Budget Estimate<br>AUD\$25,000).  | TL/IDS and<br>SME and MEs<br>and CMS | 600,000   | Procure to equip IBC to<br>enable them to<br>carryout road<br>pavement construction<br>and repairs.<br>All items procured<br>remain property of<br>PWD and hired out to<br>contractors.        |
|   | carryout repairs in PWD workshops etc.  | of plant  | Equip PWD workshops,<br>secure and store<br>consumables at<br>workshops 4 islands.<br>(Budget Estimate<br>\$25,000/island/year)   |                                      | 100,000   |  |

| #    | Theme /Objective  | Activity  | Output  | TA Inputs               | Grant<br>Funding for<br>Admin<br>under GoV<br>DFA (AUD\$) | Comment   |
|------|---|---|---|-------------------------|---|---|
|      | Sub-total   |   |   |                         | 4,656,000   |   |
| TECH | NICAL SERVICES  |   |   | -                       | -   | -   |
| 1    | PWD Annual Work plan developed and implemented effectively  | Support development<br>and Implementation of<br>PWD annual work plan  | Timely delivery of Work<br>plan outputs against<br>budget               | 12pm RES <sup>47</sup>  |   | TA support to PWD HQ<br>& Provincial offices<br>with work plan<br>oversight |
| 2    | Cohort of Small Scale Road Construction<br>and Maintenance Contractors<br>sustainably established | Mentoring and supervision of IBCs   | Increased number of IBCs engaged  | 24pm LBRS <sup>48</sup> |   | TA support for IBC<br>identification, training<br>and supervision           |
| 3    | Supplementary Technical Services Grant<br>Fund  | PWD roles for<br>contracting of design,<br>supervision, and<br>management of<br>contracted road<br>reconstruction and/or<br>maintenance works | Successfully completed<br>work plan of Contracted<br>works and services | TL/IDS                  | 400,000   | 10% of approx. \$4m Y1<br>physical works budget                             |
|      | Sub-total   |   |   |                         | 400,000   |   |
|      | GRAND TOTAL FOR GRANT (AUD\$)   |   |   |                         | 5,056,000   |   |

### Table 22: VTSSP II Work Plan for Outcome 2.

To support implementation of the physical works outcome it is envisaged that four Long Term Technical Assistance Adviser roles will be required as follows:

- Senior Road Maintenance Planning Engineer; and
- Three Road Maintenance Engineers.

This will be supplemented by a range of short term consultants recruited through the Short Term Specialist Pool.

<sup>&</sup>lt;sup>47</sup> SRMPE = Senior Road Maintenance Planning Engineer

<sup>&</sup>lt;sup>48</sup> RME = Road Maintenance Engineer

It is also envisaged that these core LTTA roles will need to be continued throughout the four year term of the Program and supplemented from time to time during work plan surge demand with Short Term TA (STTA) inputs. STTA could be either international or local consultants and would be engaged by PWD using a Technical Service Grant Facility to be established under VTSSP II. LTTA Adviser positions would span the four year program.

## WORK PLAN METHODOLOGY

The program will address Physical Works under Outcome 2 through four initiatives:-

- a. Routine Maintenance;
- b. Road and Drainage Improvement;
- c. Periodic Maintenance; and
- d. Operational Services strengthening.

### ROUTINE MAINTENANCE

Routine Maintenance will be carried out using Island Based Contractors in order to preserve the roads rehabilitated under VTSSP 1 and take up other sections of road that are considered to be in a maintainable condition. Works will include grass cutting, drainage cleaning and excavation, pothole and embankment repairs, cleaning of the inlet/outlet of culverts etc. The Island Based Contractors will be responsible for the formation of maintenance groups using community labour to undertake the maintenance works within the vicinity of the roads to be maintained. Where these groups already exist, these will, as far as possible, be used as the basis for the road maintenance groups rather than forming new groups. The ISP's Team will use task work or other incentive based systems to ensure efficient and timely delivery of works. The ISP's Team will develop a detailed work plan for this support in consultation with the PWD Divisional Manager and Engineer. The cost for these activities will be included in the estimates for road maintenance costs with the Island Based Contractors contract.

A maximum estimated rate is set as \$3,000/km/yr.

### ROAD AND DRAINAGE IMPROVEMENTS

Island Base Contractors are to be Classified into a particular 'Class' of contractor for the level of works that they can undertake and bid for in the Program. The Class of Contractor will be determined from performance and capacity assessments that have been carried out under VTSSP 1 and during implementation of VTSSP II. For example:

- Class A IBC will have about 15 km of road to maintain with a possible contract value of \$150,000;
- Class B IBC 10 km of road to maintain for a value of \$100,000; and
- Class C IBC 5 km of road to maintain with a value of \$50,000.

Under VTSSP II sections of road will be assigned to the IBC to undertake specific road and drainage improvements such as, construction of new culverts, excavation of side drains, lining of drains and other protection works and is to now include pavement repairs and re-graveling of short sections of road. Included with the road section assigned to the IBC will be the routine maintenance works that are to be undertaken using community labour.

It is estimated that at least one cross drainage structure (i.e. pipe, slab masonry or box culvert) will be provided for every 500 m of selected section of road. Depending on the road alignment and drainage requirement, more culverts will most likely be required. Experience from VTSSP I has reiterated the crucial importance of installing culverts and other water protection measures before considering any pavement maintenance works. It is proposed that cross drainage structures be provided with a minimum width of 6 meters in length. Various types of cross drainage structures will be provided depending on the road environment i.e. pipe culvert in high embankments and slab/box culverts in low embankments and cuttings. One of the Programs aims is to start putting the road network in order by immediately improving the drainage of the road. This type of construction work is very suited for small scale local contractors and will be carried out using IBCs.

The IBC are to be supported by small fleets of basic equipment (tractor, trailers, tractor attachments, tools etc). It is intended to increase the participation of small-scale private sector and community groups, with the potential for rural employment and poverty reduction.

An average estimated rate is set as \$7,800/km/yr.

## PERIODIC MAINTENANCE

This work involves grading of the existing road to reform the road and re-gravel longer section of road to achieve a 'maintainable standard' which will coincide and support the work that is being carried out using IBCs for Routine Maintenance and Road and Drainage Improvement works. PWD have a pool of construction plant and equipment and workshops on each of the Islands with Provincial Offices.

At times if the road is beyond the capability for IBCs to correct the alignment, a grader would be supplied by PWD or hired to reshape the road formation. Generally, it is expected that correction to the alignment will require re-gravelling and in some sections an overlay with gravel for a minimum compacted thickness of 80-150mm may be provided. Included in the works will be side drain excavation and construction of turn outs at 20-50 m spacing. The works under this item will be at selected locations along the road length, but of a greater length of gravelling work that can be undertaken by IBCs and of significant length to justify mobilize the heavy plant for the works. Some sections of road may have a surface of concrete or bitumen (i.e. urban areas, flood ways etc.) and some of the side drains may be lined with grouted stone pitching. The works are to reshape the road formation to a standard profile and improve the side drains.

A maximum estimated rate is set as \$8,000/km/yr.

### **OPERATIONAL SERVICES STRENGTHENING**

PWD staff will be trained in:

- a. Road network planning and management (identification of a core rural road network, definition of appropriate service levels, data collection and analysis);
- b. Establishing systems and procedures for routine, periodic and emergency maintenance works;
- c. Increasing private sector participation and the establishment of Island Based Contractors;
- d. Providing job opportunities for communities through the maintenance works; and
- e. Enhancing asset management.

## SCREENING AND EVALUATION CRITERIA

In 2006 the Millennium Challenge Account (MCA) for Vanuatu undertook scoping to improve all of the National Roads Network in Vanuatu. The National Road Network covers the nine largest and most populated islands, which also form the base for Provisional administration and service delivery. National Roads are generally located along the coastlines of the islands where the majority of the island populations live. However, the fund amount that was available from MCA could not cover costs for all of the National Roads and as a result the scope of works was significantly reduced and resulted in road construction works only being carried out on two of the islands, being Efate and Espirito Santo Islands.

The GoV then asked that the first phase of VTSSP work with the next highest priorities. As such, the National Roads on the islands of Tanna, Malekula and Ambae were selected for VTSSP I.

The next highest priority were the National Roads on Pentecost, Epi, Ambryn and Maewo. These are now to be included for works under VTSSP II. Works under VTSSP II will be selected against the criteria detailed below. Roads that are considered eligible through the 1<sup>st</sup> and 2<sup>nd</sup> Phase Screening process can be immediately accepted for improvement. Once accepted the ranking process (3<sup>rd</sup> Phase Screening) is undertaken.

| Stage                              | Criteria  | Action  |
|------------------------------------|---|---|
| Initial Screening                  | <ul> <li>1st Phase Screening</li> <li>The proposed road is within those sections of roads that were improved under VTSSP I (see Figure 7, Figure 8 and Figure 9)</li> </ul>   | Approved to Proceed.  |
| Additional<br>Screening<br>Ranking | <ul> <li>2nd Phase Screening</li> <li>The proposed road is directly linked with those roads constructed under VTSSP (except in the first year of implementation).</li> <li>The proposed road is located on the Core Road Network.</li> <li>The proposed road is located on the existing alignment and no land acquisition is required.</li> <li>3rd Phase Screening – only those roads accepted as expected as a second second</li></ul> |   |
|                                    | <ul> <li>The following process will be used by the ISP and PWD to rank those roads selected: <ol> <li>A road selection workshop will be carried out on each island and will bring together stakeholders from the Provisional Government, technical staff from the PWD Divisional Engineer's Office and representatives from the communities (i.e. village chiefs, school teachers, religious leaders, local businesses, women groups etc). Particular effort will be given to ensuring representatives of more isolated and poorer communities are present.</li> <li>Presentations at the start of the workshop will be given by the PWD Divisional Manager and others on: <ul> <li>a. maps detailing the location, topography, key features and social infrastructure facilities (i.e. health facilities, education, villages etc.) recorded for each road. Additional information will consider basic demographic indicators and especially road density per unit of population.</li> <li>b. road condition surveys for the provincial road network;</li> <li>c. identification of national, provincial or municipal roads;</li> <li>d. intervention strategy options and the costs for works. In particular the labour based strategies for employment generation will be presented which stress the opportunity for the poor to improve their income; and</li> <li>e. ranking and selection processes and criteria.</li> </ul> </li> <li>The criteria for ranking will be pre-determined and based on economic, social and technical aspects. The criteria and scoring is to be easily understandable so that the exercise will be relatively simple and participants will be able to clearly brief their communities on the process used when they return. Points will be given for:</li> </ol></li></ul>  | The ISP and PWD will<br>undertake the evaluation<br>based on agreed weighting and<br>marking for each criterion<br>relative to the particular Island<br>being assessed.<br>Selected roads and their<br>rankings will be incorporated<br>in the PWD Annual Work Plan<br>for VTSSP II which will be<br>approved jointly by GOV and<br>GFG |

- a. Population numbers immediately served by improvement of the road (i.e. Impact/Influence area to be within 5 km band width either side of the centreline of the road). This will also take into account a wide range of indicators related directly to poverty and vulnerability but with an emphasis on accessibility, longer term development and poverty alleviation affects;
- b. The number of villages served;
- c. Number of government facilities served (schools, health centres, police);
- d. Road links to maritime, airfield, markets, industries and areas of high agricultural potential;
- e. Road should serve people at large and must not only serve special interest groups i.e. plantations, tourist groups etc.;
- f. Technical / Engineering assessment: Current condition of the road, availability of construction materials, requirement for major structures, difficult sections (e.g. swamps/rocky terrain) and availability of labour;
- g. Estimated Costs include consideration of structures, materials availability, condition of road etc.;
- h. Volume and type of traffic;
- i. Any other direct and indirect impacts considered as important.

4. The participants will be split into groups to endorse or correct the province's list of essential roads before assessing each of the roads on the basis of the pre-defined criteria and computing the scores;

5. Participants will use the ranking technique to determine the score for each road. Points given will be assigned to each of the roads on the maps;

6. The totals will be summed and then divided by the road lengths to give an average ranking score;

- 7. Once completed the groups will also decide whether their final ranking is correct and what intervention strategy should be adopted full rehabilitation or spot improvement;
- 8. Groups present their scores and choices and the plenary will combine the group
- recommendations into PWD provincial priorities;9. Based on the resource available the workshop should then agree the cut-off threshold;
- 10. Finally, the PWD Divisional Manager should be given the opportunity to confirm his agreement with the participants' recommendations. In some cases it may be expected that the PWD Divisional Manager may request a slight shifting of a road's ranking for technical/engineering and budget considerations and, in those cases, the workshop should discuss these matters further to reach a consensus; and
- 11. Workshop recommendations should then be submitted to the PWD Director for endorsement, and once incorporated into the VTSSP II Work Plan

### be submitted for final approval by GFG and GOV.

The procedure addresses poverty in a number of ways. The poor will benefit if road accessibility is improved through the increase in service frequency and reduced fares. Ascribing benefits directly to the communities that the road is to serve will also ensure that the transport needs of the majority of the population are represented. The selection and prioritisation procedure also permits roads in the Provinces with recognised levels of poverty to be given a positive weighting when they are being ranked against roads in other areas.

Vanuatu Transport Sector Support Program Phase 1 Road network improvements

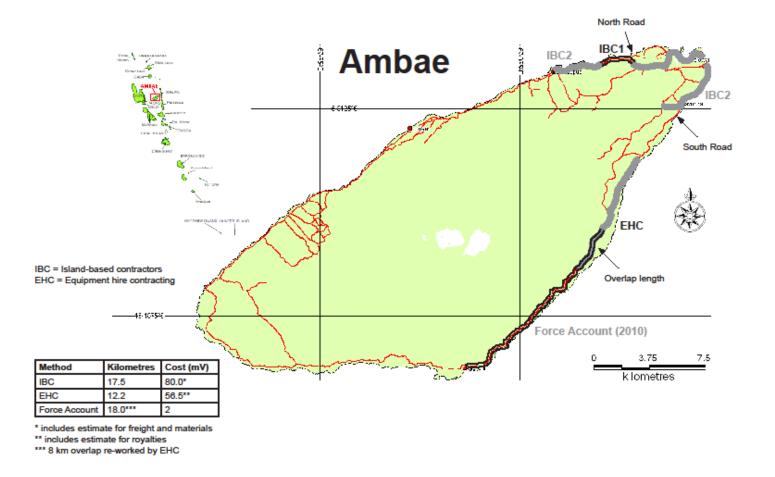
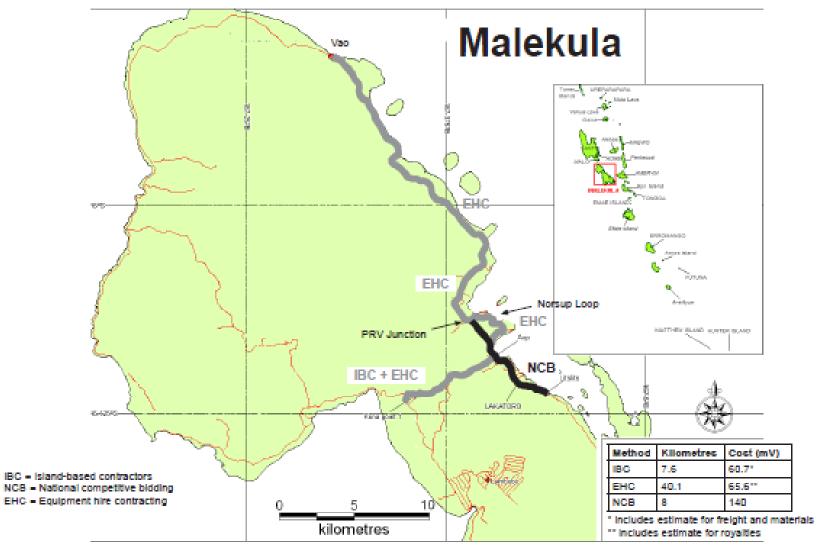


Figure 7: Roads improvements undertaken through VTSSP I - Ambae



Vanuatu Transport Sector Support Program Phase 1 Road network improvements

Figure 8: Roads improvements undertaken through VTSSP I – Malekula

Vanuatu Transport Sector Support Program Phase 1 Road network improvements

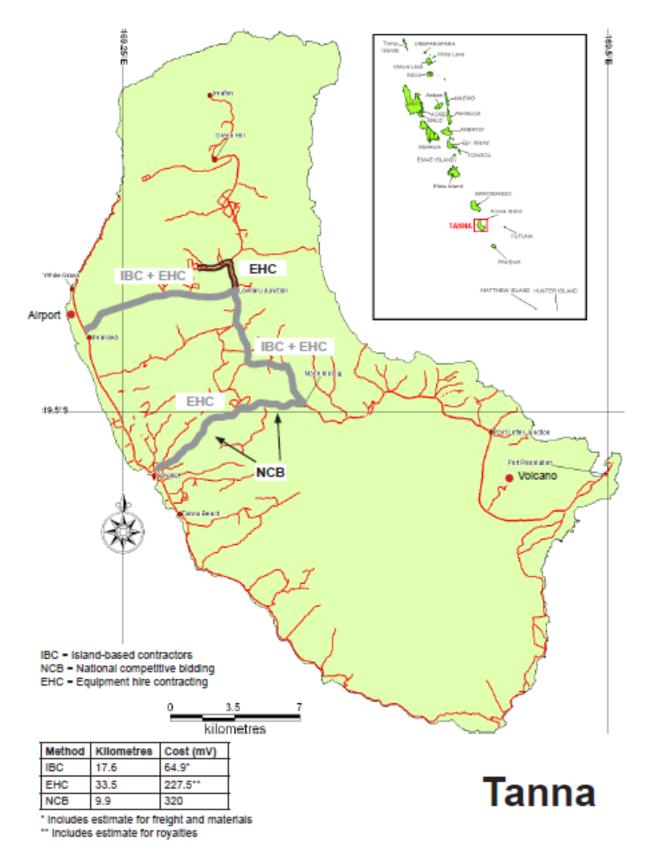


Figure 9: Roads improvements undertaken through VTSSP I – Tanna

# Annex 6. RESOURCE AND COST SCHEDULES

| Ref                | COMPONENT OUTCOMES AND INPUTS   | Unit                    | Unit Tot Q YEAR 1 ATC |            | ATQ        |                   | YEA        | AR 2                   |            | ATQ               |            | YEA        | AR 3                   |            | ATQ               |            | YE/        | AR 4              |            | ATQ               |            |            |                        |
|--------------------|---|-------------------------|-----------------------|------------|------------|-------------------|------------|------------------------|------------|-------------------|------------|------------|------------------------|------------|-------------------|------------|------------|-------------------|------------|-------------------|------------|------------|------------------------|
|                    |   |                         |                       | Q1         | Q2         | Q3                | Q4         |                        | Q1         | Q2                | Q3         | Q4         |                        | Q1         | Q2                | Q3         | Q4         |                   | Q1         | Q2                | Q3         | Q4         |                        |
|                    | 1: PWD Institutional Transformation   | 1                       |                       | -          | 1          | 1                 | 7          |                        | -          | -                 | r          | -          |                        | -          | 1                 | 1          |            |                   |            | -                 | -          |            |                        |
| 1.2                | Function - Core strategy, budgeting, policy,<br>oversight, and service delivery functions agreed and<br>delivered<br>Systems - Administration, finance, procurement and<br>management information systems developed and<br>maintained<br>Skills - Human resources managed and developed |                         |                       |            |            |                   |            |                        |            |                   |            |            |                        |            |                   |            |            |                   |            |                   |            |            |                        |
| INPUTS             |   |                         |                       |            |            |                   |            |                        |            |                   |            |            |                        |            |                   |            |            |                   |            |                   |            |            |                        |
| P(D)1.1<br>P(D)1.2 | Long Term Personnel<br>Technical Team Leader/Institutional Development<br>Specialist (International)<br>Public Finance Management Specialist<br>(International)   | Month<br>Month          | 48.0<br>48.0          | 3.0<br>3.0 | 3.0<br>3.0 | 3.0<br>3.0        | 3.0<br>3.0 | 12.0<br>12.0           | 3.0<br>3.0 | 3.0<br>3.0        | 3.0<br>3.0 | 3.0<br>3.0 | 12.0<br>12.0           | 3.0<br>3.0 | 3.0<br>3.0        | 3.0<br>3.0 | 3.0<br>3.0 | 12.0<br>12.0      | 3.0<br>3.0 | 3.0<br>3.0        | 3.0<br>3.0 | 3.0<br>3.0 | 12.0<br>12.0           |
| P(D)1.3            | Human Resource Development Specialist (National)  | Month                   | 48.0                  | 3.0        | 3.0        | 3.0               | 3.0        | 12.0                   | 3.0        | 3.0               | 3.0        | 3.0        | 12.0                   | 3.0        | 3.0               | 3.0        | 3.0        | 12.0              | 3.0        | 3.0               | 3.0        | 3.0        | 12.0                   |
| P(D)1.4            | ISP Program Administrator (National)<br>Short Term Personnel  | Month                   | 48.0<br>-             | 3.0        | 3.0        | 3.0               | 3.0        | 12.0<br>-              | 3.0        | 3.0               | 3.0        | 3.0        | 12.0                   | 3.0        | 3.0               | 3.0        | 3.0        | 12.0<br>-         | 3.0        | 3.0               | 3.0        | 3.0        | 12.0<br>-              |
| P(D)1.5            | Short Term Specialist Pool (International & National)   | Month                   | 14.0                  | 1.0        | 1.0        | 1.0               | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        |            | 3.0               | 1.0        | 1.0               | 1.0        |            | 3.0                    |
| P(D)1.7            | Contract Management Specialist<br>M&E Specialist (International)<br>Information Technology Specialist (International)<br><i>Equipment</i>   | Month<br>Month<br>Month | 15.0<br>7.0<br>3.0    |            | 1.0        | 1.0<br>1.0<br>0.5 | 1.0        | 4.0<br>3.0<br>1.5<br>- | 1.0        | 1.0<br>1.0<br>0.5 | 1.0        | 1.0        | 4.0<br>1.0<br>0.5<br>- | 1.0        | 1.0<br>1.0<br>0.5 | 1.0        | 1.0        | 4.0<br>1.0<br>0.5 | 1.0        | 1.0<br>1.0<br>0.5 | 1.0        | 1.0        | 3.0<br>2.0<br>0.5<br>- |
| E(D)1.1            | Computers   | Compute                 | 8.0                   | 4.0        |            |                   |            | 4.0                    |            |                   |            |            | -                      | 4.0        |                   |            |            | 4.0               |            |                   |            |            | -                      |
| E(D)1.2            | Vehicles<br>Training/Workshops  | l<br>Vehicle            | 1.0                   | 1.0        |            |                   |            | 1.0                    |            |                   |            |            | -                      |            |                   |            |            | -                 |            |                   |            |            | -                      |
| T(D)1.1            | Reform Consultation Workshops   | Worksho<br>p            | 15.0                  | 1.0        | 1.0        | 1.0               | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        | 1.0        | 4.0               | 1.0        | 1.0               | 1.0        |            | 3.0                    |
| T(D)1.2            | Staff Training Workshops in Provinces   | Worksho                 | 32.0                  | 2.0        | 2.0        | 2.0               | 2.0        | 8.0                    | 2.0        | 2.0               | 2.0        | 2.0        | 8.0                    | 2.0        | 2.0               | 2.0        | 2.0        | 8.0               | 2.0        | 2.0               | 2.0        | 2.0        | 8.0                    |
| T(D)1.3            | PWD Capacity Building Plan Implementation<br>Other  | p<br>Quarter            | 16.0                  | 1.0        | 1.0        | 1.0               | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        | 1.0        | 4.0                    | 1.0        | 1.0               | 1.0        | 1.0        | 4.0               | 1.0        | 1.0               | 1.0        | 1.0        | 4.0                    |
| O(D)1.2            | Island Travel (accommodation etc.)<br>General Meetings (venue hire, food etc)<br>Consumables (vehicles repairs, maintenance and   | Trips<br>Event          | 122.0<br>87.0         | 9.3<br>3.0 | 7.3<br>4.0 | 8.3<br>4.0        | 7.3<br>4.0 | 32.3<br>15.0           | 7.3<br>5.0 | 8.3<br>5.0        | 7.3<br>5.0 | 7.3<br>5.0 | 30.3<br>20.0           | 7.3<br>6.0 | 8.3<br>6.0        | 7.3<br>6.0 | 6.7<br>6.0 | 29.7<br>24.0      | _          | 8.3<br>7.0        | 7.3<br>7.0 | 6.7<br>7.0 | 29.7<br>28.0           |
| O(D)1.3            | insurance; fuel; ground transport; office<br>consumables; publications etc)<br>Grant  | Month                   | 48.0                  | 3.0        | 3.0        | 3.0               | 3.0        | 12.0                   | 3.0        | 3.0               | 3.0        | 3.0        | 12.0                   | 3.0        | 3.0               | 3.0        | 3.0        | 12.0              | 3.0        | 3.0               | 3.0        | 3.0        | 12.0                   |
| G(D)1.1            | Supplementary Technical Contracts Grant Fund  | Quarter                 | 6.0                   | 0.5        | 0.5        | 0.5               | 0.5        | 2.0                    | 0.5        | 0.5               | 0.5        | 0.5        | 2.0                    | 0.5        | 0.5               | 0.5        | 0.5        | 2.0               |            |                   |            |            | -                      |

| Ref                   | COMPONENT OUTCOMES AND INPUTS   | Unit          | Tot Q            |              | YEA          | R 1          |              | ATQ            |              | YE           | AR 2         |              | ATQ            |              | YE           | AR 3         |              | ATQ            |            | YE4          | AR 4         |              | ATQ            |
|-----------------------|---|---------------|------------------|--------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|----------------|------------|--------------|--------------|--------------|----------------|
|                       |   |               |                  | Q1           | Q2           | Q3           | Q4           |                | Q1           | Q2           | Q3           | Q4           |                | Q1           | Q2           | Q3           | Q4           |                | Q1         | Q2           | Q3           | Q4           |                |
| OUTCOME 2:<br>OUTPUTS | PWD Service Delivery  |               | 1                | 1            | 1            | 1            | 1            | Γ              | 1            | <u>г</u>     | 1            | 1            | Ī              | 1            | 1            | <u>г</u>     | <u> </u>     | Γ              | 1          | 1            | 1            |              |                |
| 2.1                   | Physical Works  |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| 2.2                   | Technical Services  |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| INPUTS                |   |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
|                       | Long Term Personnel   |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| P(D)2.1               | Senior Road Maintenance Planning Engineer                                   | Month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
| P(D)2.2               | (International)<br>Road Maintenance Engineer 1 (Int'I)                      | Month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           |            | 3.0          | 3.0          | 3.0          | 12.0           |
| P(D)2.2               | Road Maintenance Engineer 2 (Int'I)   | Month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           |            | 3.0          | 3.0          | 3.0          | 12.0           |
| P(D)2.4               | Road Maintenance Engineer 3 (Int'l)   | Month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           |            | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Short Term Personnel  |               |                  |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              | -              |
| P(D)2.4               | Short Term Specialist Pool (International & National)                       | Month         | 36.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 2.0          | 2.0          | 2.0          | 2.0          | 8.0            | 1.0        | 1.0          | 1.0          | 1.0          | 4.0            |
|                       | Equipment   |               | -                |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              | -              |
| E(D)2.1               | Computers   | Compute       | 8.0              | 4.0          |              |              |              | 4.0            |              |              |              |              | -              | 4.0          |              |              |              | 4.0            |            |              |              |              | -              |
| E(D)2.2               | Vehicles  | r<br>Vehicle  | 6.0              | 3.0          |              |              |              | 3.0            | 1.0          |              |              |              | 1.0            | 1.0          |              |              |              | 1.0            | 1.0        |              |              |              | 1.0            |
| _(_)                  | Training/Workshops  |               |                  |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              | -              |
| T(D)2.1               | Stakeholder Consultation Workshops  | Worksho       | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
|                       |   | p<br>Worksho  |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| T(D)2.2               | Island Based Contractor Training Workshops                                  | p             | 13.0             |              | 1.0          | 1.0          | 1.0          | 3.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0        | 1.0          |              |              | 2.0            |
|                       | Grant   | ·             |                  |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              | -              |
| G(D)2.1<br>G(D)2.2    | Routine Maintenance Grant<br>Periodic Maintenance Grant                     | Km<br>Km      | 1,100.0<br>726.0 | 50.0<br>33.0 | 50.0<br>33.0 | 50.0<br>33.0 | 50.0<br>33.0 | 200.0<br>132.0 | 62.5<br>41.3 | 62.5<br>41.3 | 62.5<br>41.3 | 62.5<br>41.3 | 250.0<br>165.0 | 75.0<br>49.5 | 75.0<br>49.5 | 75.0<br>49.5 | 75.0<br>49.5 | 300.0<br>198.0 |            | 87.5<br>57.8 | 87.5<br>57.8 | 87.5<br>57.8 | 350.0<br>231.0 |
| G(D)2.2<br>G(D)2.3    | Road and Drainage Improvement Grant   | km            | 1,100.0          | 68.8         | 68.8         | 68.8         | 68.8         | 275.0          |              | 68.8         | 68.8         | 68.8         | 275.0          |              | 68.8         | 49.5<br>68.8 | 68.8         | 275.0          |            | 68.8         | 68.8         | 68.8         | 275.0          |
| G(D)2.4               | Procurement of Small Plant , equipment and tools                            | Kit           | 7.0              | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 0.3          | 0.3          | 0.3          | 0.3          | 1.0            | 0.3          | 0.3          | 0.3          | 0.3          | 1.0            | 0.3        | 0.3          | 0.3          | 0.3          | 1.0            |
| 0(D)2.4               | Grant   |               | 7.0              | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 0.5          | 0.5          | 0.5          | 0.5          | 1.0            | 0.5          | 0.5          | 0.5          | 0.5          | 1.0            | 0.5        | 0.5          | 0.5          | 0.5          | 1.0            |
| G(D)2.5               | Equipment Workshop Grant  | per<br>Island | 22.0             | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.3          | 1.3          | 1.3          | 1.3          | 5.0            | 1.5          | 1.5          | 1.5          | 1.5          | 6.0            | 1.8        | 1.8          | 1.8          | 1.8          | 7.0            |
| G(D)2.6               | Impact Evaluation Study Grant   | quarter       | 16.0             | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0        | 1.0          | 1.0          | 1.0          | 4.0            |
| G(D)2.7               | Supplementary Technical Contracts Grant Fund                                | quarter       | 14.0             | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0        |              | 1.0          |              | 2.0            |
| O(D)2.1               | Other<br>Island Travel (accommodation etc.)                                 | Trips         | 152.0            | 10.0         | 10.0         | 10.0         | 10.0         | 40.0           | 10.0         | 10.0         | 10.0         | 10.0         | 40.0           | 9.3          | 9.3          | 9.3          | 9.3          | 37.3           | 8.7        | 8.7          | 8.7          | 8.7          | 34.7           |
| O(D)2.1<br>O(D)2.2    | General Meetings (venue hire, food etc)                                     | month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Consumables (vehicles repairs, maintenance and                              |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| O(D)2.3               | insurance; fuel; ground transport; office<br>consumables; publications etc) | Month         | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
| Long Term             | consumables; publications etc)  |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              | ┝───┦        |                |
| Personnel             |   |               |                  |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              | -              |
|                       | Technical Team Leader/Institutional Development                             |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Specialist (International)<br>Public Finance Management Specialist          |               |                  |              |              |              |              | -              |              |              |              |              | -              |              |              |              |              | -              |            |              |              |              |                |
|                       | (International)   |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Human Resource Development Specialist (National)                            |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
| 1                     | ISP Program Administrator (National)  |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           |            | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Senior Road Maintenance Planning Engineer                                   |               |                  |              |              |              |              | <b>F</b>       |              |              |              |              | <b>7</b>       |              |              |              |              | <b>7</b>       |            |              |              |              |                |
|                       | (International)   |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
|                       | Road Maintenance Engineer 1 (Int'I)<br>Road Maintenance Engineer 2 (Int'I)  |               | 48.0<br>48.0     | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 12.0<br>12.0   | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 12.0<br>12.0   | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 12.0<br>12.0   | 3.0<br>3.0 | 3.0<br>3.0   | 3.0<br>3.0   | 3.0<br>3.0   | 12.0<br>12.0   |
|                       | Road Maintenance Engineer 2 (Inti)<br>Road Maintenance Engineer 3 (Inti)    |               | 48.0             | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0          | 3.0          | 3.0          | 3.0          | 12.0           | 3.0        | 3.0          | 3.0          | 3.0          | 12.0           |
| Short Term            |   |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
| Personnel             | Contract Management Specialist  |               | 15.0             | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0          | 1.0          | 1.0          | 1.0          | 4.0            | 1.0        | 1.0          | 1.0          | 0.0          | 3.0            |
| 1                     | M&E Specialist (International)  |               | 7.0              | 2.0          | 0.0          | 1.0          | 0.0          | 3.0            | 0.0          | 1.0          | 0.0          | 0.0          | 1.0            | 0.0          | 1.0          | 0.0          | 0.0          | 1.0            | 0.0        | 1.0          | 0.0          | 1.0          | 2.0            |
|                       | Information Technology Specialist (International)                           |               | 3.0              | 1.0          | 0.0          | 0.5          | 0.0          | 1.5            | 0.0          | 0.5          | 0.0          | 0.0          | 0.5            | 0.0          | 0.5          | 0.0          | 0.0          | 0.5            |            | 0.5          | 0.0          | 0.0          | 0.5            |
|                       | Short Term Specialist Pool (International & National)                       |               | 50.0             | 4.0          | 4.0          | 4.0          | 4.0          | 16.0           | 4.0          | 4.0          | 4.0          | 4.0          | 16.0           | 3.0          | 3.0          | 3.0          | 2.0          | 11.0           | 2.0        | 2.0          | 2.0          | 1.0          | 7.0            |
|                       | · · · · · · · · · · · · · · · · · · ·                                       |               |                  | 1            | 1            | I            | I            |                | t            | I            | 1            | 1            |                | 1            | 1            | I            | L            |                | I          | I            | 1            |              | L              |
| SUMMARY               |   |               |                  |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
|                       | Long term International<br>Long term National                               |               | 288.0<br>96.0    |              |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
|                       | total all long term TA  |               | 384.0            | -            |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
|                       | Short Term Specialists (International & National)                           |               | 75.0             | -            |              |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |
|                       | total all short term TA   |               | 75.0             |              | 459.0        |              |              |                |              |              |              |              |                |              |              |              |              |                |            |              |              |              |                |

| Ref                       | COMPONENT OUTCOMES AND INPUTS                          | Unit       | Unit Cost<br>('000) |      | YEA  | NR 1 |      | ATQ                |      | YEA  | R2   |      | ATQ               |              | YEA         | IR 3 |      | ATQ     |      | YEA  | R 4  |      | ATQ     | GRAND TOTAL<br>('000) |
|---------------------------|--|------------|---------------------|------|------|------|------|--------------------|------|------|------|------|-------------------|--------------|-------------|------|------|---------|------|------|------|------|---------|-----------------------|
|                           |  |            | (000)               | Q1   | Q2   | Q3   | Q4   |                    | Q1   | Q2   | Q3   | Q4   |                   | Q1           | Q2          | Q3   | Q4   |         | Q1   | Q2   | Q3   | Q4   |         | (000)                 |
| OUTCOME 1: PWD Institutio | onal Transformation                                    |            |                     |      |      |      | 1    | 1                  |      | 1    |      |      |                   |              |             | - 1  |      | 1       |      | 1    |      |      |         | 1                     |
|                           |  |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
|                           | Long Term Personnel                                    |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
|                           | Technical Team Leader/Institutional                    |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
| P(D)1.                    | 1 Development Specialist (International)               | Month      | 22.0                | 65.9 | 65.9 | 65.9 | 65.9 | 263.4              | 65.9 | 65.9 | 65.9 | 65.9 | 263.4             | 65.9         | 65.9        | 65.9 | 65.9 | 263.4   | 65.9 | 65.9 | 65.9 | 65.9 | 263.4   | 1,053.6               |
|                           | Public Finance Management Specialist                   |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
| P(D)1.                    | 1  | Month      | 20.3                | 60.9 | 60.9 | 60.9 | 60.9 | 243.4              | 60.9 | 60.9 | 60.9 | 60.9 | 243.4             | 60.9         | 60.9        | 60.9 | 60.9 | 243.4   | 60.9 | 60.9 | 60.9 | 60.9 | 243.4   | 973.6                 |
|                           | Human Resource Development Specialist                  | Marth      | 7.0                 | 04.5 | 04.5 | 04.5 | 04.5 | 00.0               | 04.5 | 04.5 | 04.5 | 04.5 | 00.0              | 04.5         | 04.5        | 04.5 | 04.5 | 00.0    | 04.5 | 04.5 | 04.5 | 04.5 |         |                       |
|                           | 1  | Month      | 7.2                 | 21.5 | 21.5 | 21.5 | 21.5 | 86.0               | 21.5 | 21.5 | 21.5 | 21.5 | 86.0              | 21.5         | 21.5        | 21.5 | 21.5 | 86.0    | 21.5 | 21.5 | 21.5 | 21.5 | 86.0    | 344.0                 |
| P(D)1.4                   |  | Month      | 2.5                 | 7.5  | 7.5  | 7.5  | 7.5  | 30.0               | 7.5  | 7.5  | 7.5  | 7.5  | 30.0              | 7.5          | 7.5         | 7.5  | 7.5  | 30.0    | 7.5  | 7.5  | 7.5  | 7.5  | 30.0    | 120.0                 |
|                           | Short Term Personnel                                   |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
|                           | Short Term Specialist Pool (International &            | Manih      | 24.7                | 04.7 | 04.7 | 04.7 | 04.7 | 400.0              | 04.7 | 04.7 | 04.7 | 04.7 | 400.0             | 04.7         | 04.7        | 04.7 |      | 404.4   | 04.7 | 24.7 | 24.7 |      | 404.4   | 405.0                 |
|                           | 1  | Month      | 34.7                | 34.7 | 34.7 | 34.7 | 34.7 | 138.8              | 34.7 | 34.7 | 34.7 | 34.7 | 138.8             | 34.7         | 34.7        | 34.7 | -    | 104.1   | 34.7 | 34.7 | 34.7 | •    | 104.1   | 485.8                 |
|                           | 0 1  | Month      | 34.7                | 34.7 | 34.7 | 34.7 | 34.7 | 138.8              | 34.7 | 34.7 | 34.7 | 34.7 | 138.8             | 34.7         | 34.7        | 34.7 | 34.7 | 138.8   | 34.7 | 34.7 | 34.7 | •    | 104.1   | 520.5                 |
| P(D)1.                    | 1 ( /  | Month      | 34.7                | 69.4 | •    | 34.7 | -    | 104.1              |      | 34.7 |      | -    | 34.7              | •            | 34.7        | -    | •    | 34.7    |      | 34.7 |      | 34.7 | 69.4    | 242.9                 |
| D/D/4                     | Information Technology Specialist<br>8 (International) | Month      | 34.7                | 34.7 |      | 17.4 |      | 52.1               |      | 17.4 |      |      | 17.4              |              | 17.4        |      |      | 17.4    |      | 17.4 |      |      | 17.4    | 104.1                 |
| P(D)1.                    | 1 1  | MOHUH      | 34.7                | 34.7 | -    | 17.4 | -    | JZ. I              |      | 17.4 | -    | -    | 17.4              | •            | 17.4        | -    | •    | 17.4    | -    | 17.4 | -    | •    | 17.4    | 104.1                 |
| E(D) (                    | Equipment  | <b>A</b> 1 |                     | 10.0 |      |      |      | 40.0               |      |      |      |      |                   | 10.0         |             |      |      | (0.0    |      |      |      |      |         |                       |
| E(D)1.                    | 1 Computers  | Computer   | 3.0                 | 12.0 | -    | -    | -    | 12.0               |      | -    | -    | -    | •                 | 12.0         | •           | -    | •    | 12.0    | -    | -    | •    | •    |         | 24.0                  |
| E(D)1.3                   | 2 Vehicles   | Vehicle    | 30.0                | 30.0 | •    | -    | -    | 30.0               | •    | -    | -    | -    | -                 | •            | •           | •    | •    | -       | -    | •    | -    | •    | •       | 30.0                  |
|                           | Training/Workshops                                     |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
| × 7                       | 1 Reform Consultation Workshops                        | Workshop   | 0.5                 | 0.5  | 0.5  | 0.5  | 0.5  | 2.0                | 0.5  | 0.5  | 0.5  | 0.5  | 2.0               |              | 0.5         | 0.5  | 0.5  |         | 0.5  | 0.5  | 0.5  | •    | 1.5     |                       |
| I(D)1.                    | 2 Staff Training Workshops in Provinces                | Workshop   | 0.5                 | 1.0  | 1.0  | 1.0  | 1.0  | 4.0                | 1.0  | 1.0  | 1.0  | 1.0  | 4.0               | 1.0          | 1.0         | 1.0  | 1.0  | 4.0     | 1.0  | 1.0  | 1.0  | 1.0  | 4.0     | 16.0                  |
| T(D)1.                    | 3 PWD Capacity Building Plan Implementation<br>Other   | Quarter    | 40.0                | 40.0 | 40.0 | 40.0 | 40.0 | 160.0              | 40.0 | 40.0 | 40.0 | 40.0 | 160.0             | 40.0         | 40.0        | 40.0 | 40.0 | 160.0   | 40.0 | 40.0 | 40.0 | 40.0 | 160.0   | 640.0                 |
| O(D)1.                    | 1 Island Travel (accommodation etc.)                   | Trips      | 0.8                 | 7.0  | 5.5  | 6.3  | 5.5  | 24.3               | 5.5  | 6.3  | 5.5  | 5.5  | 22.8              | 5.5          | 6.3         | 5.5  | 5.0  | 22.3    | 5.5  | 6.3  | 5.5  | 5.0  | 22.3    | 91.5                  |
| O(D)1.                    | 2 General Meetings (venue hire, food etc)              | Event      | 0.3                 | 0.8  | 1.0  | 1.0  | 1.0  | 3.9                | 1.3  | 1.3  | 1.3  | 1.3  | 5.2               | 1.6          | 1.6         | 1.6  | 1.6  | 6.2     | 1.8  | 1.8  | 1.8  | 1.8  | 7.3     | 22.6                  |
|                           |  |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
|                           | Consumables (vehicles repairs, maintenance             |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
|                           | and insurance; fuel; ground transport; office          |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
| O(D)1.                    |  | Month      | 3.1                 | 9.3  | 9.3  | 9.3  | 9.3  | 37.2               | 9.3  | 9.3  | 9.3  | 9.3  | 37.2              | 9.3          | 9.3         | 9.3  | 9.3  | 37.2    | 9.3  | 9.3  | 9.3  | 9.3  | 37.2    | 148.8                 |
|                           | Grant  |            |                     |      |      |      |      |                    |      |      |      |      |                   |              |             |      |      |         |      |      |      |      |         |                       |
| 0.001                     | Supplementary Technical Contracts Grant                | 0          | 100.0               | -    | P0.0 |      | F0.0 |                    |      | 50.0 |      | P0.0 |                   | <b>F</b> A A | <b>FO</b> 0 | F0.0 | PA 4 |         |      |      |      |      |         |                       |
| G(D)1.<br>Sub-Tota        |  | Quarter    | 100.0               | 50.0 | 50.0 | 50.0 | 50.0 | 200.0<br>1.529.900 | 50.0 | 50.0 | 50.0 | 50.0 | 200.0<br>1.383.60 | 50.0         | 50.0        | 50.0 | 50.0 | 200.0   | -    | -    |      |      |         | 600.0<br>5.424.920    |
| Sub-Lota                  |  |            |                     |      |      |      |      | 1,529.900          |      |      |      |      | 1,585.60          |              |             |      |      | 1,361.4 |      |      |      |      | 1,150.0 | 5,424.920             |

| Ref                      | COMPONENT OUTCOMES AND INPUTS  | Unit       | Unit Cost           |                 | YEA            | .R 1             |                 | ATQ           |                   | YEA             | IR 2          |         | ATQ     |         | YEA     | NR 3    |         | ATQ      |                                |         |         | ATQ     | GRAND TOTAL |            |          |  |
|--------------------------|--|------------|---------------------|-----------------|----------------|------------------|-----------------|---------------|-------------------|-----------------|---------------|---------|---------|---------|---------|---------|---------|----------|--------------------------------|---------|---------|---------|-------------|------------|----------|--|
|                          |  |            | ('000)              | Q1              | Q2             | Q3               | Q4              |               | Q1                | Q2              | Q3            | Q4      |         | Q1      | Q2      | Q3      | Q4      |          | Q1                             | Q2      | Q3      | Q4      |             | ('000)     |          |  |
| OUTCOME 2: PWD Service D | Delivery   |            |                     |                 |                |                  |                 |               |                   |                 | I             |         |         |         |         |         |         |          |                                | ı       | L       |         |             |            |          |  |
|                          | (  | )          | 1                   |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         | 1           |            |          |  |
|                          | Long Term Personnel  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | Senior Road Maintenance Planning Engineer  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| P(D)2.1                  |  | Month      | 20.3                | 60.9            | 60.9           | 60.9             | 60.9            | 243.4         | 60.9              | 60.9            | 60.9          | 60.9    | 243.4   | 60.9    | 60.9    | 60.9    | 60.9    | 243.4    | 60.9                           | 60.9    | 60.9    | 60.9    | 243.4       | 973.6      | 973.6    |  |
|                          | 2 Road Maintenance Engineer 1 (Int1)   | Month      | 20.3                | 60.9            | 60.9           | 60.9             | 60.9            | 243.4         | 60.9              | 60.9            | 60.9          | 60.9    | 243.4   | 60.9    | 60.9    | 60.9    | 60.9    | 243.4    | 60.9                           | 60.9    | 60.9    | 60.9    | 243.4       | 973.6      | 973.6    |  |
|                          | 3 Road Maintenance Engineer 2 (Int1)   | Month      | 20.3                | 60.9            | 60.9           | 60.9             | 60.9            | 243.4         | 60.9              | 60.9            | 60.9          | 60.9    | 243.4   | 60.9    | 60.9    | 60.9    | 60.9    | 243.4    | 60.9                           | 60.9    | 60.9    | 60.9    | 243.4       | 973.6      | 973.6    |  |
|                          | 4 Road Maintenance Engineer 3 (Int1)   | Month      | 20.3                | 60.9            | 60.9           | 60.9             | 60.9            | 243.4         | 60.9              | 60.9            | 60.9          | 60.9    | 243.4   | 60.9    | 60.9    | 60.9    | 60.9    | 243.4    | 60.9                           | 60.9    | 60.9    | 60.9    | 243.4       | 973.6      | 973.6    |  |
| . (-)                    | Short Term Personnel   |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | Short Term Specialist Pool (International &  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| P(D)2 4                  | 4 National)  | Month      | 34.7                | 104.1           | 104.1          | 104.1            | 104.1           | 416.4         | 104.1             | 104.1           | 104.1         | 104.1   | 416.4   | 69.4    | 69.4    | 69.4    | 69.4    | 277.6    | 34.7                           | 34.7    | 34.7    | 34.7    | 138.8       | 1,249.2    | 1,249.2  |  |
| 1 (0)2                   | Equipment  | month      | VT.1                | 104.1           | 104.1          | 104.1            | 104.1           | 410.4         | 104.1             | 104.1           | 104.1         | 104.1   | 410.4   | 00.4    | 00.4    | 00.4    | 00.4    | 211.0    | 04.1                           | 04.7    | 04.7    | 04.1    | 100.0       | 1,240.2    | 1,240.2  |  |
| E(D)2.1                  | 1 Computers  | Computer   | 3.0                 | 12.0            |                |                  |                 | 12.0          |                   |                 |               |         | _       | 12.0    |         |         |         | 12.0     |                                | -       |         | 24.0    | 24.0        |            |          |  |
| E(D)2.<br>E(D)2.2        |  | Vehicle    | 40.0                | 12.0            |                |                  |                 | 12.0          | 40.0              |                 |               |         | 40.0    | 40.0    |         |         |         |          | 40.0 40.0 40.0 240.0 240.0     |         |         |         |             |            |          |  |
| E(U)2.2                  | Training/Workshops   | venicie    | 40.0                | 120.0           |                |                  |                 | 120.0         | 40.0              |                 |               |         | 40.0    | 40.0    |         |         |         | 40.0     | 10 40.0 40.0 240.0 240.0 240.0 |         |         |         |             |            |          |  |
|                          |  | Warkahan   | 0.5                 | 4.5             | 1.5            | 1.5              | 4.5             | 6.0           | 1.5               | 1.5             | 1.5           | 1.5     | 6.0     | 1.5     | 4.5     | 1.5     | 4.5     | 6.0      | 1.5                            | 1.5     | 1.5     | 1.5     | 6.0         | 24.0       | 24.0     |  |
| I(U)2.1                  | 1 Stakeholder Consultation Workshops   | Workshop   | 0.5                 | 1.5             | 1.5            | 1.5              | 1.5             | 6.0           | 1.5               | 1.5             | 1.5           | 1.5     | 6.0     | 1.5     | 1.5     | 1.5     | 1.5     | 6.0      | 1.5                            | 1.5     | 1.5     | 1.5     | 6.0         | 24.0       | 24.0     |  |
| T(D)0 (                  | laland Daard Contractor Tesisian Westerhoos  | Madadaa    | 1.0                 |                 | 4.0            | 4.0              | 4.0             |               | 1.0               | 4.0             | 4.0           | 1.0     | 4.0     | 4.0     | 4.0     | 4.0     | 4.0     | 4.0      | 4.0                            | 4.0     |         |         |             | 40.0       | 40.0     |  |
| I(D)2.2                  | 2 Island Based Contractor Training Workshops                                       | vvorksnop  | 1.0                 | -               | 1.0            | 1.0              | 1.0             | 3.0           | 1.0               | 1.0             | 1.0           | 1.0     | 4.0     | 1.0     | 1.0     | 1.0     | 1.0     | 4.0      | 1.0                            | 1.0     |         | -       | 2.0         | 13.0       | 13.0     |  |
|                          | Grant  |            |                     |                 |                |                  |                 | _             |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          |  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| · · · /                  | 1 Routine Maintenance Grant  | Km         | 3.0                 | 150.0           | 150.0          | 150.0            | 150.0           | 600.0         | 187.5             | 187.5           | 187.5         | 187.5   | 750.0   | 225.0   | 225.0   | 225.0   | 225.0   | 900.0    | 262.5                          |         | 262.5   | 262.5   | 1,050.0     | 3,300.0    | 3,300.0  |  |
|                          | 2 Periodic Maintenance Grant   | Km         | 8.0                 | 264.0           | 264.0          | 264.0            | 264.0           | 1,056.0       | 330.0             | 330.0           | 330.0         | 330.0   | 1,320.0 | 396.0   | 396.0   | 396.0   | 396.0   | 1,584.0  | 462.0                          | 462.0   | 462.0   | 462.0   | 1,848.0     | 5,808.0    | 5,808.0  |  |
| G(D)2.3                  | 3 Road and Drainage Improvement Grant  | km         | 8.0                 | 550.0           | 550.0          | 550.0            | 550.0           | 2,200.0       | 550.0             | 550.0           | 550.0         | 550.0   | 2,200.0 | 550.0   | 550.0   | 550.0   | 550.0   | 2,200.0  | 550.0                          | 550.0   | 550.0   | 550.0   | 2,200.0     | 8,800.0    | 8,800.0  |  |
|                          | Procurement of Small Plant , equipment and   |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | 4 tools Grant  | Kit        | 175.0               | 175.0           | 175.0          | 175.0            | 175.0           | 700.0         | 43.8              | 43.8            | 43.8          | 43.8    | 175.0   | 43.8    | 43.8    | 43.8    | 43.8    | 175.0    | 43.8                           | 43.8    | 43.8    | 43.8    | 175.0       | 1,225.0    | 1,225.0  |  |
|                          | 5 Equipment Workshop Grant   | per Island | 25.0                | 25.0            | 25.0           | 25.0             | 25.0            | 100.0         | 31.3              | 31.3            | 31.3          | 31.3    | 125.0   | 37.5    | 37.5    | 37.5    | 37.5    | 150.0    | 43.8                           | 43.8    | 43.8    | 43.8    | 175.0       | 550.0      | 550.0    |  |
| G(D)2.6                  | 6 Impact Evaluation Study Grant  | quarter    | 20.0                | 20.0            | 20.0           | 20.0             | 20.0            | 80.0          | 20.0              | 20.0            | 20.0          | 20.0    | 80.0    | 20.0    | 20.0    | 20.0    | 20.0    | 80.0     | 20.0                           | 20.0    | 20.0    | 20.0    | 80.0        | 320.0      | 320.0    |  |
|                          | Supplementary Technical Contracts Grant  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| G(D)2.7                  | 7 Fund   | quarter    | 100.0               | 100.0           | 100.0          | 100.0            | 100.0           | 400.0         | 100.0             | 100.0           | 100.0         | 100.0   | 400.0   | 100.0   | 100.0   | 100.0   | 100.0   | 400.0    | 100.0                          | -       | 100.0   | -       | 200.0       | 1,400.0    | 1,400.0  |  |
|                          | Other  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| O(D)2.1                  | I Island Travel (accommodation etc.)   | Trips      | 0.8                 | 7.5             | 7.5            | 7.5              | 7.5             | 30.0          | 7.5               | 7.5             | 7.5           | 7.5     | 30.0    | 7.0     | 7.0     | 7.0     | 7.0     | 28.0     | 6.5                            | 6.5     | 6.5     | 6.5     | 26.0        | 114.0      | 114.0    |  |
| O(D)2.2                  | 2 General Meetings (venue hire, food etc)  | month      | 0.3                 | 0.8             | 0.8            | 0.8              | 0.8             | 3.1           | 0.8               | 0.8             | 0.8           | 0.8     | 3.1     | 0.8     | 0.8     | 0.8     | 0.8     | 3.1      | 0.8                            | 0.8     | 0.8     | 0.8     | 3.1         | 12.5       | 12.5     |  |
|                          | ,  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | Consumables (vehicles repairs, maintenance   |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | and insurance; fuel; ground transport; office                                      |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
| O(D)2.3                  | 3 consumables; publications etc)   | Month      | 4.0                 | 12.0            | 12.0           | 12.0             | 12.0            | 48.0          | 12.0              | 12.0            | 12.0          | 12.0    | 48.0    | 12.0    | 12.0    | 12.0    | 12.0    | 48.0     | 12.0                           | 12.0    | 12.0    | 12.0    | 48.0        | 192.0      | 192.0    |  |
| Sub-Tota                 | 1  |            |                     | 1,785.3         | 1,654.3        | 1,654.3          | 1,654.3         | 6.748.120     | 1,672.8           | 1,632.8         | 1.632.8       | 1,632.8 | 6,571.1 | 1,759.3 | 1,707.3 | 1,707.3 | 1,707.3 | 6,881.3  | 1,821.9                        | 1.681.9 | 1,780.9 | 1,680.9 | 6,965.5     | 27,166.080 | 27,166.1 |  |
| GRAND TOTAL              |  |            |                     | 1,785.3         | 1.654.3        | 1,654.3          | 1.654.3         | 8,278.0       | 1,672.8           | 1.632.8         | 1.632.8       | 1,632.8 | 7,954.7 | 1,759.3 | 1.707.3 | 1,707.3 | 1,707.3 | 8,242.8  | 1,821.9                        | 1,681.9 | 1,780.9 | 1.680.9 | 8,115.5     | 32,591.0   | 32.591.0 |  |
| Management Fees          | s 13%  |            |                     | 223.2           | 206.8          | 206.8            | 206.8           | 1,034.753     | 209.1             | 204.1           | 204.1         | 204.1   | 994.34  | 219.9   | 213.4   | 213.4   | 213.4   | 1,030.35 | 227.74                         | 210.24  | 222.61  | 210.11  | 1,014.44    | 4,073.875  | 4,073.9  |  |
| VTSSP 2 Budge            | 1376   |            |                     | 220.2           | 200.0          | 200.0            | 200.0           | 9.312.773     | 203.1             | 204.1           | 204.1         | 204.1   | 8.949.1 | 210.0   | 210.4   | 213.4   | 210.4   | 9,273.1  | 221.14                         | 210.24  | 222.01  | 210.11  | 9.129.9     | 36,664.875 | 36,664.9 |  |
| VISSP 2 budge            |  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         | .,          |            |          |  |
|                          | The second second second   | - P. N. 14 |                     | 2,488           | 2,194          | 2,246            | 2,194           | 9,313         | 2,215             | 2,222           | 2,170         | 2,170   | 8,949   | 2,324   | 2,307   | 2,254   | 2,219   | 9,273    | 2,333                          | 2,228   | 2,287   | 2,139   | 9,130       | 36,665     | 36,665   |  |
| Management Fees          | The Management Fee is comprised of, but n  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | a) profits, including commercial margins and                                       |            |                     |                 |                |                  | .,              |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | b) financial management costs, including the                                       |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | c) costs associated with establishing and/or                                       |            |                     |                 |                | VISSP II, includ | ding utilities; | ;             |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | d) all high level management and manageme  |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | e) costs of any Contractor Head Office suppo                                       |            |                     |                 | anagement su   | ipport;          |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | f) costs associated with all personnel briefing                                    |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | g) costs associated with any subcontracting and procurement of goods and services; |            |                     |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | h) costs, including domestic and international                                     |            |                     | er diems, and l | ocal transport | costs where att  | ributable to    | the FMF and r | equired for Contr | actor Head Offi | ce personnel; |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |
|                          | i) taxation (other than percennel related taxes                                    |            | e e e e e l'a e bla |                 |                |                  |                 |               |                   |                 |               |         |         |         |         |         |         |          |                                |         |         |         |             |            |          |  |

i) taxation (other than personnel-related taxes and GST), as applicable;

(j) insurance costs (including but not limited, to professional indemnity, worker's compensation, public liability, and any other insurances as required under the Contract or deemed necessary by the Contractor) in accordance with Clause 33 (Indemnity) and Clause 34 (Insurance) of Part 6 (Standard Contract Conditions) of the Contract; k) any other overheads required to perform the Services in accordance with this Contract;

I) any allowance for risks and contingencies; and

m) Performance Guarantee.

# Annex 7. MONITORING AND EVALUATION FRAMEWORK

## PERFORMANCE MANAGEMENT

The monitoring and evaluation matrix (**Error! Reference source not found.**) summarises the erformance management arrangements. These arrangements are elaborated further in the following sections.

## IMPACT ASSESSMENT

The broad performance question that will be answered in relation to the VTSSP II goal is:

Do women and men in target localities have increased access to improved road transport infrastructure?

VTSSP II will use both primary and secondary data sources to assess program impact<sup>49</sup>, as outlined below.

### HOUSEHOLD INCOME & EXPENDITURE SURVEY (HIES)

Secondary data from the National Statistics Office (NSO) Household Income and Expenditure Survey (HIES) will be used to gather evidence about progress towards the VTSSP II goal<sup>50</sup>. A VNSO survey undertaken in November 2010 will provide a baseline dataset. A repeat survey planned by NSO for 2015 will provide evidence of impact by measuring changes in road transport-related indicators. The questionnaire used by the NSO includes a range of questions about road transport (see Table 23).

| Area of Enquiry             | Relevant HIES Questions |
|-----------------------------|-------------------------|
| Access to water             | Questions H16 – H19     |
| Access to health facilities | Questions H22 – H24     |
| Transport                   | Questions H27 – H30     |
| Access to markets           | Questions H31 – H35     |
| Transport procurement       | Question H61 – 67       |
| Freight                     | Question H73 (2)        |
| Sales revenue               | Question H76 – H81      |

Table 23: Vanuatu HIES Transport Questions

The HIES uses a 10% population sample frame. A subset of the national sample that aligns with program target areas will be drawn for the purposes of VTSSP II. Analysis will involve a range of descriptive and inferential statistics to document any significant changes in beneficiary circumstances. This information will enable wider debate about the development merits of investing in regional transport infrastructure. It will also enable AusAID to report against the 'Sustainable Economic Development' strategic goal of the Australian Government's aid program.

 <sup>&</sup>lt;sup>49</sup> For the purposes of VTSSP II, 'impact' is defined as "significant and lasting changes in the lives of ultimate beneficiaries".
 <sup>50</sup> The survey data will be disaggregated by gender, location and other stratifying variables to enable meaningful interpretation of positive and negative impact.

### Table 24: VTSSP Monitoring and Evaluation Matrix

|                        | Strategy  | Performance<br>Questions  | Evidence/Indicators  | Methods/<br>Sources  | Frequency                 | Responsibility                | Communication/<br>Report   |
|------------------------|---|---|--|--|---------------------------|-------------------------------|--|
| Ultimate Beneficiaries | <b>Goal</b><br>People in<br>Vanuatu have<br>increased<br>access to a<br>well<br>maintained,<br>affordable<br>and<br>integrated<br>transport<br>network. | Do women and<br>men in target<br>localities have<br>increased<br>access to<br>improved road<br>transport<br>infrastructure? | <ul> <li><sup>51</sup>Time taken to reach health facility</li> <li>Mode of transport used to reach health facility</li> <li>Main source of transport used</li> <li>Time taken to reach nearest main road</li> <li>Time taken to water source</li> <li>Number of trips per day to water source (by women and men)</li> <li>Time taken to reach nearest wharf or anchorage</li> <li>Time taken to reach nearest airstrip</li> <li>Percentage of households that purchased a vehicle in past year</li> <li>Percentage of households that paid for freight of goods in past year</li> <li>Time to reach nearest market or centre</li> <li>Time to reach nearest market or centre</li> <li>Mode of transport to market</li> </ul> | Subset of<br>Household<br>Income &<br>Expenditure<br>Survey (HIES) | Baseline/<br>Endline      | National<br>Statistics Office | Baseline Report (to<br>GoV/AusAID)<br>Endline Report (to<br>GoV/AusAID)<br>Annual 'State of the<br>Sector Report' (to<br>GoV/AusAID and public,<br>media and NGOs) |
|                        |   |   | Longitudinal perceptions of sampled<br>households about the social and economic<br>impact of road transport works in their<br>locality   | 'Annual<br>Snapshots'<br>(longitudinal<br>case studies)            | Baseline +<br>annual (x3) | VTSSP II M&E                  | Annual Household<br>Perceptions Snapshot<br>Annual 'State of the<br>Road Sector Report'<br>(to GoV/AusAID and<br>public, media and<br>NGOs)                        |

<sup>&</sup>lt;sup>51</sup> Indicators derived from National Statistics Office (NSO) Household Income and Expenditure Survey (HIES). N.B. Respondents disaggregated by gender and locality.

| Strate          | 3Y  | Performance<br>Questions  | Evidence/Indicators   | Methods/Sources   | Frequency                    | Responsibility                                       | Communication/Report  |
|-----------------|---|---|---|---|------------------------------|--|---|
|                 | The GoV<br>demonstrates<br>capacity to<br>responsibly<br>prioritise, plan,<br>build and maintain<br>road transport<br>infrastructure<br>within available<br>national and<br>donor resources | Is there clear evidence<br>that road transport<br>priorities are<br>determined by a policy<br>that is appropriately<br>sensitive to<br>development needs<br>and available<br>resources. | Review of road selection criteria<br>based on cost/benefit. Benefit<br>balances economic growth and<br>poverty alieviation.   | Independent<br>review of policy<br>framework and<br>subsequent<br>investment<br>portfolio | Mid-term<br>and end-<br>term | Independent<br>evaluators                            | Independent Report to<br>GoV and AusAID   |
| † †<br>Partners | MIPU PWD has the<br>skills, systems, and<br>resources<br>necessary to plan<br>& manage its<br>agreed core<br>mandate  | Outcome 1<br>Is the PWD<br>demonstrating<br>stronger institutional<br>performance in<br>delivering the<br>department's core<br>mandate?   | Progress against agreed<br>institutional capacity<br>development 'progress markers'<br>(planning, policy, budgeting,<br>oversight etc.)                               | Joint Annual<br>Capacity<br>Appraisal (JACA)  | Annual                       | GoV M&E<br>Unit<br>(supported<br>by VTSSP II<br>M&E) | <b>PWD Capacity</b><br><b>Appraisal Report</b><br>Annual ' <b>State of the</b><br><b>Road Sector Report</b> '<br>(to GoV/AusAID and<br>public, media and<br>NGOs) |
|                 | MIPU PWD<br>Operations<br>capably maintains   | <b>Outcome 2</b><br>Is the PWD effectively<br>facilitating local road   | Key achievements and constraints  | Independent<br>Progress<br>Reviews ( <b>IPR</b> )   | Midterm &<br>Year 4          | Independent<br>evaluators                            | IPR Report (to<br>AusAID/GoV)   |
|                 | key road transport<br>infrastructure  | infrastructure<br>maintenance<br>including increasing<br>use of community and<br>private sector<br>partners?  | A raft of indicative measures of<br>infrastructure<br>quality/maintenance including:<br>road traffic counts, road surface<br>roughness, drainage<br>maintenance, etc. | Infrastructure<br>monitoring<br>protocols (to be<br>developed with<br>PWD)                | Annual                       | PWD  | Infrastructure<br>Monitoring Report to<br>GoV/AusAID<br>Annual 'State of the<br>Road Sector Report'<br>(to GoV/AusAID and<br>public, media and<br>NGOs)           |

| Strate             | gy                   | Performance<br>Questions  | Evidence/Indicators                       | Methods/Sources  | Frequency                | Responsibility   | Communication/Report            |
|--------------------|----------------------|---|---|--|--------------------------|--|---------------------------------|
| ↑<br>Delivery Team | Outputs<br>specified | Outputs<br>Is VTSSP II delivering<br>key program outputs<br>on time, within<br>budget and of<br>sufficient quality? | Work output and quality by MPU<br>and PWD | Package metrics<br>compiled in<br>Transport<br>Infrastructure<br>Information<br>System ( <b>TIIS</b> ) | At package<br>completion | Site<br>Supervisor<br>Reports<br>(supported<br>by MPU) | Annual Progress<br>Report (APR) |

## LONGITUDINAL CASE STUDIES ('ANNUAL SNAPSHOTS')

To supplement the NSO quantitative analysis described above, primary data will be collected by VTSSP II in the form of qualitative 'snapshots' of beneficiary circumstances. This will involve a series of longitudinal case studies. The first will be conducted as soon as possible after program approval and will provide baseline snapshots. Subsequent case studies will be carried out on a yearly basis to inform annual reporting to the GfG Management Committee and other stakeholders. The case studies will involve the same purposively sampled households each year<sup>52</sup>. This will enable deep insights into particular transport-related issues faced by households to be tracked through time. As the program evolves and new target areas are identified, then additional households will be added to the survey. The case studies will be based on a set of research questions concerned with household socioeconomics, development cross-cutting themes (e.g. gender equality and disability access), MDGs, and perceptions of road transport infrastructure and services. Indicative research questions are provided in Table 25.

## **OUTCOME EVALUATION**

As discussed in Section 3.1, two outcomes will contribute to the VTSSP II's purpose. Performance questions related to each outcome include:

- Is the PWD demonstrating stronger institutional performance in delivering the department's core mandate?
- Is the PWD effectively facilitating local road infrastructure maintenance including increasing use of community and private sector partners?

The methods to accrue answers to these performance questions are elaborated in turn below.

## JOINT ANNUAL CAPACITY APPRAISAL (JACA)

The first outcome question is concerned with institutional strengthening of the PWD. Measuring changes in institutional 'capacity' is a universally challenging area. Under existing legislation, PWD through the Ministry of Infrastructure and Public Utilities (MIPU) is required to report annually to a GoV M&E Unit within the Office of the Prime Minister. VTSSP II will work with the M&E Unit and PWD to develop and implement a Joint Annual Capacity Appraisal (JACA) process<sup>53</sup> that will both meet the internal GoV reporting needs and the information needs of VTSSP II. The JACA will be based on the concept of 'Progress Markers' developed by the Canadian International Development Research Centre's (IDRC) as part of the 'Outcome Mapping' approach<sup>54</sup>. Progress Markers have shown promise as a way to track open-ended developments—such as institutional performance—along an agreed trajectory<sup>55</sup>. The JACA will be implemented as a semi-structured interview/dialogue administered by the GoV M&E Unit (with support from VTSSP II) with selected PWD staff at strategic, tactical and operational levels.

<sup>&</sup>lt;sup>52</sup> The sample for the snapshots may expand during the life of the program to take in new target localities. There will also be a need for the sample frame to consider gender, cultural, economic and social factors.

<sup>&</sup>lt;sup>53</sup> The MCA road program attempted to implement an 'institutional scorecard' for tracking PWD capacity development, but the process broke down because key stakeholders felt 'audited' and withdrew their support. It is important to communicate that the JACA proposed here is fundamentally different: i) it is a joint process; ii) it supports/enhances internal GoV M&E/annual reporting processes; iii) it is a learning and management decision-making tool rather than an audit tool; iv) it tracks progress along an agreed trajectory (it is forward looking) rather than an externally imposed set of standards.

<sup>&</sup>lt;sup>54</sup> Earl, S., Carden, F. & Smutylo, T. (2002). *Outcome Mapping: building learning and reflection into development programs*. Ottawa, IDRC. See <u>http://www.idrc.ca/en/ev-26586-201-1-DO\_TOPIC.html</u>.

<sup>&</sup>lt;sup>55</sup> Participants periodically assess current progress against progress markers defined as 'expect to see', 'like to see' and 'love to see'.

| <b>Research Theme</b>                              | Area of Questioning  | Data   |
|--|--|--|
|  | Location   | <ul> <li>Province</li> <li>Island</li> <li>Village</li> </ul>  |
| Fundamental<br>household<br>attributes             | Household structure  | <ul> <li>Age</li> <li>Gender</li> <li>Education</li> <li>Disabilities</li> </ul>   |
|  | Monthly expenditure threshold<br>Mobile phone usage                                | Major expense items  |
|  | Housing  | <ul><li> Roof material</li><li> Wall material</li></ul>  |
|  | Access to school   | <ul> <li>Time</li> <li>Distance</li> <li>Attendance</li> <li>Reasons for non-attendance</li> <li>Method of transport</li> </ul>  |
|  | Access to clinic   | <ul> <li>Number visits in past month</li> <li>Method of transport</li> </ul>   |
| Socioeconomics<br>of infrastructure                | Access to local market/shops   | <ul><li>Number of visits in past month</li><li>Method of transport</li></ul>   |
| of hill astructure                                 | Access to major market/shops   | <ul> <li>Time</li> <li>Distance</li> <li>Number of visits in past year</li> <li>Method of transport</li> </ul>   |
|  | Perceptions of transport infrastructure limitations over past year                 |  |
|  | Perceptions of major changes in transport<br>infrastructure quality over past year | <ul><li>Positive</li><li>Negative</li></ul>  |
| Perceptions of<br>public works<br>service delivery | Perceived status of closest road   | <ul> <li>Type/classification</li> <li>Usage (who, what, frequency)</li> <li>Quality</li> <li>Major challenges/problems</li> <li>Time since last maintenance activity (perceived quality/value of maintenance activities)</li> <li>Value/impact on household (current and potential)</li> </ul> |
|  | Perceived status of major road   | Type/classification  |

| <b>Research</b> Theme  | Area of Questioning  | Data  |
|--|--|---|
| <u>Research Theme</u>  | Perceived prevalence and consequence of<br>'development risks'   | <ul> <li>Usage (who, what, frequency)</li> <li>Quality</li> <li>Major challenges/problems</li> <li>Time since last maintenance activity (perceived quality/value of maintenance activities)</li> <li>Value/impact on household (current and potential)</li> <li>Lack of political will affects the on-going maintenance of transport works, thereby eroding their value for households and enterprises.</li> <li>Budget allocations are insufficient for on-going maintenance of transport works.</li> <li>Local communities unable to mobilise sufficient resources for maintenance activities.</li> <li>Improved transport infrastructure does not translate into increased economic activity.</li> <li>Local attitudes/motivation in opposition to need for community involvement in maintenance activities.</li> <li>Lack of entrepreneurship inhibits extent to which improved transport infrastructure can be exploited for local economic benefit.</li> <li>Social inequities inhibit involvement of women, disabled, youth or other marginalised groups to derive social or economic benefits from improved transport infrastructure.</li> <li>Local communities lack skill required to derive social and economic benefits from new transport infrastructure.</li> <li>Local communities lack skill required to maintain transport works.</li> <li>Local and ownership or other legal constraints erode the upkeep of transport infrastructure.</li> </ul> |
| Implementation   | otos   | Significant weather events destroy or damage new transport infrastructure.  |
| <ul> <li>Independer</li> <li>Researcher</li> <li>Researcher</li> <li>Major hous</li> <li>Changes in</li> </ul> | eholds interviewed annually at same time of y<br>nt perspectives of both genders obtained<br>to obtain International Roughness Index rati<br>to note general observations<br>ehold events over previous year (births, deat<br>household security<br>nunity events over previous year | ng for closest road   |

Changes in general psychosocial wellbeing

# Table 25: Indicative Research Themes for Longitudinal Case Studies

The semi-structured interview/dialogue will be guided by agreed dimensions of PWD performance (see Appendix F for indicative elements).

The process may also draw on work by the Public Service Commission to install an individual performance appraisal system. The full development and piloting of the JACA will be an early deliverable of the M&E Specialist.

Analysis of JACA data will be used to inform PWD about progress relative to annual action plans, and to inform VTSSP II about the efficacy of capacity building methods.

### INFRASTRUCTURE MONITORING

The second outcome question is concerned with the delivery of transport infrastructure in target localities. PWD staff will be supported by VTSSP II to establish a simple and appropriate regime of ex-post monitoring of infrastructure works. This will include established methods such as road traffic counts, road surface roughness measures, airfield and wharf maintenance checks etc. The capacity to conduct this monitoring work will be developed under the institutional strengthening component (Outcome 1). The data collected through the monitoring processes will be maintained within the Transport Infrastructure Information System (TIIS) described below (See Output Monitoring on p 94).

## INDEPENDENT PROGRESS REVIEW (IPR)

To provide more in-depth insights into the effectiveness of PWD work at local level and the efficacy of institutional strengthening support and progress of outsourcing reform, an independent progress review (IPR) will be commissioned around November 2012 and at end-of-program. This will involve a team of independent evaluators that will include expertise in institutional strengthening, transport sector management and international development evaluation. The terms of reference (ToR) for the IPR will focus on achievements and challenges in relation to transport infrastructure works from the standpoint of provincial PWD staff, private sector contractors and relevant civil society actors. Findings will be reported to the GfG Management Committee, and circulated to all key stakeholders.

| Indicative elements to the JACA<br>Progress Markers  |  |  |
|--|--|--|
| GoV MDG indicators for the<br>Transport Sector (as defined in the<br>UNDP MDG Data Needs Assessment<br>& Costing Tool and required by the<br>Office of the Prime Minister<br>through the M&E Unit) |  |  |
| Corporate and Annual planning and reporting metrics  | • Presence and quality of PWD corporate planning and reform agenda     |  |
|  | • Progress against agreed reform agenda                                | <ul> <li>Status for each agenda item (complete, in-progress, not started)</li> <li>Reasons for current status</li> </ul>   |
|  | • Presence and quality of PWD annual planning and reporting            |  |
| Service Management Metrics<br>(captured and presented in GIS)  | • Maintenance activities undertaken in past year (planned v actual)    | <ul> <li>Quantity (e.g. km)</li> <li>Expenditure</li> <li>Location (Island distribution)</li> </ul>  |
|  | • Rehabilitation activities undertaken in past year (planned v actual) | <ul> <li>Quantity (e.g. km)</li> <li>Expenditure</li> <li>Location (Island distribution)</li> </ul>  |
|  | • Development activities undertaken in past year (planned v actual)    | <ul> <li>Quantity (e.g. km)</li> <li>Expenditure</li> <li>Location (Island distribution)</li> </ul>  |
|  | • Network monitoring activities  | <ul> <li>Maritime infrastructure monitoring (to be defined)</li> <li>Airport infrastructure monitoring (to be defined)</li> <li>Road infrastructure monitoring (International<br/>Roughness Indicator method used by MCA based on<br/>an agreed sample frame)</li> </ul>                 |
| Outsourcing/contract management<br>metrics   | • Contracts signed   | <ul> <li>Number</li> <li>Value</li> <li>Location</li> <li>Type (rehabilitation, maintenance, development)</li> <li>Subsector (roads, maritime, aviation)</li> <li>Classification</li> <li>Status (complete, in-progress, not started)</li> <li>Quality rating (to be defined)</li> </ul> |
| Rating for prevalence and  | • Competing political agendas or priorities affect PWD's ability to    |  |

| consequence of 'intervention risks' | deliver VTSSP II outcomes.   |
|-------------------------------------|--|
|                                     | <ul> <li>Local political factors inhibit the prioritisation and approval of</li> </ul>   |
|                                     | transport sector projects.   |
|                                     | • PWD budget allocations are insufficient to support the   |
|                                     | government's obligations under the program.  |
|                                     | <ul> <li>Contract budgets prove insufficient for contractors/community<br/>groups to deliver agreed outcomes.</li> </ul>                     |
|                                     | <ul> <li>Financial mismanagement of projects affects the viability of the<br/>partnership.</li> </ul>  |
|                                     | • Organisational cultural/motivational factors erode the   |
|                                     | performance of PWD and inhibit achievement of program  |
|                                     | outcomes.  |
|                                     | Relationships between TSSU and PWD deteriorate thereby   |
|                                     | eroding the efficacy of program deliverables (especially   |
|                                     | institutional strengthening).  |
|                                     | <ul> <li>Relationships within partner community groups or contractors<br/>breakdown and inhibit achievement of program outcomes.</li> </ul>  |
|                                     | • PWD staff skills prove to be inadequate to fully realise program   |
|                                     | outcomes.  |
|                                     | • Contractors lack the technical capacity to adequately deliver on technical designs.  |
|                                     | <ul> <li>Community groups and small-scale contractors lack the<br/>technical skill to adequately deliver approved local projects.</li> </ul> |
|                                     | <ul> <li>Legal or legislative impediments affect the timeliness or quality</li> </ul>  |
|                                     | of PWD engagement of contractors or community groups.  |
|                                     | <ul> <li>Significant weather events affect the progress of projects.</li> </ul>  |

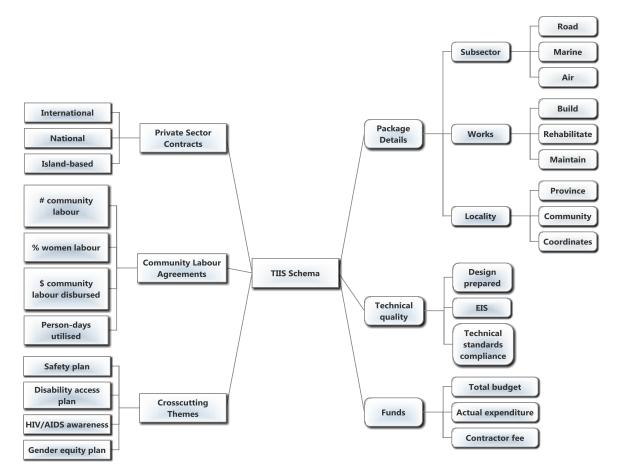
Table 26: Indicative Dimensions of PWD Capacity

## **OUTPUT MONITORING**

The performance question relating to program outputs is:

Is VTSSP II delivering key program outputs on time, within budget and of sufficient quality?

The basic data to track the progress and quality of output delivery will be enabled by establishing a Transport Infrastructure Information System (TIIS). This system will utilise database and Geographic Information System (GIS) capability to record all relevant works supported by VTSSP II. It will draw on and integrate the disparate data gathering mechanisms that currently exist. Initially the system will be developed and maintained by VTSSP II, but could be transferred to PWD as capacity increases and demand for management information emerges. The following diagram is indicative of the TIIS database schema:



### Figure 10: Indicative database schema for a Transport Infrastructure Information System

The TIIS will enable monitoring of program progress relative to PWD annual work plans and VTSSP II annual plans. Indicative monitoring targets at this time include:

- 150 km per year of road maintained
- 20 km per year of road constructed
- Labour days generated

### **M&E** COMMUNICATION

It is a truism that the resources and effort invested in M&E are squandered if findings are not communicated effectively and utilised. It is also a truism that 'information is power' when it is effectively communicated.

Recognising these truisms, M&E information for VTSSP II will be used to meet routine reporting requirements, but will also be used in a more strategic way to create influence and support the broader reform agenda. This will require that the program engage a part-time communication specialist to creatively communicate key findings so that they foster the desired results. A communication strategy will be developed and will include:

- Mapping of key stakeholders and their respective information needs
- Identification of available communication channels meet/influence the various stakeholders
- Development of creative and accessible communication mediums
- Scheduling and facilitation of key communication events

A key element of the communication strategy will be an Annual Stakeholders Forum convened by the GfG Management Committee to present progress and constraints in the transport sector of Vanuatu. The event will be open to the media, GoV, civil society and private sector.

## **M&E MANAGEMENT**

The management of the M&E arrangements proposed in this document will require the oversight of a M&E Specialist (approximately 7 months over four years). Significant inputs will be required early in the life of the program to develop the M&E tools and protocols that underpin the broad methods outlined in this document. Thereafter inputs will be intermittent and timed to support key M&E processes (e.g the JACA, IPR, annual 'snapshots' etc.). There will also be a need to invest in capacity building of counterparts—in particular the GoV M&E Unit.

Supporting the M&E Specialist will be an Information System Analyst (approximately 3 months) who will provide initial inputs, and then as-needed inputs to develop and support the TIIS (as per Figure 10) that will compile, analyse and report the full breadth of data that the program will accumulate. This role would provide support for key technical data management processes such as GIS integration. The TIIS will become increasingly valuable over the life of the program as datasets accumulate and can support the ad hoc information requests from GoV and GoA concerning the transport sector. The TIIS will ultimately be handed over to PWD.

There is a possibility that the program may be required to invest in the GoV M&E Unit, depending on the internal capacity constraints that the unit faces, and the extent to which they are able to support the program's needs. Some investment will also be required in the NSO to ensure that the HIES data meets program impact evaluation needs, including funding a midterm sub-sample of the full HIES.

The IPR will be commissioned and managed directly by AusAID.

# Annex 8. VTSSP Environmental Screening and Protection Measures

The main emphasis of VTSSP II is on the rehabilitation and maintenance of existing island roads where there are already established road alignments and where major road realignment and/or widening are generally not expected. As such it is not expected that VTSSP II will cause significant irreversible and adverse environmental impacts. Possible environmental impacts are likely to be localized, short term and reversible.

In general it is actually expected that VTSSP II will have a positive effect on the environment as the selection of appropriate design options (including adaptations to climate change), the use of local resource-based work methods, the quality control standards, and the inclusion of maintenance activities in road works, will reduce erosion and minimize the risks of local environmental hazards (like landslides and flooding). Available information on climate change risks (in particular related to increases in the amount, intensity and duration of rainfall) will be taking into account to inform the design, including relevant adaptation measures as proven successful under VTSSP I.

Well-designed road works will also improve the surroundings environment by retaining water for human or natural benefits, or by reducing flooding and draining of unhealthy standing water (possible breeding grounds for mosquitoes for instance). With regard to erosion, drainage systems and soil stabilization measures (including bio-engineering stabilization measures) play an important role because of the considerable amounts of rain received in the mountainous areas and VTSSP II is applying a unit cost rate for island roads works (per km) that allows for the construction of adequate drainage structures, soil stabilization measures and the hard pavement of potentially highly erodable road sections (like steep road sections).

Considering the main focus of VTSSP II on road rehabilitation and maintenance works and the assessment of possible environmental impacts, the approved Program EMS includes an environmental screening of proposed sub-projects following a generic check-list. Use of this checklist, shown in Table 1 below, will ensure that environmental safeguard considerations are integrated into sub-project identification, planning, design and implementation.

The outcome of the environmental screening will be reflected into Environmental Management Plans (EMPs) for individual sub-projects. Particulars of such EMPs are prescribed in the VTSSP EMS and will be reflected in instructions/guidelines for staff, in conditions and clauses in contractors' contracts, in specific designs, in construction approaches/technologies to be applied and in quality control & quality assurance systems and procedures.

| 1Pre-construction phase screening: Before actual construction starts, till the time the contract with the contractor is signed1.1Protect potential<br>environmentally<br>sensitive areas and<br>minimize negative<br>impacts on sensitive<br>ecosystems or the<br>natural environmentConfirm the location of environmentally sensitive or ecologically fragile areas, especially proposed protection<br>locate construction sites/activities away from them or incorporate adequate safeguards in the design to<br>adverse environmental impacts.<br>Ensure that DOE, PWD, VTSSP TA and contractors are aware of locations of sensitive areas and inform the<br>them.<br>Raise awareness among DoE, PWD, VTSSP TA and contractors about endangered species and their habit<br>relevant matters concerning the natural environment needs that have to be preserved.<br>If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guide<br>Ensure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that crossing water flows are properly taken care of in the design (bid ges, culverts).<br>Ensure in the desi  |                        |
|--|------------------------|
| environmentally<br>sensitive areas and<br>minimize negative<br>ecosystems or the<br>natural environmentlocate construction sites/activities away from them or incorporate adequate safeguards in the design to<br>adverse environmental impacts.<br>Ensure that DoE, PWD, VTSSP TA and contractors are aware of locations of sensitive areas and inform th<br>them.1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>ensure in the design that road structures have effective drainage systems (side-drains, culverts and sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and sufficient camber (6-8% cross fall) so that rainwater flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long- |                        |
| <ul> <li>sensitive areas and minimize negative impacts on sensitive ecosystems or the natural environment environment</li> <li>adverse environmental impacts. Ensure that DoE, PWD, VTSSP TA and contractors are aware of locations of sensitive areas and inform the them. Raise awareness among DoE, PWD, VTSSP TA and contractors about endangered species and their habit relevant matters concerning the natural environment needs that have to be preserved. If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct permanent bunds or trenches to confine machines and activities. Identify possible locations for the extraction of local construction materials in accordance with GoV guide the road</li> <li>Appropriate designs that avoid erosion and damage to the road</li> <li>Ensure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from the Ensure the provision of suitable erosion protection structures in the design (like retaining erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff Ensure that crossing water flows are properly taken care of in the design (bridges, culverts). Ensure in the design that appropriate compaction standards are set Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness. Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage construction. Identify suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpp</li> </ul>  |                        |
| minimize negative<br>impacts on sensitive<br>ecosystems or the<br>natural environmentEnsure that DoE, PWD, VTSSP TA and contractors are aware of locations of sensitive areas and inform th<br>them.<br>Raise awareness among DoE, PWD, VTSSP TA and contractors about endangered species and their habit<br>relevant matters concerning the natural environment needs that have to be preserved.<br>If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>opermanent bunds or trenches to confine machines and activities.1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpi  | mitigate possible      |
| impacts on sensitive<br>ecosystems or the<br>natural environmentthem.Raise awareness among DoE, PWD, VTSSP TA and contractors about endangered species and their habit<br>relevant matters concerning the natural environment needs that have to be preserved.<br>If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guid1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>erosion Jandslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpp  |                        |
| ecosystems or the<br>natural environmentRaise awareness among DoE, PWD ,VTSSP TA and contractors about endangered species and their habit<br>relevant matters concerning the natural environment needs that have to be preserved.<br>If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guid1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling/disposal of materials.   | nem to stay out of     |
| natural environmentrelevant matters concerning the natural environment needs that have to be preserved.If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guide1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling/disposal of materials.   |                        |
| If proposed construction must encroach onto or pass close to environmentally sensitive areas, construct<br>permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guide1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpp  | ats and other          |
| permanent bunds or trenches to confine machines and activities.<br>Identify possible locations for the extraction of local construction materials in accordance with GoV guid1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpp   |                        |
| Identify possible locations for the extraction of local construction materials in accordance with GoV guid1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from th<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpi  | t temporary fences or  |
| 1.2Appropriate designs<br>that avoid erosion<br>and damage to the<br>roadEnsure that roads designs have sufficient camber (6-8% cross fall) so that rainwater flows away from the<br>Ensure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp  |                        |
| that avoid erosion<br>and damage to the<br>roadEnsure the provision of suitable erosion protection structures in the design (like retaining<br>erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling   | lelines                |
| and damage to the<br>road erosion/landslides and/or to rehabilitate existing landslide areas and areas with obvious erosion proble<br>Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp   | e road itself.         |
| road Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling/disposal of materials.  | , walls) to prevent    |
| road Ensure in the design that road structures have effective drainage systems (side-drains, culverts and suff<br>Ensure that crossing water flows are properly taken care of in the design (bridges, culverts).<br>Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling/disposal of materials.  | ems.                   |
| Ensure in the design that appropriate compaction standards are set<br>Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage<br>construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp  | icient turnouts).      |
| Review alternative pavement scenarios, vis-à-vis traffic requirements, costs and erosiveness.<br>Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockpiling/disposal of materials.  |                        |
| Incorporate – as appropriate – bioengineering solutions to prevent erosion/landslides and to encourage construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp   |                        |
| construction.<br>Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp   |                        |
| Identify suitable sites/quarries to extract local construction materials in accordance with GoV guideline<br>Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp  | ge re-vegetation after |
| Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp   |                        |
| Determine suitable sites for stockpiling/disposal of materials. Preferably locate where long-term stockp   | S.                     |
|  |                        |
| by vegetation.   |                        |
| Allocate sufficient resources to ensure adequate site supervision during the implementation of the const   | truction works.        |
| 2 <b>Construction phase screening</b> : From time that contract is awarded until the time of issuing of Certificate of Completion  |                        |
| including liability period   |                        |
| 2.1 Reduce erosion by Reduce the time that surfaces remain bare and keep vehicles on defined tracks.   |                        |
| minimizing the Avoid disturbance on steep slopes and keep vegetation clearing to a minimum.  |                        |
| amount of materials Construct necessary temporary/permanent control structures.  |                        |
| and sediment lost Strictly enforce disposal of surplus material at designated, environmentally safe disposal/fill site   | es. If spoil heaps or  |
| from the site stockpiles containing fine sediments remain bare for extended periods in high rainfall areas, cover the  | m to prevent erosion   |
| and sediment runoff. Disposal sites have to be set back away from watercourses, drainage lines and   | d also avoid steep or  |

# Table 1: Environmental Screening Checklist for VTSSP II Sub-projects

|     |   | unstable slopes. The base of disposal/stockpile sites should be levelled and contained. If community groups plan to use spoil<br>locally, a clear and level site must be prepared on which the spoil can be dumped. Where possible, use spoil to backfill quarry<br>areas or waste disposal pits before they are re-vegetated<br>Implement engineering "best practices" like the use of appropriate local resource-based construction methods and<br>technologies.<br>Include all drainage provisions suggested for construction sites in the site plans.<br>Ensure that defects in works are repaired quickly and adequately by contractors during construction period and liability<br>period.  |
|-----|---|---|
| 2.2 | Minimize dust and<br>sediment run-off   | Install control structures at the outset of construction phase, as necessary with silt traps along flow lines.<br>All disturbed areas that are not to be paved should be re-vegetated or prepared for natural re-vegetation after final land shaping.<br>Phase ground disturbance so that it is limited to areas of a workable size and schedule construction so that large areas of soil are not laid bare during wet seasons.<br>Contain construction areas using a bund or trench, or isolate them from other surface run-off, and clean and rehabilitate them when construction is complete.<br>If the road is on loose or unstable rock, slope the batters gently; high batters will need steps or horizontal benches, and re-vegetation and/or bio-engineering will be necessary.<br>Avoid discharging water on to unstable slopes or old landslips.<br>Ensure that stockpiles, spoil heaps and batters are managed properly. |
| 2.3 | Control storm water<br>to minimize the<br>impact of run-off<br>water                      | Divert run-off from non-construction areas (temporarily) around construction areas to keep natural flows separate from construction run-off.<br>Design drains and culverts to remove all run-off water without scour. On steep slopes culverts and side drains may need to be stepped.  |
| 2.4 | Ensure appropriate<br>selection and<br>management of<br>quarry                            | The contractor can propose the quarry site, but PWD/VTSSP will need to approve the sites, the quality and suitability of the materials, the proposed extraction methods and the proposed extraction volumes - in line with GoV guidelines. PWD/VTSSP approval will also consider the environmental impacts of the specific quarrying site.<br>As required, the contractor needs to prepare the approved material extraction sites (quarries) like the construction of retaining walls and drainage facilities (to ensure for example bank/channel stability in the area to be quarried, to minimize erosion and sedimentation).   |
| 2.5 | Waste disposal,<br>handling of<br>hazardous materials<br>such as oils, and<br>landscaping | Contain all stores waste within construction sites and crush, burn, and bury all inorganic solid waste in an approved disposal<br>area<br>During site cleanup, burn all spilled fuel oils and remove all disabled machinery from the project area.<br>Use above water-table pit latrines, septic tanks or composting toilets at construction sites.<br>Compost all green or organic wastes or use as animal food.   |

| 2.6 | Occupational health        | Ensure all occupational health and safety requirements are in place on construction sites and in work camps;   |
|-----|----------------------------|--|
|     | and safety risks           | Install lights and cautionary signs in hazardous areas;  |
|     |                            | Limit time of exposure to dust particles, chemical, and noise;   |
|     |                            | Ensure that safety and inspection procedures are in place, including procedures for handling (toxic and hazardous) materials/substances and explosives, conducting tests, paving, operating heavy equipment, and constructing trenches |
| 2.7 | General health and         | Introduction to health and safety issues on construction sites including main areas of risk to workers and others  |
|     | safety awareness           | Education on basic hygiene practices to minimize spread of typical tropical diseases   |
|     | activities for             | HIV/AIDS and STD awareness, including information on methods of transmission and protection measures   |
|     | construction workers       | Prohibition of drugs and alcohol on construction sites   |
|     |                            | Procedures for seeking medical assistance in emergency or non-emergency situations and procedures for seeking other  |
|     |                            | health-related assistance.   |
| 2.8 | Decommissioning of         | Establish a site re-vegetation plan. Where possible involve local women's groups to provide materials and implement re-  |
|     | the used sites by the      | vegetation. The re-vegetation plan could include: (i) name(s) of contact landowner/community group; (ii) summarized  |
|     | contractors.               | outcome of discussions, and decisions on what will be planted; (iii) list of seedlings/stock to be provided, by whom (people   |
|     |                            | or group), agreed price, and (iv) agreement for planting and tending   |
| 3   | <b>Operation and maint</b> | enance phase screening: From time of issuing of Certificate of Completion by PWD to contractor until the end of the 20 year  |
|     | life time of the subproj   | ect  |
| 3.1 | Ensure that the roads      | PWD needs to ensure that sufficient resources are allocated for the maintenance of the roads during their life-time, including   |
|     | are being maintained       | a provision for emergency maintenance.   |
|     | properly.                  | PWD needs to ensure that routine maintenance (annually) and periodic maintenance (every third year) is being undertaken  |
|     |                            | as per specifications and standards.   |

# Annex 9. RISK MATRIX

| Risk event  |   | Mitiga<br>Ris |   | Risk treatment  | Responsibility    |  |
|---|---|---------------|---|---|-------------------|--|
|   | L | C             | R |   |                   |  |
| Donor expectations arising from a<br>raft of proposed transport initiatives<br>swamp the limited capacity of PWD<br>and affect the delivery of VTSSP II   | L | М             | 3 | <ul> <li>GfG maintains a careful assessment of transport<br/>related activities and meets regularly with other<br/>donors to ensure synergy.</li> <li>Major infrastructure projects are delivered by<br/>International Contract and managed through a<br/>Major Projects Unit and not through the limited<br/>service capacity of MIPU service delivery<br/>departments.</li> </ul>   | GfG; MIPU, Donors |  |
| GOV makes inadequate financial<br>allocations and associated approvals<br>to resource MIPU/PWD with the<br>necessary skilled staff, equipment<br>and systems to fulfil its mandate  | М | М             | 4 | <ul> <li>An on-going policy dialogue with concerned MIPU,<br/>PMO, MFEM senior officials prior to the official start<br/>of Phase 2 is proposed with the aim of obtaining<br/>firm commitments regarding required PWD staff<br/>inputs.</li> <li>Through VTSSP's capacity building activities the<br/>Program will be able to gradually develop PWD's<br/>ability to influence the allocation of GoV budgets for<br/>the roads sub-sector</li> </ul>  | GfG, ISP, PWD     |  |
| Leadership and staff commitment<br>within MIPU/PWD and other<br>relevant agencies is insufficient to<br>build capacity and other factors such<br>as unfilled staff vacancies and staff<br>turnover undermine capacity<br>building | L | М             | 4 | <ul> <li>VTSSP will build leadership and staff commitment through the close engagement of senior officials, policy dialogue and the integration of VTSSP's set-up within PWD institutional structures and procedures to the extent practicable and responsible.</li> <li>Capacity development activities will be assessed, planned and implemented with close involvement of PWD to manage the risks posed by staff turnover, including by focussing on team performance as well as individual skills. Capacity building support –</li> </ul> | ISP, PWD, GfG     |  |

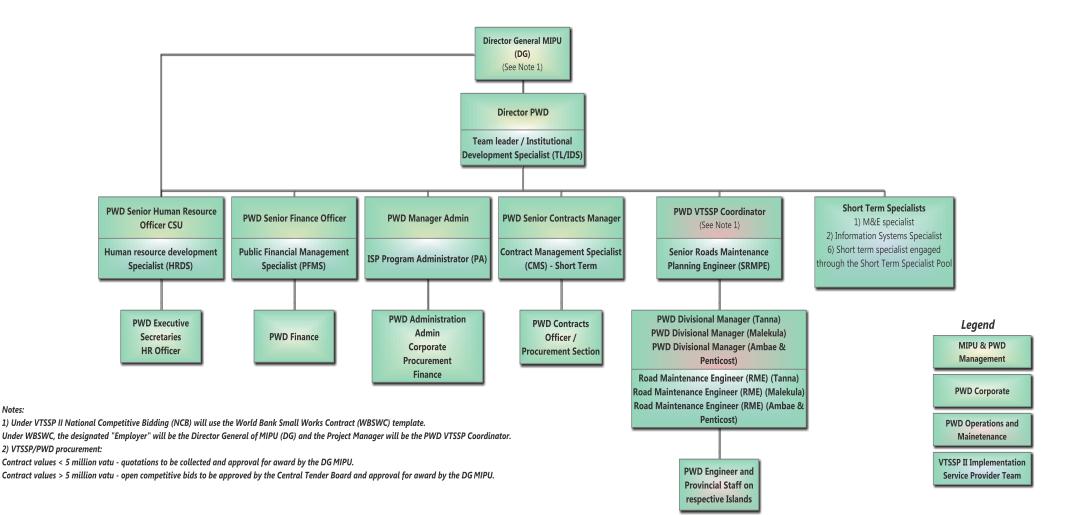
| Risk event   |   | Mitigated<br>Risk |   | Risk treatment  | Responsibility            |
|--|---|-------------------|---|---|---------------------------|
|  |   | С                 | R |   |                           |
|  |   |                   |   | <ul> <li>following a staged approach – will be delivered in line with evolving absorption capacities in PWD</li> <li>If increased staffing levels in PWD will not materialize, as required , sufficient flexibility has been incorporated in VTSSP II design – in particular with regards to outsourcing of technical services – that VTSSP II's capacity of delivering the envisaged physical works under Component 2 will not be jeopardized even if less additional PWD counterpart will become available than anticipated.</li> </ul> |                           |
| Transport infrastructure<br>development does not remain a key<br>priority for GoV and the political will<br>and interest to develop the road<br>network is not maintained and built<br>upon after elections in late 2012 | L | L                 | 2 | <ul> <li>Policy dialogue, drawing on and demonstrating the outputs, effects and impacts of VTSSP I road improvements to maintain and build political commitment to investments in transport infrastructure.</li> <li>Alignment of VTSSP with GoV's priorities for investments in transport network as outlined in the Vanuatu Infrastructure Strategic Investment Plan 2012 (WIP)</li> </ul>  | AusAID, GfG, PWD          |
| GoV has insufficient national<br>resources for the rehabilitation and<br>maintenance of a prioritised core<br>transport network identified in a<br>rational and transparent manner                                       | Н | М                 | 4 | <ul> <li>VTSSP II will assist the GoV define the current road network and identify the costs required for its sustainbabile rehabilitation and maintenance. VTSSP II will communicate this broadly to GoV, key stakeholders and other donors.</li> <li>Through VTSSP's capacity building activities the PWD will itself be able to influence the allocation of GoV budgets for the roads sub-sector</li> <li>Discussion between AusAID, GoV and other donors</li> </ul>   | AusAID, GoV, other donors |

| Risk event   |   | Mitigated<br>Risk |   | Risk treatment  | Responsibility        |  |
|--|---|-------------------|---|---|-----------------------|--|
|  |   | L C R             |   |   |                       |  |
|  |   |                   |   | must occur to identify sustainable resourcing packages for the core road system   |                       |  |
| Identification and selection of road<br>investments is not done in a fair and<br>transparent manner based on<br>established selection criteria | L | М                 | 2 | <ul> <li>The identification and selection of road works will<br/>be aligned in accordance with the core road<br/>network and priorities as formulated in the<br/>Vanuatu Infrastructure Strategic Investment Plan<br/>2012.</li> <li>Annual senior official's policy dialogue will<br/>reinforce the Partnership for Development<br/>commitments to focus on sustainable economic<br/>growth and service delivery.</li> <li>VTSSP II will ensure transparency and openness in<br/>the prioritization and selection process and<br/>information will be made public in accordance with<br/>the communication strategy for VTSSP that will be<br/>developed during the inception period.</li> </ul> | ISP, PWD, Communities |  |
| Use of IBCs and a labour-based<br>approach is not adopted by GoV<br>when it is cost effective and<br>appropriate                               | М | М                 | 3 | <ul> <li>Experience from VTSSP I indicates that use of IBCs and labour-based approaches are feasible and appropriate and can be cost effective. VTSSP II will build on the successful experiences of VTSSP I for the application of these approaches and promote impact evaluation results.</li> <li>VTSSP II will demonstrate the effectiveness and appropriateness of the approaches and building necessary capacities within PWD for the effective application of these labour-based approaches, where appropriate.</li> <li>On-going institutional transformation will continue to stress the agreed outsourcing agenda of the GoV</li> </ul>   | ISP, PWD, GfG         |  |

| Risk event   | Mitigated<br>Risk |   |   | Risk treatment  | Responsibility  |
|--|-------------------|---|---|---|---|
|  | L                 | C | R |   |   |
|  |                   |   |   | and clarify the reasons why this makes economic sense   |   |
| Communities and Entrepreneurs are<br>unwilling to participate in island<br>road works and labour-based works                               | L                 | М | 2 | <ul> <li>Experience from VTSSP I indicates that this is not a problem, provided that suitable awareness programs are conducted</li> <li>VTSSP II road work activities will take into account seasonal variations in local labour availability and, as needed, downscale construction activities (e.g. in agricultural peak season) to avoid undue competition for casual labour.</li> </ul> | PWD, ISP, Communities,<br>Private Sector  |
| MFEM Exchequers Section certifies<br>payment of LPOs not signed by<br>authorised Financial Delegates in<br>breach of Financial Regulations | L                 | Н | 3 | <ul> <li>PWD/ VTSSP refers all LPOs with unauthorised<br/>Financial Delegates to MFEM Exchequer Section for<br/>stop-payment. Exchequer Section needs to certify<br/>0% of unauthorised LPOs. Report all referrals and<br/>outcomes to GfG Management Committee.</li> </ul>   | PWD Technical Director and<br>VTSSP II Finance Advisor (if<br>not a PWD Financial<br>Delegate) to conduct sample<br>testing and report to GfG.<br>Chair GfG Management<br>Committee to formally refer<br>any concerns to DG MFEM. |

#### Annex 10. PROPOSED VTSSP II ADVISORY SUPPORT ALIGNMENT TO PWD

Notes:



# Annex 11. POSITION DESCRIPTIONS / TERMS OF REFERENCE

| TEAM LEADER / INSTITUTIONAL DEVELOPMENT SPECIALIST |   |  |
|--|---|--|
| Duration   | Full time – 48 months with possibility of 12 month extension. |  |
| ARF Group/Level                                    | Group D, Level 3  |  |
| Location   | Port Vila and Provinces of Vanuatu                            |  |

### Purpose

The Team Leader / Institutional Development Specialist will supervise the establishment and management of VTSSP II within PWD to ensure timely effective implementation of the Program .To provide high level strategic advice to the Public Works Department and to manage and coordinate Australian assistance under the Vanuatu Transport Sector Support Program Phase II

### **Duties and responsibilities**

- Provide high level strategic advice and assistance to PWD
- As required, provide mentoring and on the job training for the Director PWD, and other PWD staff as appropriate
- Collaborate with the PWD Human Resource Manager and PWD Heads to develop annual Capacity Development plans and to identify those CD needs that can be funded (Year 1 CD plan prepared)
- Provide high level strategic advice and assistance to the MIPU and Director PWD to implement the Transport Sector Policy and Strategies and assist to coordinate donor assistance across the transport sector
- Collaborate with AusAID and PWD on variations to the TA position descriptions.
- Oversee the work of other specialists funded under the Program including liaison with the heads of host agencies as appropriate
- Manage the development, approval and implementation of the social safeguards framework addressing all AusAID cross cutting issue policies, e.g. HIV, Universal Access, Gender Equality, Climate Change and Environment
- Liaise with the leaders of other Australian funded assistance programs to optimize potential for integration of Australian aid and encourage full cooperation with GoV donor coordination initiatives
- The Team Leader / Institutional Development Specialist (TL/IDS) shall be responsible for the overall management and successful and timely delivery of VTSSP II.
- The TL/IDS will analyse and review existing management and delivery systems and, if appropriate or required, recommend adjustments to the Director PWD.
- The TL/IDS is responsible for adequate staffing of the program and will review the existing staffing structure of the program and, if appropriate recommend adjustments to the Director of PWD and AusAID.
- The TL/IDS will assist in the procurement of all program related equipment/material, consultants and contractors in coordination with PWD and AusAID
- The TL/IDS will manage all communications between the MC and the relevant ministries, government offices, other implementing partners and AusAID in coordination with the Director of PWD.
- The TL/IDS will work with the Director of PWD to strengthen strategic liaison with relevant development partners, and strengthen PWD role for project planning and delivery
- The TL/IDS will regularly review program progress and the implementation structure to ensure the most efficient and most cost effective model to deliver the construction work is devised and lessons are learnt for the future
- The TL/IDS will continue to raise awareness of shortcomings in the contractor market and ensure sustained funding as a function of recognition of demand for the service.
- The TL/IDS will work closely with PWD staff to review existing delivery plans, i.e.: maintenance work plans, PWD annual plan, progress reporting, and resource planning etc.
- While the TL/IDS must have impeccable technical (engineering) credentials, the focus of his/her work will be on management of delivery systems to produce extremely ambitious results under difficult circumstances.
- The TL/IDS will work closely with the Financial Management Specialist to refine financial

planning and disbursement schedules. The TL/IDS will strengthen the integration of field/Provincial and Central (Port Vila) based project functions to accelerate delivery in full compliance with AusAID and PWD financial and procurement rules and regulations.

| Reports directly to                   | Director PWD  |  |
|---------------------------------------|---|--|
| Directly supervises                   | The team of the Implementation Service Provider.  |  |
| Other Stakeholders                    | Constant liaison and collaboration with the Director of PWD<br>and to a lesser extent the Minister, D-G MIPU, and other<br>senior staff of MIPU and heads of other government<br>agencies including PMO, MFEM and MoL   |  |
| Special Conditions                    | The TL/IDS will be based in Port Vila and share time between<br>Central PWD Office and the Provincial PWD Offices and work<br>sites on the Outer Islands to best meet programmatic<br>requirements – anticipated 80% Port Vila and 20% in the<br>Provinces/Outer Islands. |  |
| CRITERIA TO BE SELECTED FOR THIS POST |   |  |

| Qualification | Qualified Engineer with Master Degree or equivalent post<br>graduate academic qualification in Engineering, Public<br>Administration and Management (or demonstrated relevant<br>equal skills), |
|---------------|---|
|               | Other qualifications considered highly desirable in Business<br>Administration, Public Transport Policy, Public Sector<br>Management or any other relevant qualification.                       |

- Minimum 15 years of experience working with partner government agencies, in public works, road construction and maintenance and aid context to improve efficiency and effectiveness of their planning, budgeting and management systems and procedures to facilitate the delivery of public infrastructure and/or services.
- Minimum 15 years of experience in program development and team management.
- Minimum of 5 years of experience with a focus on public policy, institutional development, road construction and maintenance or infrastructure sector reform.
- Experience of providing advisory services in the area of capacity development in a governmental or multilateral organization with sound understanding and capability to empower and develop the capacity of national counterparts.
- Senior management experience of large scale infrastructure projects in complex and constrained environments.
- Extensive experience in the overall management and oversight of community contracting, FIDIC/WB contracting, tendering procedures, and databases for construction and construction related works.
- Experience of managing work on national rural road construction and maintenance programs internationally and preferably in a tropical climate and Pacific region countries.
- Relevant experience in developing countries for the purpose of infrastructure development and labour based methods
- Experience in Bilateral/Multilateral and AusAID funded projects considered very desirable.
- Excellent inter-personal skills with experience working in cross cultural setting.
- Expertise in government organisational structures , management, operations and capacity building.

| Special Skills | Driver's license (desirable)<br>Computer literate            |
|----------------|--|
| Language       | English fluency essential<br>Bislama and/or French desirable |

| PUBLIC FINANCE MANAGEMENT ADVISER |   |  |
|-----------------------------------|---|--|
| Duration                          | Full time – 48 months with possibility of 12 month extension. |  |
| ARF Group/Level                   | Group A, Level 3  |  |
| Location                          | Port Vila, Vanuatu  |  |

To provide assistance to MIPU/PWD to strengthen organisational capacity (staff, systems and processes) to effectively manage, control and report on the finances and assets of the PWD and particularly the funding provided under the VTSSP funded by GoA.

### **Duties and responsibilities**

- Assist MIPU/PWD to ensure all VTSSP funding is effectively managed , controlled and reported on in accordance with program governance requirements;
- Advise and assist MIPU/PWD with the development/ review and implementation of compliant financial policies, procedures and processes to improve operations in accordance with legislative and regulatory requirements;
- Assist MIPU/PWD with establishment of an effective internal financial control structure including the conduct of a regular program of spot checks and reviews for all VTSSP funding
- Assist MIPU/PWD to develop timely and accurate VTSSP project reporting through the GoV's FMIS, including cash flow reporting and funds expenditure against work programs in accordance with the requirements of stakeholders
- Mentor PWD counterpart/s to ensure the completeness, accuracy and validity of all invoices presented for processing under VTSSP or any other PWD contracts
- Provide timely reports and liaison as required under the contract with AusAID
- Establish and maintain transparent and respectful cooperation with the MIPU/PWD and other relevant ni-Vanuatu agencies as required
- Ensure quality administrative and financial procedures are established and practiced throughout VTSSP implementation
- Ensure fiduciary risk management strategies are implemented and updated appropriately throughout VTSSP implementation

| <b>Reports directly to</b> | Team Leader and head of PWD        |
|----------------------------|------------------------------------|
| Directly supervises        | Mentor PWD counterparts, as agreed |

### **CRITERIA TO BE SELECTED FOR THIS POST**

| Qualification | Certified Practicing Accountant (CPA), Chartered Accountant (CA) or           |
|---------------|---|
|               | equivalently qualified accountant with substantial and relevant experience in |
|               | public sector budgeting, accounting and reporting.                            |

- Demonstrable understanding of the public sector financial management environment in developing countries.
- Demonstrable ability to engage senior public officials on key public finance sector policy and operational matters;
- Ability to mentor and build professional capacity of counterparts.
- Understanding of sound procurement practices
- Ability to liaise and negotiate across cultures
- Eligibility to obtain Vanuatu and Australian visas
- Understanding of gender and development issues (desirable)
- Understanding of transport sector and development issues (desirable)
- Previous experience working in Melanesian culture (desirable)

| Special Skills | Driver's license (mandatory)                                 |
|----------------|--|
| Language       | English fluency essential<br>Bislama and/or French desirable |

| SENIOR ROAD MAINTENANCE PLANNING ENGINEER |   |  |
|---|---|--|
| Duration                                  | Full time – 48 months with possibility of 12 month extension. |  |
| ARF Group/Level                           | Group C, Level 3  |  |
| Location                                  | Port Vila, Vanuatu  |  |

Assist the PWD to improve its standards of Transport network management and particularly road maintenance service delivery.

### **Duties and responsibilities**

- Establish and maintain productive and transparent working relationships with the MIPU/PWD leadership team and other staff within the PWD
- Assist PWD to plan, budget, contract, supervise and administer implementation of the annual road maintenance work plan through force account or outsourced methods as appropriate for each Province, including assistance with regular monitoring and reporting on the progress and performance of delivery of the work plan
- Assist PWD to supervise and guide the activities of consultants, specialists and other contracted parties engaged by PWD to support planning and delivery of road maintenance programs so that positive team dynamics are evident, and individual and collective efforts are maximised
- Advise PWD on, and support development of, improved approaches for prioritising and managing transport network maintenance activities to enhance the effectiveness of national budget execution based on principles of output based work plans and budgets, asset preservation and appropriate application of technology.
- Assist MIPU/PWD to identify, implement and monitor capacity building interventions for the PWD and broader transport sub-sector
- Assist PWD to strengthen its corporate and policy planning frameworks in relation to priority national road maintenance programs, and in building capacity for partnering with private sector service providers
- Assist MIPU/PWD to build the skills and resources required for effective roll-out and implementation of the new Public Road Act.
- Provide mentoring and guidance to the staff within the PWD
- Provide input to the development and implementation of the PWD's mid-term reformation plans
- Contribute to reporting and other aspects of partnership management as requested by the Australian Partnership Coordinator

### Team Leader and head of PWD

**Directly supervises** Mentor PWD counterparts, as agreed

### **CRITERIA TO BE SELECTED FOR THIS POST**

**Qualification** University degree in a relevant area, such as civil engineering

### Experience

**Reports directly to** 

- Minimum of 5 years planning, managing and/or advising on infrastructure maintenance and/or development in developing countries, with a focus in civil and road pavement engineering
- Experience in strategic planning and policy development for the road transport sub-sector, and in transferring skills and strengthening institutional capacity in transport asset maintenance
- Demonstrated commitment to and understanding of governance, institutional strengthening, change management and capacity building principles, strategies and techniques
- Commitment and demonstrated capacity to undertake activities in a participative, culturally sensitive and consultative manner, ensuring counter-parts actively participate and develop understanding and ownership
- Competence with a range of computer software programs, including word, excel and power-point
- Sensitivity to gender, HIV-AIDS, environment and development issues
- Previous experience working in Melanesian culture (desirable)

| Special Skills | Driver's license (mandatory)                                 |
|----------------|--|
| Language       | English fluency essential<br>Bislama and/or French desirable |

| ROAD MAINTENANCE ENGINEER |  |  |
|---------------------------|--|--|
| Duration                  | Full time – 24 months with possibility of 12 month extension.                    |  |
| ARF Group/Level           | Group C, Level 3   |  |
| Location                  | Based on an Outer-island/ regional urban centre with regular visits to Port Vila |  |

To assist PWD to implement VTSSP II annual work plan of road reconstruction and maintenance activities

### **Duties and responsibilities**

- Establish and maintain productive and transparent working relationships with the PWD Division office leadership team and other staff within the PWD provincial office and other key Provincial Government officers
- Assist PWD to design, budget, contract, supervise and administer implementation of the annual VTSSP II road improvement work plan through outsourced methods as appropriate for target roads agreed through the annual program planning process
- Assist PWD with regular monitoring and reporting on the progress and performance
- Support and mentor relevant PWD Divisional Counterparts to administer VTSSP II funded services contracts in compliance with VTSSP II social safeguards framework
- Mentor and provide guidance, where appropriate, to small scale contractors and consultants partnering with PWD for delivery of VTSSP II annual work plan
- Promote and advocate mainstreaming of relevant cross cutting issues into delivery of VTSSP II work plan road improvement activities
- Provide mentoring and guidance to the staff within the PWD Divisional offices on discharge of mandated responsibilities
- Provide input to the development and implementation of the PWD's mid-term reformation plans

| • Contribute to reporting and other aspects of VTSSP II management as requested by the PWD Director or Team Leader |   |
|--|---|
| Reports directly to  | Team Leader and head of PWD   |
| Directly supervises  | Mentor PWD provincial office counterparts and private sector partners |
| Special Conditions   | Must be willing to live long term (12months +) on an outer island     |
|  |   |

**Qualification** University degree in a relevant area, such as civil engineering

- Minimum of 5 years planning, managing and/or advising on infrastructure maintenance and/or development in developing countries, with a focus in civil and road pavement engineering
- Experience in strategic planning and policy development for the road transport sub-sector, and in transferring skills and strengthening institutional capacity in transport asset maintenance
- Demonstrated commitment to and understanding of governance, institutional strengthening, change management and capacity building principles, strategies and techniques
- Commitment and demonstrated capacity to undertake activities in a participative, culturally sensitive and consultative manner, ensuring counter-parts actively participate and develop understanding and ownership
- Competence with a range of computer software programs, including word, excel and power-point
- Sensitivity to gender, HIV-AIDS, environment and development issues(desirable)
- Previous experience working in Melanesian culture (desirable)

| Special Skills | Driver's license (mandatory)                                 |
|----------------|--|
| Language       | English fluency essential<br>Bislama and/or French desirable |

| M&E SPECIALIST (MES) |   |
|----------------------|---|
| Duration             | Short-term up to total of 7 months over 4 years   |
| ARF Group/Level      | Group C, Level 3  |
| Location             | Port Vila for periodic inputs (number of trips negotiated each year, with 2 envisaged in first year), other inputs from home-base |

To support Ministry of Infrastructure and Public Utilities (MIPU) and its transport sector agencies to develop and implement monitoring system for understanding progress and performance of the VTSSP II annual work plan

### **Duties and responsibilities**

- Establish productive working relationships with DG, MIPU, Director PWD and other heads and senior staff of transport sector agencies, and ascertain current systems and capacity in relation to monitoring practices
- Support PWD and Program team to develop a monitoring approach related to implementation of the VTSSP II work plan (as they are developed annually), in close collaboration with stakeholders
- Assist Program team to work with PWD and other relevant transport sector agencies to generate and communicate relevant monitoring data and information against the annual work plan
- Support inputs from the Information Systems Analyst (Local consultant) to develop VTSSP data and information management systems so that it is relevant and accessible for MIPU Officers to access, integrate and eventually take responsibility for management and maintenance
- Conduct occasional monitoring visits to transport sector agencies and work with staff to support their monitoring processes and to meet agreed requirements against the annually approved VTSSP II work plan
- Prepare material for sharing with GoA and other donors in relation to monitoring practices to maximize the achievement of a single sector monitoring plan and implementation of this plan
- Strengthen national monitoring systems for the transport sector and ensure that VTSSP MEF system integration with national processes is optimised.

| Reports directly to | Team Leader  |
|---------------------|--|
| Special Conditions  | Timing of in-country inputs will be required around inception phase planning period and prior to annual Partnership dialogue events with potential to undertake some work from home base |

### **CRITERIA TO BE SELECTED FOR THIS POST**

- Monitoring of international donor-funded programs
- Contemporary approaches to monitoring in complex contexts and in non-linear ways
- Some knowledge of transport sector concepts and organizations
- Prior experience Pacific (desirable)
- Understanding of gender and its relevance to monitoring
- Ability to analyse data and information and prepare analytical reports to suit diverse audiences
- Good coordination skills
- Good time management and organisational skills

| Special Skills | Ability to work collaboratively with ni-Vanuatu colleagues; to contribute to capacity development while completing tasks within deadlines |
|----------------|---|
| Language       | English fluency essential   |

| Program Administrator |   |
|-----------------------|---|
| Duration              | Full time – 24 months with possibility of 12 month extension. |
| ARF Group/Level       | NA  |
| Location              | Port Vila   |

- To provide administrative, financial and reporting support and assistance to the Team Leader and Program
- To manage implementation of the Program Communications Strategy and Action Plan

### **Duties and responsibilities**

- Administer and manage the financial systems as required by the Partnership Coordinator
- Manage the development, maintenance and implementation of the Program Communications Strategy and Action Plan
- Maintain financial records including invoices and receipts, prepare and reconcile finance records, and assist with preparation of financial reports as required
- Establish and maintain office systems for the sound operation and administration of the Program team inputs
- Perform general administrative duties
- Provide administrative support to the Program using sound judgement, initiative, confidentiality and sensitivity
- Other duties as deemed necessary by the Team Leader

### **Reports directly to**

Team Leader

### **CRITERIA TO BE SELECTED FOR THIS POST**

```
Qualification
```

Diploma or equivalent relevant experience

- Demonstrated experience in managing and maintaining full financial accountability of a small office or organisation with experience in bookkeeping and use of computers and computerised accounting software
- Demonstrated experience and skills in all aspects of office administration procedures
- Ability to work effectively at an individual and team member
- Good communication skills
- Good time management and organisational skills

| Special Skills | Highly computer literate   |
|----------------|--|
|                | Knowledge and demonstrated use of computerised accounting package(s) |
| Language       | English and Bislama - mandatory                                      |