



GOVERNMENT OF THE REPUBLIC OF VANUATU



DISASTER RISK REDUCTION AND DISASTER MANAGEMENT

NATIONAL ACTION PLAN

(2006 - 2016)

Prepared

In partnership with the Government of Vanuatu and The Pacific Disaster Risk Management Partnership Network

Publication Date: May 2007

PACIFIC ISLANDS APPLIED GEOSCIENCE COMMISSION

c/o SOPAC Secretariat Private Mail Bag GPO, Suva FIJI ISLANDS http://www.sopac.org Phone: +679 338 1377 Fax: +679 337 0040

www.sopac.org director@sopac.org

IMPORTANT NOTICE

This report has been produced with the financial assistance of the European Community; however, the views expressed herein must never be taken to reflect the official opinion of the European Community.



The Vanuatu DRM&DM process was supported by the Pacific Disaster Risk Management Partnership Network, particularly the following partnership members:

The World Bank





Pacific Islands Forum Secretariat







International Strategy for Disaster Reduction

Pacific Islands Applied Geoscience Commission

FOREWORD

The Republic Island of Vanuatu is located in one of the highest disaster-prone areas in the world. In recent years our people have been exposed to cyclones, volcanic eruptions, earthquakes, floods and droughts. Since independence over a quarter of a century ago, our vulnerabilities to disasters have increased not only due to our changing lifestyles but also because we have lost some of our traditional methods for minimising risk and coping strategies in times of disasters. Our people are also becoming more reliant on disaster relief assistance rather than taking preventative, mitigation and adaptive steps to reduce risks, whilst building our self reliance and increasing resilience to disasters.

As the Prime Minister of the Republic, I clearly see that there is a need for a political will to bring about a change in the way we deal with disaster risks and to strengthen our community's resilience through a more holistic approach to disaster risk reduction and disaster management.

Disaster is a development issue. So there must be a political will to ensure disaster risk considerations are fully integrated into all our policies, plans, budgets, and decision-making processes at all levels of government and communities and Vanuatu has shown that will and commitment through this process. The Hyogo Framework for Action: Building the Resilience of Nations and Communities to Disasters and the Disaster Risk Reduction and Disaster Management Regional Framework for Action, 2005-2015 provide guiding principles for developing a holistic, whole-of-country approach to disaster risk reduction and disaster management.

The Vanuatu Government has made a commitment under the Pacific Plan to operationalise the Disaster Risk Reduction and Disaster Management Regional Framework for Action, 2005-2015, which we endorsed together with our fellow Leaders from the region in Madang, in 2005.

To put effect to this commitment, we need a firm political and financial commitment to see that disaster risk reduction and disaster management is mainstreamed into our national policies, plans, budgetary provisions and decision making across all sectors and all levels of government, and communities and that disaster risk management is the responsibility of the whole country and is everyone's business.

We can no longer just sit and wait for disasters to happen. We must take actions to minimise our risks. At the same time we can also better prepare for and more effectively respond because we will never be able to eliminate all disasters.

We realise that in this effort to build a safe, secure and resilient Vanuatu, our national resources are limited and thus we need the support of our friends and support from the whole international community. We also need long-term commitment and support from our regional organisations and development partners.

My Government is pleased to acknowledge the assistance provided by the Pacific Disaster Risk Management Partnership (SOPAC/PIFS/World Bank/UNDP), and coordinated by SOPAC, to develop the National Action Plan for Vanuatu. This task was carried out in collaboration with our National Task Force, coordinated by the National Disaster Management Office. I would like to commend the dedication of the National Task Force and the high level of support provided by the Pacific Disaster Risk Management Partnership Network for this process in Vanuatu.

This National Action Plan, which is linked to a new supplementary Priorities and Action Agenda, provides a prioritised programme of action that the Vanuatu Government will implement over the next decade. The National Action Plan provides a range of actions requiring commitment and a coordinated joint effort within government, and with the private sector and civil society.

I am proud to note that Vanuatu is the first country to systematically operationalise the global Hyogo Framework [for] Building the Resilience of Nations and Communities to Disasters and the Disaster Risk Reduction and Disaster Management Regional Framework for Action, 2005-2015. Our National Action Plan on Disaster Risk Reduction & Disaster Management 2006-2016, reflecting the core principles reflected in these frameworks becomes an example for others.

I personally pledge my support and that of my Government to ensure we maintain the momentum that has already been generated over these few short weeks. We must therefore act quickly to lay down the policy framework and organisational foundation for mainstreaming DRR and DM.

The ownership of the process and the responsibility for the success of our endeavors must remain with us. However, there is too much at stake for us to even entertain any thought of failure. With all your continued support and assistance together we will create a safe, secure and resilient Vanuatu.

Hon. Ham LINI VANUAROROA Prime Minister Republic of Vanuatu

TABLE OF CONTENTS

	REWORD	
List	of Acronyms	
	6	
1.1	The Vanuatu Context	
1.2	The Regional and International Context	
1.3	The Vanuatu Process	12
	1.3.1 Political Support	
	1.3.2National Workshop 2006 and National Task Force	12
	1.3.3Review of Key National Frameworks and Stakeholder Consultations	12
	1.3.4Disaster Risk Reduction and Disaster Management Issues	13
	1.3.5Key Guiding Principles for Disaster Risk Management	14
	1.3.6 Outputs	16
1.4	National Action Plan on DRR&DM	17
	1.4.1 Objectives	17
1.5	Implementation Strategy	19
	Theme I: Governance and Policy Context	21
	Theme II: Mainstreaming DRR and DM in National Planning and Budgetary Processes	23
	Theme III: Mainstreaming Disaster Risk Reduction	24
	Theme IV: Strengthening Disaster Management	26
	Theme V: Information, Information System and Knowledge Management	28
	Theme VI: Capacity Building	31
	Theme VII: Monitoring, Evaluation and Reporting	33
	Theme VIII: Implementation of the National Action Plan	34
List	t of Figures & Table:	
Figu	ure	
1	Vanuatu – regularly exposed to a wide range of hazards	10
2	Link between the national development processes and DRM Guiding Principles	15
3	Link between National Development Planning and Budgetary Process and Disaster Risk Management	16
4	National Action Plan Structure, Key Strategies and Themes	18
Tab	ole	
1	National DRR&DM Action Plan and Implementation Strategies, 2006-2016	21
Anr	nex:	
Ann	nex 1: Chronological order of events, people consulted and involved in the development of this NAP	35

LIST OF ACRONYMS

CBO Community-Based Organisations

COM Council of Ministers

CROP Council of Regional Organisations in the Pacific

CRP Comprehensive Reform Programme DCO Departmental Committee of Officials

DESD Department of Economic and Social Development
DESP Department of Economic and Sector Planning

DRM Disaster Risk Management comprising DRR and DM

DRR Disaster Risk Reduction
DM Disaster Management
EWS Early Warning System

GoV Government of Vanuatu/Government of the Republic of Vanuatu

HRU Human Resource Unit (Prime Minister's Office)
ICAO International Civil Aviation Organization
ISDR International Strategy for Disaster Reduction

MEA Multilateral Environment Agreement
MLNR Ministry of Lands and Natural Resources

MOIA Ministry of Internal Affairs

MTEF Medium Term Strategic Framework
MTSF Medium-Term Strategic Framework

NAP National Action Plan for Disaster Risk Reduction and Disaster Management

NAPA National Adaptation Plan of Action
NEOC National Emergency Operation Centre
NCSA National Capacity Self-Assessment

NGOs Non Government Organisations (also known as Non State Actors or Civil Society)

NDMO National Disaster Management Office

NSA Non State Actors

NTF National Task Force for DRM (Vanuatu)

PAA Priorities Action Agenda

PIFAC Pacific Islands Framework for Action on Climate Change

PIFS Pacific Islands Forum Secretariat

PMO Prime Minister's Office

PTWC Pacific Tsunami Warning Center
REDI Rural Economic Development Initiative

SOPAC Pacific Islands Applied Geoscience Commission

SPREP Secretariat of the Pacific Regional Environment Programme

UNDP United Nations Development Programme

UNISDR United Nations International Strategy for Disaster Reduction

VANRIS Vanuatu Resource Information System

WB World Bank

WMO World Meteorological Organization

WMW World Media Watch

WSSD World Summit on Sustainable Development

ACKNOWLEDGEMENTS

The development of the Vanuatu National Action Plan on Disaster Risk Reduction and Disaster Management was made possible through the assistance of many people and organisations in Vanuatu and our development partners from the region.

We acknowledge the political support provided by our Prime Minister of Vanuatu, Honorable Ham Lini Vanuaroroa for his initiative during the discussions with the Regional High-Level Advocacy Team by Dr Langi Kavaliku and Mr Alan Mearns of SOPAC and Mr Alf Simpson of the World Bank. This support from the highest office made it possible to obtain necessary cross-sectoral support and promote disasters as a development issue to all levels of government and the wider community.

We also acknowledge the newly formed Government cross-sectoral National Task Force, supported by the Reference Group comprising Director Generals and Senior Level Ministerial Officials of the Development Committee of Officials who were largely responsible for coordinating the development of the National Action Plan.

The National Task Force Team members are:

Mr Job Esau National Disaster Management Office (Chairperson)

Mr Jotham Napat Ministry of Public Utilities (Vice Chair)

Mr Johnson Wapaiat Ministry of Internal Affairs

Mr Jean .F.Metmetsan Department of Strategic Management
Mrs Cherol Ala Department of Provincial Affairs

Mr Ruben Bakeo Ministry of Agriculture, Forestry and Fisheries

Mr William B Worwor Department of Meteorology

Mr Morris Amos Ministry of Health
Mr John Knox Ministry of Education
Mrs Esline Garaebiti Department of Geo-hazard

Mr Ernest Bani Environment Unit

Mr Jerry Lapi Ministry of Finance and Economic Management

Mr Albert Williams Local Consultant

Disaster management needs support from different disciplines, experts of varying backgrounds as well as commitment from different regional and international organisations. We therefore acknowledge the formation of the Pacific DRM Partnership and the support provided by SOPAC, Pacific Islands Forum Secretariat, SPREP, UNDP, World Bank, and UNISDR and coordinated by SOPAC. We also acknowledge the leadership and commitment shown by particularly SOPAC and PIFS in assisting us in finalising this National Action Plan.

Members of the Pacific DRM Partnership Network who were Supporting Vanuatu in this process were:

Mr Alan Mearns SOPAC

Dr Padma Lal Pacific Islands Forum Secretariat

Dr Netatua Pelesikoti SOPAC Mr Peter Muller UNDP

Ms Stephanie Hodges UNDP Consultant
Mr Alf Simpson World Bank Consultant
Dr Peter King World Bank Consultant
Mr John Norton SOPAC Consultant

Mr Joseph Chung UNISDR

Many people in Vanuatu, from national and provincial government agencies, development partners, NGOs and other institutions, community and village leaders and individuals freely shared their knowledge and experiences. We wish to express our sincere appreciation for their willingness to attend, often at short notice, and share with us their experiences and knowledge during our various national, provincial and community-level consultations. Their inputs have ensured that the National Action Plan remains a practical and action-oriented plan.

1. THE VANUATU CONTEXT

The Republic of Vanuatu is one of the most vulnerable nations in the world. Its geographical location in the 'ring of fire' and the 'cyclone belt' area of the Pacific, and its archipelagic geological characteristics and wide distribution of a number of small islands in a large EEZ, together with limited financial and technical capacity make Vanuatu particularly vulnerable to many different hazards.

Vanuatu regularly suffers from volcanic eruptions, cyclones, earthquakes, droughts and floods, some of which are increasing in frequency and variability, as well as extreme events due to climatic variability and sea-level rise associated with human-induced climate changes (Figure 1). Increasing population, uncontrolled growth of urban centres and spontaneous peri-urban settlements are contributing to increased levels of vulnerability. The potential for devastating cyclones and earthquakes in fast growing urban areas, such as Port Vila, highlights the need for a more coordinated approach to urban planning as natural hazards can trigger other hazards in a domino effect.

The impacts of disasters on lives and livelihoods of people, as well as damage to physical infrastructure, are large, affecting both the social and economic fabric of communities. For example, Cyclone Uma in 1987 cost the private sector about US\$25 m in damages, together with infrastructure damages of another US\$25 m. The Government in its effort to rebuild the community incurred a national budget deficit increase of about US\$8.5 m – US\$10.6 m. The 2002 Port Vila earthquake damage and loss was estimated to be over US\$2.5 m, whereas Cyclone Ivy in 2004 incurred a loss of around US\$6 m, that affected about 50,000 people and the loss of one person's life (McKenzie et al. 2005)¹.

These impacts affect Vanuatu's ability to meet the needs and aspirations of its people and to address the sustainable development goals at national, provincial and community levels which are articulated in the Comprehensive Reform Programme (CRP) and Priorities and Action Agenda (PAA), and also reflected in the Regional Economic Development Initiative (REDI).

Historically, Vanuatu has demonstrated resilience to natural hazards and an ability to rebuild its subsistence economy and societies, using traditional knowledge and external disaster relief and other development assistance. However, the capacity of Vanuatu to effectively deal with the impacts of major disasters remains fragile, particularly as parts of the country become urbanised and where traditional knowledge has been lost. The challenge of achieving sustainable development goals, including the reduction of poverty, increasing economic growth and protection of the environment, will be undermined unless the potential impact of hazards on vulnerable communities and economies is addressed.

The risks posed by such hazards can only be effectively reduced and managed as part of a sustainable development process that adopts a broader and more integrated approach to disaster risk reduction and disaster management (DRR&DM). This will involve the proactive management of disaster risks and reduction of vulnerability,

¹ McKenzie, E. et al., (2005), Guidelines for Estimating the Economic Impact of Natural Disasters on Development in the Pacific. SOPAC Joint Contribution Report 179b. SOPAC, Suva, Fiji.

expanding beyond the traditional approach to disaster preparedness, response and recovery, and adopting a strategic approach to improve and strengthen development effectiveness and efficiency by emphasising DRR&DM.

The Government has recognised that Vanuatu has limited financial and technical capacity to adequately deal with disaster risk management and, as a member of Pacific Islands Forum, has acknowledged the importance and relevance of continued assistance by regional organisations as well as by regional and international development partners. Vanuatu is also a party to several international and regional instruments on sustainable development, including commitments on DRR&DM.

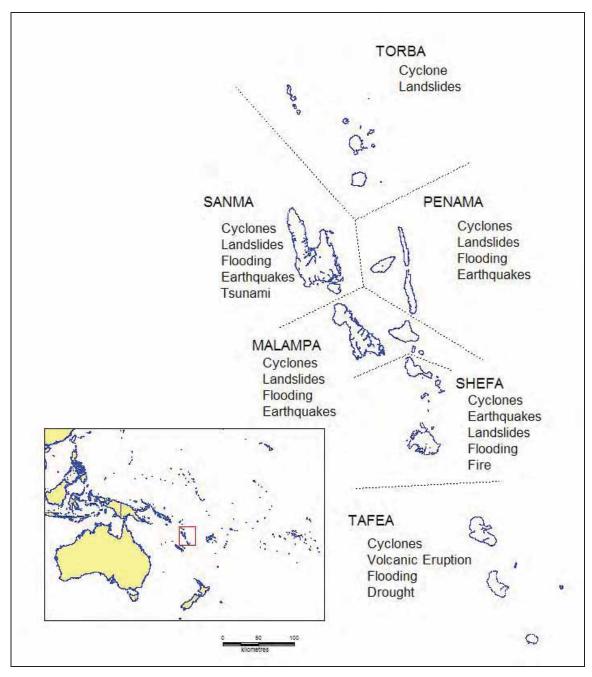


Figure 1: Vanuatu – one of the highest vulnerability index countries in the world, regularly exposed to a wide range of hazards.

2. THE REGIONAL AND INTERNATIONAL CONTEXT

The vulnerability of Vanuatu to disasters, and the need for a shift towards treating disasters as a development issue by adopting an 'all hazards' and integrated approach to disaster risk management was acknowledged by the Vanuatu Prime Minister, and other Pacific Leaders, in 2005, when they endorsed the regional Disaster Risk Reduction and Disaster Management (DRR&DM) Framework for Action, 2005-2015; and to some extent in the Pacific Islands Framework for Action on Climate Change (PIFAC), 2006-2015. The regional disaster risk management framework mirrors the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters, and which draws on the guidance set by the Yokohama Strategy for a Safer World (1994) and the International Strategy for Disaster Reduction (ISDR)². The Pacific Islands Framework for Action on Climate Change (PIFAC), 2006-2015 reflects international commitments made by Vanuatu, and other Forum Leaders, when they signed the UN Framework on Climate Change (UNFCC). The Forum Economic Ministers and the Forum Leaders have also acknowledged disaster as a development issue in 2003.

These regional frameworks, together with other international instruments endorsed by Pacific Leaders, such as the Johannesburg Plan of Implementation, which gave effect to the Declaration made at the World Summit on Sustainable Development, and the Mauritius Strategy for Further Implementation of the Barbados Plan of Action, outline key principles and strategies for DRR&DM.

The Kalibobo Road Map produced by the Forum Leaders Meeting in 2005, also called for the operationalisation of these regional frameworks at the national level to assist member countries to develop national capacity for an integrated DRR&DM approach that focuses on preventative measures to minimise risks, on preparedness in the event of a hazardous event, and on effective and timely post-disaster response and rehabilitation. Recognising the presence of limited financial and technical capacity, the Leaders also endorsed the Pacific Plan, requesting CROP agencies and development partners to provide country-focused assistance to complement national efforts, including in DRR & DM under Initiatives 5.5, 13.4 and 5.1. Development partners, too, have agreed to coordinate and harmonise their development support under the Pacific Plan reflecting their commitments made in the Paris Declaration of Aid Effectiveness and the Pacific Principles of Aid Effectiveness. There is also a high level of support for the policy suggestions contained in the World Bank's Policy Note (*Not If, But When*), dealing with adaptation to climate change.

To implement the Regional Framework of Disaster Risk Reduction and Disaster Management at the national level, and giving effect to various commitments made by regional organisations and development partners at the regional and international level; SOPAC under the Pacific Plan coordinated the formation of a <u>Pacific Disaster Risk Management Partnership Network</u>, which comprises over thirty regional and international organisations. At the request of the Vanuatu Government, a subset of the <u>Partners Network – PIFS, SPREP, UNDP, WB, UNISDR and SOPAC – agreed to jointly assist Vanuatu by assessing current capacities and needs for disaster risk reduction, helping to build DRR&DM into the Priorities and Action Agenda (PAA); and assisting to develop and implement an associated National Action Plan (NAP).</u>

² ISDR, when mentioned alone, refers to the Strategy. References to the system, the Secretariat and platforms are specifically indicated.

3. THE VANUATU PROCESS

The Vanuatu process for developing and mainstreaming disaster risk management comprises five key phases, in addition to the initial workshop held by SOPAC in November 2005. One of the outcomes of the first workshop was the need to develop a NAP for DRR&DM.

A chronological order the processes is listed in Annex 1, along with events and people consulted and involved in developing this NAP.

3.1 Political Support

Noting that disaster risk management is a cross-cutting issue and needs commitment at the highest level, a regional high-level advocacy team visited Vanuatu in June 2006. This High-Level Advocacy Team, led by Dr Langi Kavaliku, and comprising key members of the Pacific Disaster Risk Management Partnership Network, met with the Prime Minister, key Ministers and Directors General (DG) of Ministries, to highlight disaster as a development issue and the need to focus on both disaster risk reduction and disaster management. At this meeting, strong political support from the Vanuatu Government was obtained.

3.2 National Workshop 2006 and National Task Force

After receiving the political support from the Prime Minister's Office, the Pacific Disaster Risk Management Partnership held a second workshop in July 2006. The objective of the workshop was to identify a framework and provide strategic guidance and direction to mainstream DRR&DM in national development efforts. The Partners were also asked to provide suggestions about strengthening the PAA with regards to disaster risk management. This also provided the opportunity to make suggestions about how the NAP for disaster risk management should be linked to the PAA, CRP and national resource allocation.

The Government established a National Task Force on DRR&DM at this workshop to assist in this process. The Task Force members were senior officers from ministries and departments from the national and provincial governments of Vanuatu.

3.3 Review of Key National Frameworks and Stakeholder Consultations

Members of the Task Force and Development Partners reviewed key policy documents, key past country assessment reports, as well as holding broader consultation in Phase 2. Key policy documents considered included:

- Priorities and Action Agenda (PAA);
- Comprehensive Review Programme (CRP) matrix;
- Medium-Term Expenditure Framework (MTEF);
- Medium-Term Strategic Framework (MTSF); and
- Rural Economic Development Initiative (REDI).

Key past assessments and reports reviewed included:

- National Adaptation Plan of Action (NAPA);
- National Capacity Self Assessment (NCSA) for Capacity to Implement Multilateral Environment Agreements (MEAs);
- November 2005 workshop on DRM comprising DRR&DM;
- Island and Provincial situation reports on disaster risk management; and
- National assessments for the international meetings, including WSSD in 2002 and the Mauritius Internal Meeting in 2005.

Key people consulted included representatives from each ministry and sector, Port Vila and Luganville Municipalities, and Malampa, Sanma, Penama, Shefa and Tafea (Tana Is) Provincial Governments, national NGO and community representatives, women's and youth groups, and selected local communities. The main purpose of the consultation was to identify key issues related to disaster risk management at all levels which need to be considered when designing the NAP. Development partners resident in Vanuatu were also consulted to inform them of this initiative and to help identify their current and potential DRR&DM activities.

3.4 Disaster Risk Reduction and Disaster Management Issues

Amongst the key issues identified during various consultations, and in past assessment reports on disaster risk management are that:

- disaster risk management has been generally regarded as either an environmental or humanitarian issue;
- disaster management has been largely considered in terms of response and recovery from disasters without consideration of risk reduction opportunities in a holistic manner and as an integral element of development planning;
- there's a lack of government policy, organisational structures and legislative framework to underpin DRR&DM in a holistic, coordinated and programmatic manner:
- there's currently inadequate allocation of national financial resources for DRR&DM;

- decision-making processes at the national, sectoral, provincial and community levels do not reflect explicit considerations of assessment of hazards and vulnerabilities to disasters;
- engagement with communities at risk, private sector, women's groups and other stakeholders, in developing DRR &DM actions and projects is minimal;
- there's a lack of, or inadequate, quality information about hazards and vulnerability available to all levels of decision-makers;
- there's an absence of, or weak, information systems available for each key hazard that provides 24-7 monitoring and early warnings to communities at risk; and
- communities at risk lack adequate disaster risk reduction efforts to minimise their exposure to risks, or disaster management arrangements, which can be invoked in times of disaster.

3.5 Key Guiding Principles for Disaster Risk Management

Issues identified during national consultations and various needs assessment mentioned above, together with key guiding principles in relation to sustainable development, good governance and best practices of DRR&DM defined the development of the NAP.

Key guiding principles committed to by the Vanuatu Government are listed below.

- 1. Disaster risk management is a sustainable development issue, which requires a balanced approach addressing social, economic and environmental goals.
- 2. Disaster risk management fundamentally involves supporting communities in understanding and managing their hazards and disasters.
- Disaster risk management is everyone's business and requires a whole-of-Government commitment to addressing issues across all sectors and levels of Government; to forming public/private partnerships for the promotion of good practice; and to involving communities and other stakeholders in decisionmaking.
- 4. Effective disaster risk management requires a strong governance framework with clear policies and legislation, accountable institutional and organisational arrangements and connections across, and within, levels of government, sectors and communities.
- Disaster risk management addresses all hazards and comprises disaster risk reduction, which includes prevention, mitigation and adaptation, and disaster management, which includes setting arrangements for self help in preparedness, response and recovery and for receiving relief support into the community level.
- 6. Mainstreaming disaster risk management and capacity development into national planning and budgetary processes, sectoral and provincial plans and community development plans.

- 7. Developing time-series hazard information and undertaking robust vulnerability assessments supported by traditional knowledge as a basis for underpinning key decisions by national, sectoral and provincial government agencies, NGOs, communities and individuals.
- 8. Encouraging the relevance and value of traditional knowledge and its integration with scientific information in the design of risk reduction and risk management strategies and activities at all levels.
- 9. Adoption of regulatory and incentive-based disaster risk management instruments in DRR&DM.
- 10. Promoting public-private and community partnerships for reducing risk and for disaster management.
- 11. Empowering communities to address their risks through the development of capacity and knowledge (traditional and scientific) and through the provision of support for local involvement in developing and implementing risk reduction and disaster management strategies.

The links between national development planning and budgeting processes and the mainstreaming of the disaster risk management guiding principles above are summarised in Figures 2 and 3.

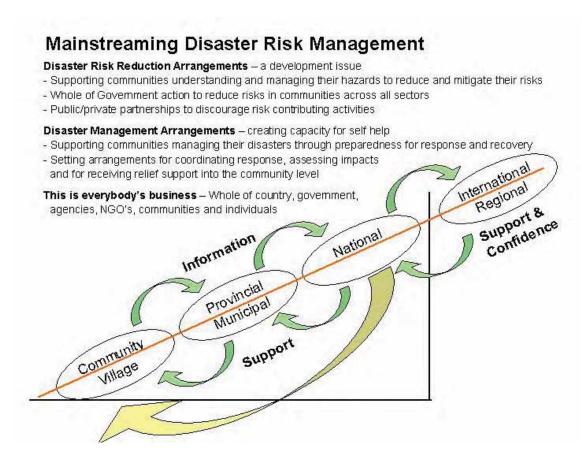


Figure 2: The link between the national development processes and DRM guiding principles³.

³ Source: Adapted from Norton J. (2006), Norton Consulting Limited, and New Zealand with inputs from SOPAC, PIFS and NTF.

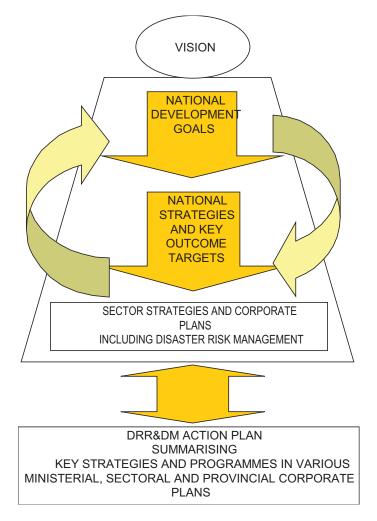


Figure 3: Link between National Development Planning and Budgetary Process (PAA) and mainstreaming Disaster Risk Management.

3.6 Outputs

As requested by the Government of Vanuatu, two key outputs have been produced for consideration by the Council of Ministers.

- 1. A Supplementary Document to the PAA on disaster risk reduction and disaster management.
- 2. The National Action Plan (this document) for disaster risk reduction and disaster management, including an implementation strategy.

4. NATIONAL ACTION PLAN ON DRR&DM

The overall goal of the National Action Plan for Disaster Risk Reduction and Disaster Management is to promote and ensure a safe, secure and resilient Vanuatu through the reduction of social, economic and environmental impacts of disasters on the people of Vanuatu and its economy, thereby facilitating the achievement of national development goals.

4.1 Objectives

Specific objectives of the National Action Plan on DRR & DM are to:

- recognise disaster risk management as a sustainable development issue;
- mainstream all-hazards risk management into all sectors and decision-making processes at all levels of government, including national planning and budgetary processes;
- establish a strong governance framework for DRR & DM, with clear policies and legislation, accountable institutional and organisational arrangements and connections across and within levels of government, sectors and communities;
- empower communities through targeted capacity enhancement to reduce their risks to hazards and prepare for, respond to, and recover from disasters;
- promote knowledge-based decision-making, including traditional knowledge and know-how on disaster risk reduction and coping mechanisms in times of disasters; and
- provide for a sustained, coordinated and harmonised support form regional, international organisations and development partners.

Table 1 summarises in a matrix 8 themes, 10 strategies and their respective key actions under each of the eight broad themes for DRR&DM. Figure 4 summarises those ten strategies under the eight broad themes of the NAP.

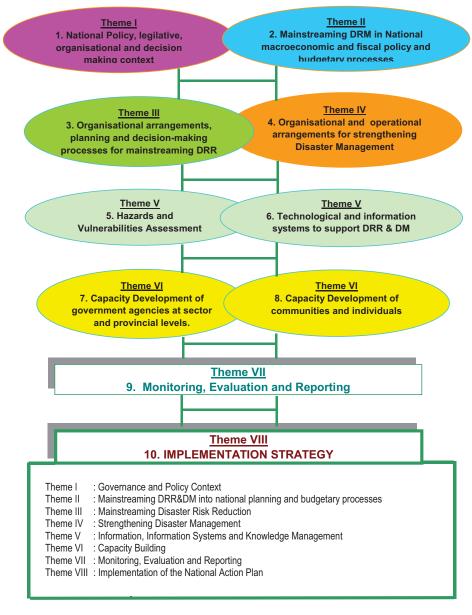


Figure 4. National Action Plan Structure, Key Strategies and Themes.

The effectiveness of the NAP for DRR&DM will be in its implementation and the commitment of all relevant agencies. The allocation of roles, functions and accountabilities to individual agencies and partners are fundamental to achieving the outcomes. Thus, against each action a responsible existing government agency is listed, or an alternative organisational suggestion is made, to lead the implementation of the action. For monitoring, evaluation and reporting against the NAP, specific indicators are also identified against each action.

5. IMPLEMENTATION STRATEGY

Vanuatu is particularly vulnerable to hazards, which regularly undermine national development efforts.

The NAP for DRR&DM has identified key strategies for mainstreaming DRR&DM across sectors and through all levels of national, provincial and community decisions and actions in order to reduce vulnerability to hazards and provide for effective management of disasters when they occur.

The implementation of the NAP would require a whole-of-Government commitment and adequate resources across all sectors and at national, provincial and community levels. Active involvement of communities and private sector stakeholders in the process and in taking action to reduce their vulnerabilities is also essential to the successful implementation of the Plan. The Vanuatu Government also acknowledges that in the light of limited national resources and competing demands on their budget, sustained technical and financial support for DRR&DM from international and regional organisations and development partners is critical. Furthermore, the presence of a wide group of regional and international agencies with interest in DRR&DM operating in Vanuatu, the Government recognises the need for coordination of support from international and regional organisations and development partners to complement their own national efforts. This will ensure not only an increase in aid effectiveness but more importantly for Vanuatu to cost effectively achieve a threshold of capacity and systems for ongoing DRR&DM hence minimising ongoing hazard threat to its national development goals.

Before a detailed implementation programme can be developed for the NAP, it is critical to lay the foundation for an integrated DRR&DM for Vanuatu. As a priority, a number of key initial steps need to be taken to establish that foundation, both at the national and regional levels. Specific in-country activities would then follow.

5.1 National: Government Commitment, Governance and Policy Context

- Identification of high-level champions and establishment of an in-country DRR&DM team to overview, coordinate and direct the implementation of the National Action Plan.
- Adoption of the NAP and development of a clear Government policy position on mainstreaming DRR&DM and setting the institutional and legal frameworks articulated in Strategy 1 as a pre-requisite to give effect to this programme.
- Provision of an introductory programme on the principles of DRR&DM to build awareness and commitment at all levels of the Vanuatu Government.

5.2 Regional: Regional and International Organisation and Development Partner Commitment and Coordination

- Under the Pacific Plan, the establishment of a formal mechanism for:
 - securing long-term commitment from regional and international organisations and development partners to assist Vanuatu to adopt a programmatic and whole-of-country approach to the implementation of the NAP;
 - coordinating technical and financial support from regional and international organisations and development partners for the implementation of Vanuatu's NAP; and
 - o joint programming and implementation where appropriate.
- Regional and international organisations and development partners and NGOs to engage in round table discussions with Vanuatu to ensure long term and coordinated technical and financial support for the implementation of NAP.

5.3 Coordinated In-country Implementation, Monitoring and Evaluation Programme

- Development of detailed and practical three-year and ongoing ten-year programme
 of activities for each of the Key Actions of the NAP identifying the accountable
 agency, and time, resource and budget requirements.
- Development and implementation of each ministerial and sectoral corporate plan identifying time, resource and budget requirements.
- Identifying early capacity development activities at the community, provincial and national levels for the facilitation of the NAP programmes.
- Undertaking of an annual review of progress against the Plan and its effectiveness and adjust as necessary involving in-country participants and Partners.

Table 1: National Disaster Risk Reduction and Disaster Management Action Plan and Implementation Strategies, 2006-2016

** immediate priority for implementation (2006-2009)

high priority but government may be constrained by limited resources (2006 -2012)

a priority for a long-term commitment (2006-2016)

		1					
		COMPLETION DATE	1.1 December 2006	1.2 October 2006	1.3 December 2006	1.4 December 2006 – March 07	1.5 December 2007
		INDICATORS	1.1 DRR&DM stated as priorities in PAA.	1.2 Action Plan distributed and widely used.		1.4 National policy and strategy for DRR&DM in place and widely used.	1.5 DRR&DM policy and strategy with appropriate legislative backing.
	d Policy Context	RESPONSIBLE AGENCY	1.1 Prime Minister's Office and line Ministries.	1.2 Ministry of Prime Minister and line Ministries, with the assistance of the DRR&DM Task Force.	1.3 Ministry of Prime Minister and line Ministries, with the assistance of the DRR&DM Task Force.	1.4 Ministry of Internal Affairs and the Prime Minister's Office with the assistance of the DRR&DM Task Force.	1.5 State Law Office at the advice of Ministry of Internal Affairs.
	Theme I: Governance and Policy Context	EXPECTED RESULTS	1.1 Council of Ministers approval of the PAA supplementary.	1.2 Incorporation of DRR&DM issues into the CRP Matrix.	1.3 DRR&DM National Action Plan approved by COM.	1.4 National DRR&DM Policy and Strategy adopted by COM.	1.5 Transparent and accountable organisational arrangements established by COM.
	The	KEY ACTIONS	*** 1.1 Submit the PAA supplementary document on DRR&DM to the Council of Ministers for approval.	***1.2 Present the National DRR&DM Action Plan to the 2006 CRP Summit.	*** 1.3 Submit the DRR&DM National Action Plan to the COM for approval.	***1.4 Prepare a national policy paper on organisational, decision making, legislative and traditional arrangements for DRR&DM at national, provincial and community levels.	***1.5 Define and adopt organisational, decision-making, monitoring, reporting and accountability arrangements for DRR&DM.
والما في المالم الم		STRATEGY	Strengthen national policy, legislative, organisational and decision making arrangements for coordinated and effective DRR&DM.				

STRATEGY	KEY ACTIONS	EXPECTED RESULTS	RESPONSIBLE AGENCY	INDICATORS	COMPLETION DATE
	** 1.6 Review the Disaster Management Act of 2000 to give effect to DRR&DM principles and strategies contained in this NAP.	1.6 Strengthened legislative framework for DRR&DM.	1.6 Ministry of Internal Affairs and Prime Minister's Office, in collaboration with other Ministries and with the assistance of the DRR&DM Task Force.	1.6 Strong organisational arrangements for DRR&DM.	1.6 December 2007
	*** 1.7 Formulate and implement national legislation and policies for rationalising monitoring and reporting of all natural hazards (geohazard, hydrological and meteorological).	1.7 Organisational arrangements for scientific monitoring of natural hazards rationalised and agencies are mandated to monitor and provide information on different hazards.	1.7 Prime Minister's Office in collaboration with line Ministries, and with assistance of the DRR&DM Task Force.	1.7 National hazard monitoring arrangements mandated by appropriate legislation.	1.7 December 2007

	COMPLETION DATE	4.1 Start immediately and complete by March 2007.	4.2 December 2007	4.3 December 2007	4.4 December 2008 (for at least a few provinces and communities).
	INDICATORS	4.1 Effective whole-of- country coordination being provided for prepared- ness, response and recovery arrangement.	4.2 Ministerial and senior officials accountability being exercised.	4.3 Number of Plans completed.	4.4 Number of Plans completed.
visaster Management	RESPONSIBLE AGENCY	4.1 DCO at the advice of DG of MOIA.	4.2 DCO at the advice of DG MOIA.	4.3 DG of MOIA in collaboration with response ministerial/department heads and NGO/CBO agencies.	4.4 Heads of ministries/ departments, SG of provincial governments, and area councils and NGO/CBO agencies.
Theme IV: Strengthening Disaster Management	EXPECTED RESULTS	4.1 An effective and appropriately resourced NDMO located within a government organisational structure that will allow it to provide support to all areas of government and community DM planning and coordination.	4.2 Clear and accountable organisational arrangements at senior official and ministerial levels for DM.	4.3 A clear and effective National Disaster Management Plan exists and Communities are better able to respond to and recover from disasters.	4.4 Clear and effective disaster management plans and operational arrangements in place at the sector, provincial and local levels including specific hazard response plans where appropriate.
Ther	KEY ACTIONS	*** 4.1 Review institutional and organisational arrangements, resources, and operating budget, including the current location of the NDMO, to ensure effective and accountable DM operations.	*** 4.2 Develop an effective mechanism for ministerial and senior official overview, coordination and accountability for DM.	*** 4.3. Review, revise and develop the National Disaster Plan, clarifying roles, responsibilities and operational arrangements for disaster management at national, provincial and sector levels, including links to infrastructure utilities, welfare support groups and arrangements for accessing international support.	* 4.4. Develop sector (including infrastructure), provincial and community plans and operational arrangements and budgets for disaster management, including response arrangements to early warnings and public education.
	STRATEGY	Strengthen national organisational, decision-making processes and operational arrangements for Disaster Management (DM), (preparedness, response and recovery).			

STRATEGY	KEY ACTIONS	EXPECTED RESULTS	RESPONSIBLE AGENCY	INDICATORS	COMPLETION DATE
	*** 4.5 Individual businesses and business sectors (eg. oil sector, tourism sector, etc) to develop their disaster contingency plans and provide a coordinated support to national disaster management.	4.5 Disaster management plans developed by businesses and business sectors.	4.5 Private and business sector and Chamber of Commerce.	4.5 Number of Plans completed and effectively implemented.	4.5 June 2007 (for high-risk businesses).
	** 4.6. Incorporate appropriate traditional knowledge and practices in national, sectoral, provincial, and community plans and operational arrangements for disaster management.	4.6 Disaster management plans and operational arrangements strengthened with appropriate traditional knowledge and practices.	4.6 Heads of ministries/ departments, SG of provincial governments, area councils and traditional leaders	4.6 Number of Plans with traditional knowledge and practices appropriately incorporated	4.6 December 2009
	*** 4.7 Establish and maintain an effective National Emergency Operation Centre including adequate resources.	4.7 Establishment of NEOC	4.7 Ministry of Internal Affairs	4.7 A dedicated NEOC and improved coordination and control through professions and adequate resources.	4.7 December 2008
	** 4.8 Establish a national and Provincial contingency stockpile of emergency relief items.	4.8 Rapid response mechanism in place.	4.8 Ministry of Internal Affairs in collaboration with other ministries, provinces and municipalities.	4.8 Government will response and control urgent needs at the first instance.	4.8 December 2009
	** 4.9 Conduct disaster exercises and drills periodically involving all relevant agencies and communities.	4.9 All agencies and communities understand their roles in disasters and are competent, and disaster response and management systems work effectively	4.9 Agency responsible for the coordination of national disaster management in partnership with the respective sector and provincial government and local area council	4.9 Number of exercises and drills conducted and reported on.	4.9Regular programme in place by December 2007; Ongoing

	COMPLETION DATE	5.1 Immediate start and completion by December 2008 (New system). December 2009 (updates)	5.2 Start immediately and ongoing activity.	5.3 Start immediately and ongoing activity (dependent on capacity development).	5.4 Immediate start and completion by December 2009 (high-risk islands).
nagement	INDICATORS	5.1 Quality and timely information available for decision-making.	5.2 Number of area maps of hazard risks and vulnerability completed and available to users.	5.3 Adaptation and risk reduction measures implemented.	5.4 User satisfaction in accessing data and information for decisionmaking.
V. Theme: Information, Information System and Knowledge Management	RESPONSIBLE AGENCY	5.1. Agencies responsible for monitoring hazards (such as Meteorological Services and Geohazard Unit).	5.2 Vanuatu's Statistics Office, in collaboration with respective sector department heads.	5.3 Agencies responsible for monitoring hazards (such as Meteorological Services and Geohazard Unit) in collaboration with relevant agency responsible for DRR&DM.	5.4 Ministry of Lands and Natural Resources in collaboration with the Responsible agency(ies) for DRR&DM.
ation, Information Syst	EXPECTED RESULTS	5.1 Quality of hazard information and data improved for DRR&DM.	5.2 Quality information on people, communities and their activities and infrastructure improved for DRR&DM.	5.3 Understanding the extent and scale of community vulnerability to hazards, to inform decisions related to DRR&DM.	5.4 GIS Information System for DRR & DM strengthened and used for decision-making.
V. Theme: Inform	KEY ACTIONS	*** 5.1 Compile and monitor historical and time-series data on geological, hydrological and meteorological hazards for vulnerability assessment and early warning.	*** 5.2. Undertake mapping of social, infrastructure and economic activities to provide an information base to conduct hazard risk and vulnerability assessment.	*** 5.3 Conduct hazard and vulnerability assessments, including assessment of potential impacts of particular scale of disaster event on 'at risk' communities, for input to sector planning for disaster risk reduction and disaster management.	*** 5.4 Develop a linked, coordinated, harmonised and user-friendly GIS ⁴ based national information management system for DRR&DM, while ensuring that each agency maintains its own robust information system.
	STRATEGY	5. Understand hazards, vulnerabilities, and communities at risk (hazardscape) as a basis for disaster risk reduction and disaster management			

⁴ GIS is geographical information system which is a digital georeferenced data based containing different layers of data, such as population, cadasteral maps, hazard maps, etc. Vanuatu has several different information system, pOPGIS, PEIN (Pacific Environment Information Network)

STRATEGY	KEY ACTIONS	EXPECTED RESULTS	RESPONSIBLE AGENCY	INDICATORS	COMPLETION DATE
	** 6.4 Encourage and promote traditional practices, and support community innovations, in DRR&DM.	6.4 Increased traditional practice and active engagement of communities in developing innovative community solutions.	6.4 Ministry of Internal Affairs in collaboration with provincial governments, Council of Chiefs and women groups, with agencies responsible for monitoring hazards.	6.4 Number of traditional practices adopted and community innovations supported.	6.4 Ongoing
	*** 6.5 Establish appropriate networks and agreed data exchange protocols between providers of scientific information and provincial and sectoral agencies implementing DRR&DM at all levels.	6.5 Effective exchange and understanding of, and access to, quality information.	6.5 Agencies responsible for DM in collaboration with agencies monitoring hazards (such as Meteorological Services and Geohazard Unit) with input from sectoral agencies implementing DRR&DM.	6.5 Level of functional networks.	6.5 Immediate start – ongoing.

Theme VI: Capacity Building	EXPECTED RESULTS RESPONSIBLE AGENCY INDICATORS COMPLETION DATE	7.1 National, provincial and sectoral government and NGO collaboration with the agency officials' capacity needs in analytical skills and tools and integrated decision-making for DRR&DM identified.	7.2 Targeted capacity of 7.2 Each ministerial DG in 7.2 Number of targeted capacity of government officials at national, collaboration with the Agency provincial and sectoral levels for responsible for DRR&DM. government and NGO officials, capacity enhanced.	7.3 People in all sectors gain an 7.3 Agency responsible for understanding of the development context of DRR&DM in collaboration with context of DRR&DM and the understanding reflected in their ministerial/departmental corporate plans and budgets.
	STRATEGY KEY ACTIONS EXP	Government 7. Improve and strengthen capacity 7. Improvement of ficials 8. Improvement of ficials 8. Improvement of ficials 8. Improvement of ficials 9. Improvement of fic	*** 7.2 Develop and conduct 7.2 Targeted training programmes at gove the national, provincial and sectoral level to address the needs DRR identified in 7.1.	*** 7.3 Develop and appropriately resource training programs to improve national, sector and provincial capacity in recognising disaster as a development issue and to include DRR&DM in their departmental programmes and budgets.

STRATEGY	KEY ACTIONS	EXPECTED RESULTS	RESPONSIBLE AGENCY	INDICATORS	COMPLETION DATE
	*7.4 Develop guidelines for economic and social vulnerability and impact assessment of hazards.	7.4 Practical guideline documents and tools in economic and social vulnerability and impact assessment of disasters are available to all sectors.	7.4 Agency responsible for DRR&DM in collaboration with Regional Disaster Risk Management Partners under the Pacific Plan.	7.4 Guideline widely used.	7.4 Long term
	** 7.5 Integrate DRR&DM principles and concepts into school curriculum and courses offered by other training institutions.	7.5 Elements of DRR&DM included in curricula in schools and training institutions.	7.5 Ministry of Prime Minister (HRU), Ministry of Education and Rural Training Centres in collaboration with other training institutions.	7.5 Number of disciplinary subjects where DRR&DM principles and concepts are covered.	7.5 Immediately and ongoing permanent programme.
Community 8. Strengthen individual and community capacity in DRR&DM.	*** 8.1 Assess needs and develop programmes for strengthening capacity at the community level in addressing vulnerability to hazards and disasters in their community.	8.1 Local capacity enhanced to do their vulnerability assessment, prepare for risk reduction and response to their priority disasters.	8.1 Agency responsible for DRR&DM in collaboration with provincial and community leaders.	8.1 Number of communities that take actions to reduce risks and prepare for disasters.	8.1 Commence engagement as resources become available.
	*** 8.2 Develop programmes to strengthen village and community leadership and networks in DRR & DM, including integrating traditional knowledge and practices with scientific information.	8.2 Effective leadership, well- functioning networks and increased use of traditional knowledge and practices, together with scientific information in DRR&DM.	8.2 Provincial government and community leaders in collaboration with agency responsible for DRR&DM and sector agencies.	8.2 Number of capacity development completed and level of participation raised or sustained.	8.2 Ongoing and building as resources become available.
	*** 8.3 Strengthen provincial government and area council arrangements for interactions and engagement with traditional community leaders for planning and response to disasters.	8.3 Networks between national, provincial and community groups and leaders strengthened.	8.3 Provincial government and community leaders in collaboration with agency responsible for DRR&DM and sectoral agencies strengthened.	8.3 Effective and well functioning networks.	8.3 Ongoing and building as resources become available.

	Theme	Theme VII: Monitoring, Evaluation and Reporting	ation and Reporting		
STRATEGY	KEY ACTIONS	EXPECTED RESULTS	RESPONSIBLE AGENCY	INDICATORS	COMPLETION DATE
Strengthen monitoring and evaluation of Vanuatu's efforts to ensure progress and improvements in risk roduction programments.	*** 9.1 Establish M&E and reporting mechanisms with feedback for improvements in DRR&DM programmes, consistent with organisational structures adopted under the NAP.	9.1 National M&E mechanism for DRR&DM established and functioning.	9.1 Agency responsible for DRR&DM in collaboration with provincial and sectoral agencies and community leaders.	9.1 M & E mechanisms established and effectively functioning.	9.1 Commence June 2007.
reduction, preparediress, response and recovery against disasters.	*** 9.2 Develop a set of relevant national, sectoral, provincial, community indicators for monitoring and reporting progress of DRR&DM programmes.	9.2 Indicators relevant to national, sectoral, provincial, community-level monitoring and reporting on progress on DRR&DM developed and adopted.	9.2 Agency responsible for DRR&DM in collaboration with provincial and sectoral agencies and community leaders.	9.2 Agreed set of indicators for monitoring progress identified and in use.	9.2 Commence June 2007 – ongoing.
	*** 9.3 Develop a set of relevant national, sectoral, provincial, and community indicators for monitoring and reporting on the effectiveness of DRR&DM programmes.	9.3 Indicators relevant to national, sectoral, provincial, community-level monitoring and reporting on the effectiveness of DRR&DM programmes developed and adopted.	9.3 Agency responsible for DRR&DM in collaboration with Ministry of Finance and Economic Development, provincial and sectoral agencies and community leaders	9.3 Agreed set of indicators for monitoring and reporting on the effectiveness of DRR&DM identified and in use.	9.3 Define indicators by June 2007. Commence reporting by June 2008.
	***9.4 Ensure national indicators, where appropriate, are consistent with regional and internationally used indicators of DRR&DM.	9.4. National indicators are consistent with regional and internationally used DRR&DM indicators.	9.4 Agency responsible for DRR&DM	9.4 Internationally and regionally consistent set of indicators in use in Vanuatu.	9.4 June 2007
	***9.5 Prepare and disseminate M&E reports on DRR&DM (under the supplementary PAA), aggregating information from communities, provinces and sectors, and review DRR&DM programmes as appropriate.	9.5. Quality and informative DRR&DM reports prepared, disseminated and informed review and revisions of DRR&DM programmes.	9.5 Agency responsible for DRR&DM in collaboration with provincial and sectoral agencies and community leaders.	9.5 M & E reports completed and acted upon.	9.5 June 2008 – ongoing.
	** 9.6 Ensure national M&E information and reports on DRR&DM are used for regional and international reporting.	9.6 National reports used to underpin regional and international reports, reducing Vanuatu's reporting burden with respect toDRR &DM.	9.6 Government agency responsible for reporting on regional and international commitments in collaboration with the agency responsible for DRR&DM.	9.6 Regional and international reports on DRR&DM are based on national M&E reports on DRR&DM.	9.6 Commence 2008, and ongoing.o

	Theme VIII: Implementation of the National Action Plan
Strategy	
10. Implement the DRR&DM National Action Plan	Once the Government has endorsed the draft NAP linked to the PAA, and have implemented the key steps identified in Section 1.5 of the NAP establishing a DRR&DM governance and policy context outlined under Theme I and Strategy 1, a detailed implementation programme would need to be developed using a log frame, including:
	 key result areas under each of the strategies and themes; a prioritised set of activities under each of the expected result areas and target beneficiary groups, together with potential lead agencies at the national, regional and/or international levels in their implementation; technical and financial resource requirements, expected outputs/outcomes; expected national resource commitments; expected regional and international organisation commitments and resource allocations; and constraints and assumptions.
	As part of the implementation programme, an annual review of progress against the NAP and its effectiveness is important. Based on the review reports, regular adjustments as necessary would be made to the implementation programmes, involving in-country participants and partners.

ANNEX 1

Chronological Order of Events, Consultations and People met and involved in the development of the NAP

(1) 1st National Workshop November 2005 – List of Participants

Mr Joe Carlo Bomal, First Political Advisor, Ministry of Internal Affairs officially opened the Workshop.

Participants:

Name	Agency	Name	Agency
Armstrong Masanga	Red Cross	Jack Pedro	FSP
Balan Ata	Malampa	Jerryson Lapi	DESP
Boma Avia	VMF Fire Brigade	Jotham Napat	Meteo
Collin Tavi	DESP	Kalep Wilkins	FSP
Denis Alvos	Public Utility	Michel Kalorie	Shefa
Donald Manses	NDMO	Michael Taun	Shefa
Edgell Tari	Penama	Noel Peardes	Torba
Emil Mael	Shefa	Rex Thomas	NGO
Ernest Bani	Environment Unit	Rex Willie	DESP
Esline Garaebetu	Geology and Mines	Selwin Tagabu	Tafea
George lapson	Education	Simon Boe	World Vision
GeorgePakoasongi	Provincial Affairs	Stanley John	Port Vila Municipal
Harry Tete	Municipal Luganville	Thomas Banga	DESP
Zachariah Daniel	Sanma	Wycliff Bakeo	Provincial Affairs

(2) High-Level Advocacy Team visits Vanuatu, May-June 2006 – Dr Langi Kavaliku, Mr Alan Mearns, SOPAC and Mr Alf Simpson, World Bank and met with the Hon. Prime Minister, Mr Ham Lini and senior Government officials.

(3) The Five Phases of Developing the NAP

Phase One – Initial stakeholder consultations (17-20 July 2006)

- A two-day participatory stakeholder workshop;
- Task Force established;
- PAA supplementary and draft NAP developed;
- Presentation and discussions with National Reference Group (DCO); and
- Preparation of broad consultation programme.

Phase Two – Broader stakeholder consultations to consolidate the PAA issues and the draft National Action Plan (21 July to 25 August 2006).

National Task Force conducting broader consultations to ensure that all relevant stakeholders have the opportunity to participate in the further development and consolidation of the inputs to the PAA and the draft national action plan.

- The Partnership Network will provide appropriate technical and resource support to the National Task Force.
- Completion of the Supplementary PAA and NAP

Phase Three – Consideration and decision by the Council of Ministers on the PAA and National Action Plan (September 2006)

The National Reference Group to submit the PAA and draft NAP.

Phase Four – National workshop on managing the implementation process (October 2006)

The Partnership Network to provide assistance in the facilitation of a national planning workshop of key stakeholders who will have the primary responsibility for implementing and monitoring the approved national action plan.

Phase Five – implementation of national action priorities (November 2006)

A meeting with Pacific Partnership Network members to consider national priority actions, identify potential financial and technical resources to assist Vanuatu in their implementation and agree on a timetable for implementation.

 Pacific Partnership Network members to consider national priority actions, identify potential financial and technical resources to assist Vanuatu in their implementation and agree on a timetable for implementation.

(4) 2nd National Workshop, 17-20 July 2006

Mr Joe Carlo Bomal, First Political Advisor, Ministry of Internal Affairs officially opened the Workshop.

List of Participants:

Name Designation Ministry/Department Mr Jerryson Lapi Sector Analyst - Infrastructure and Internal Affairs **DESP** Mr Russell Nari **Director General** Ministry of Lands and Natural Resources Mr Ernest Bani Director, Vanuatu Environment Unit Ministry of Lands and Natural Resources Mrs Jenny Ligo CEO, Vanuatu National Council of Women Vanuatu National Council of Women Director of Cultural Affairs Vanuatu Cultural Centre Mr Ralph Regenvanu Mr Willie Vira Internal Affairs MLNS (Geology and Mines Departments) Ms Esline Garae Manager of GeoHazards Mr Morris Amos Legislation Officer Ministry of Health (Public Health) Mr Brian Philips Coordinator of Climate Change, Metrological Service Ministry of Public Utilities Mr Silas Robson Dikona Scientific Officer, Met Service Ministry of Public Utilities Mr Alvos Dennis Senior Engineer Ministry of Public Utilities Mr Bae Williams Worwor Senior Forecaster, Met Service Ministry of Public Utilities Mr Mr Esrom Molisa Information and Awareness Officer, NDMO Ministry of Internal Affairs Mr.Joh Esau Director, NDMO Ministry of Internal Affairs Project Officer, REDI Unit Ms Janet Samuel Ministry of Internal Affairs Mrs Cherol Ala Deputy Director, Department of Provincial Affairs Ministry of Internal Affairs Mr Gregoire Nimbick Director, Department of Strategic Management Prime Ministers Office Mr Pierre Gambetta Principal Education Officer Ministry of Education Mr Malcolm Dalesa **Environmental Health Officer** Port Villa Municipal Council

Mr Jean Franqois Metsan Policy Officer Prime Ministers Officer

Mrs Leah Nimetto IWP Coordinator Environment Unit MLNR

Mr Albert Williams Private Environment Consultants **EHS Consultants** Mr Jean Sese **Director General** Prime Minister's Office Mr Johnson Wabaiat **Director General** Ministry Internal Affairs Mrs Myriam Abel Director General Ministry of Health Mr Jeffery Wilfred **Director General** Ministry of Agriculture Mr Joseph Dick Fist Political Adviser, Ministry of Agriculture

Mr Jotham Napat Acting Director General Ministry of Infrastructure and Public Utilities

PIFS Dr Padma N. Lal Sustainable Development Adviser Mr Bruce Chapman Programme Manager - Pacific Futures **SPREP** Mr Peter Muller Natural Disaster Reduction and Transition Specialist **UNDP** Ms Stephanie Hodge Consultant **UNDP** Mr Alf Simpson Consultant World Bank Dr Peter King Consultant World Bank Dr Langi Kavaliku DRR and DM High Level Advocacy Team SOPAC **SOPAC** Mr Alan Mearns Programme Manager Community Risk Programme Mr Noud Leenders Community Risk Adviser **SOPAC** Mrs Paula Holland Senior Governance and Resources Adviser **SOPAC** Dr Netatua Pelesikoti SOPAC Sustainable Development Adviser

(5) National Task Force established by the 2nd Workshop

Members:

Name Designation Ministry/Department

Mr Job Esau Director, NDMO National Disaster Management Office (Chairperson)

Mr Jotham Napat Acting Director General Ministry of Public Utilities (Vice Chair)

Mr Johnson Wapaiat Director General Ministry of Internal Affairs

Mr Jean .F.Metmetsan Policy Officer, Department of Strategic Management
Mrs Cherol Ala Deputy Director Department of Provincial Affairs

Mr Ruben Bakeo Chief Executive Officer Ministry of Agriculture, Forestry and Fisheries

Mr William B Worwor Senior Forecaster, Met Service Department of Meteorology

Mr Morris AmosLegislation OfficerMinistry of HealthMr John KnoxEducation OfficerMinistry of EducationMrs Esline GaraebitiManager of GeoHazardsDepartment of Geo-hazard

Mr Ernest Bani Director Environment Unit

Mr Jerry Lapi Sector Analyst – Infrastructure and Internal Affairs Ministry of Finance and Economic Management

Mr Albert Williams Local Consultant

(6) Santo Consultation - Luganville: 15-16 August 2006

Town Clerk

Participants:

Denis Savuir

Names Designation Municipality/Province/Agency

Town Planner Harry Tete Luganville Municipality **Environmental Health Officer** Andrew Ala Luganville Municipality Jacques Masingnaleng Chief Warden Luganville Municipality **Buleban Pierre Chanell** Councilor Luganville Municipality John Boe Deputy Clerk Luganville Municipality Terry Wilson **Deputy Mayor** Luganville Municipality Kenneth Hivivd Councilor (Chairman of Beautification) Luganville Municipality Ronald Liathlamal Councilor Luganville Municipality Ruben Jonah Councilor Luganville Municipality Rex Thomas VECA coordinator Luganville, Santo

Luganville Municipality

Jack Kalo Niel Member of Civil Society

Fred Siba PWD Malampa Province
Graham Rovea Rural water supplies officer Malampa Province
Simeon Standley PWD SANMA province

Lesines Hilaire Principal Saint Michel school, Luganville, Santo

Benuel TariLands DepartmentLuganville, SantoBuletare ProsperPhysical Planning UnitSanma ProvinceCalinto CevuardAssistant Secretary GeneralSanma ProvinceKalindas TimothyMeteo OfficerLuganville, Santo

Job Esau Task Force Chairman (Chairman) NDMO

Cherol AlaTask force memberDepartment Of Provincial AffairsWilliams WorworTask Force member (Secretary)Department of Meteorology

Stephanie Hodge Consultant UNDP

Federico Motka UNDP Pacific Sub-Regional Center, Suva, Fiji

Netatua Pelesikoti Sustainable Development Adviser SOPAC

(7) TANNA Consultation: 19-21 August 2006

Participating Schools and Communities:

- Lenekal Secondary School
- Yanamakel Community
- lenpakil Village
- Nemakel Village
- John Frum Community
- Tafea Provincial Council Of Women President Mrs Yellow Ruth
- Tafea Provincial Office

(8) Workshop with National Development Partners on the Draft NAP, 23rd August 2006

Facilitator: Mr Alan Mearns, Manager, Community Risk Programme, SOPAC Chair: Mr Johnson Wabaiat, Director, General, Ministry of Internal Affairs

List of Participants:

Name Designation Agency

Mr Bernard Faro PremierCounselorFrench Embassy, Port VilaMr Patrick HainesSector AnalystAusAID Office, Port VilaMr Adrien MourguesProgramme ManagerEuropean Union, Port Vila

Mr Johnson Vora Sector Analyst NZAID

Mr Peng DouyiDeputy ChiefChinese Embassy, Port VilaMs Sally ConnellAssistant Project OfficerChild Rights, UNICEF, Port VilaMajor Philip ChapmanAFP Advisorto VanSec House, Port Vila

Dr Corinne Capuano Country Liaison Officer World Health Organization, Port Vila

 Mr Simon Boe
 Director
 World Vision

 Mr Yves Nyuen
 JICA Representative
 JICA

Ms Anthea Toka Country Programme Officer Oxfam, Port Vila

Ms Mary Chapman Deputy Commissioner New Zealand High Commission, Port Vila

Mrs Cathy Solomon Director VARTDCA

Aaron Willie Representative Vanuatu Cultural Centre

Ms Jenny Ligo CEO Vanuatu Council of Women

Mr Augustine Garae Representative Vanuatu Red Cross Society

National Task Force and Partners

Mr Job Esau NDMO (Chair) NDMO

Mr Jotham Napat Director Vanuatu Meteorological Services (Vice Chair)

Mr William WorworForecasterVanuatu Meteorological ServiceMr Johnson WabaiaDirector GeneralMinistry of Internal Affairs

Mr Jean Metmetsan Representative Department of Strategic Management, PM's Office

Mr Moris Amos Environmental Health Officer Ministry of Health

Ms Cherol Ala Deputy Director Department of Provincial Affairs

Mrs Esline Garaebiti Volcanologist Geo-Hazard Section, Ministry of Lands and Natural Resources

Mr Albert William Local Facilitator EHS Consultants

Mr John NortonConsultantSOPACDr Netatua PelesikotiSustainable Development AdvisorSOPACDr Padma LalSustainable Development AdvisorSOPACMs Stephanie HodgeConsultantUNDPMr Joseph ChungManagerUN ISDR

Mr Alan Mearns Manager Community Risk Programme, SOPAC

(9) Workshop with Reference Group on the 24th August 2006

Facilitator: Mr Alan Mearns, Manager, Community Risk Programme, SOPAC Chair: Mr Johnson Wabaiat, Director General, Ministry of Internal Affairs

List of Participants:

Name Designation Sector/Ministry

Mr Johnson Binaru Acting Director General Ministry of Infrastructure and Public Utilities

Mr George Maniuri Director General Ministry of Foreign Affairs

Mr Gregory Nimtik Director – DSM Acting Director General PM's Office

Mr Johnson WabaiatDirector GeneralMinistry of Internal AffairsMr Tony EdwellRepresentativeDirector General Ministry of TradeMr Jim KnoxRepresentativeDirector General Ministry of Education

Mr Reuben Bakeo Representative Ministry of Agriculture, Livestock, Quarantine, Forestry and Fisheries

Guy Bernard Advisor Vanuatu Maritime Authority
Mr Kembro Inspector Vanuatu Maritime Authority

Leo Moli Head Energy Unit, Ministry of Lands and Natural Resources

Mr Charlie Douglas Representative Vulcanology, Geo-hazard Section, DGMWR

Mr John Henry Representative Vanuatu Mobile Force

Mr Lucas Bong Peace Corps Volunteer NDMO

Mr Jean Metmetsan Representative Department of Strategic Management, PM's Office

Mr Morris Amos Representative Ministry of Health

Mrs Cherol Ala Deputy Director Department of Provincial Affairs

Mrs Esline Garaebiti Volcanologist Geo-Hazard Section, Ministry of Lands and Natural Resources

Mr Albert Williams Local Facilitator Vanuatu SOPAC Mr John Norton Consultant Dr Netatua Pelesokoti Sustainable Development Advisor **SOPAC** Sustainable Development Advisor **PIFS** Dr Padma Lal Consultant **UNDP** Ms Stephanie Hodge Mr Joseph Chung Manager **UN ISDR**

Mr Alan Mearns Manager Community Risk Programme, SOPAC

10) Broader Stakeholder Consultation, 24 July – 25 August 2006

Sector Situation Analysis Conducted:

- Education
- · Agriculture and Forestry
- Lands
- Water, Minerals and GeoHazard
- Meteorology
- Trade
- Foreign Affairs
- Finance
- Health
- PM's Office
- NDMO Committee
- Fisheriest
- Public Utilities
- Tourism
- Ports and Harbour

List of People at the Broader Consultation:

Name	Designation	Ministry/Department
Mr Jean Sese	Director General	Prime Ministers' Office

Mr Russel Nari Director General (SOPAC National Rep) Ministry of Lands and Natural Resources
Mr Johnson Binaru Acting Director Genera Ministry of Public Utilities and Infrastructure

Mr Kafau Kaloris Director Foreign Affairs Department

Mr George Borugu Director-General Ministry of Trade
Mrs Myriam Abel Director General Ministry of Health

Mr Wilfred Jeffrey Director General Ministry of Agriculture, Livestock, Quarantine,

Forestry and Fisheries
Ministry of Internal Affairs

Mr Johnson WabaiatDirector GeneralMinistry of Internal AffairsMrs Hilda TaleoDepartment of Women's AffairsMr Frederick HoseaActing DirectorDESP – Ministry of Finance

Mrs Flora BaniSector AnalystDESP – Ministry of FinanceMr Wycliffe BakeoManager REDI ProgrammeDepartment of Provincial Affairs

Mr Lui PatuActing Deputy Police CommissionerDepartment of PoliceMr Jo DorrasScript WriterWan Smol Bag TheatreMr Brian Robert ActorActorWan Smol Bag Theatre

Mr James Wasi Department of Agriculture and Rural

Development, MALQFF
LTC. Aru Maralau Commander Crime Police Headquarters, Port Vila

Mr Martin Tete Director Electoral Office, Ministry of Internal Affairs

Chief Inspector James Acting Principal Immigration Officer Immigration Department
Narwayeng Ministry of Internal Affairs

Mr Jacob Issac Principal Civil Registration Officer Civil Status Department
Ministry of Internal Affairs

Mr Joe lati Principal HR Officer Corporate Services Unit, Ministry of Internal

Affairs

Mr Dickinson Tevi Accounting Consultant Vanuatu Council of Chiefs

Chief Murmur Kalkot & Mr Peace Corps Volunteer Proposed World Heritage Site Mangaliliu, Efate

Kalsev
Mrs Jacquiline Tari
Officer-in-Charge
Vanuatu Tourism Office, Port Vila

Mr Alan Churchill Manager Safety and Compliance, Airports Vanuatu Limited

Captain Guy Bernard Advisor Vanuatu Maritime Authority, Port Vila

Mr Barry Aneityum Tourism Project

Pastor Pakoa Maraki Representative Vanuatu Council of Churches Mr Robert Avio **Acting Director** National Tourism Development Office

Mrs Alice Kalontas Team Leader **FSP Management Team** Mr Augustine Garae Disaster Officer Vanuatu Red Cross Society

Mr Kalpeau Vatoko Chairman Vanuatu Red Cross Society, Port Vila

Development Partners and Donors

Mr Bernard Faro **Premier Counselor** French Embassy - Port Vil Mr Christian Curran Security Advisor EU, based in Canberra, Australia Mr Adrien Mourgues Programme Manager European Union - Port Vila Mr Patrick Haines Sector Analyst AusAID Office - Port Vila

Mr Peng Douyi **Deputy Chief** Chinese Embassy - Port Vila, Vanuatu Assistant Project Officer Child Rights, UNICEF - Port Vila Ms Sally Connell Major Philip Chapman AFP Advisor VanSec House - Port Vila

Country Liaison Officer World Health Organization - Port Vila Dr Corinne Capuano

Project Officer UNICEF - Port Vila Dr Ketsamay Rajphangthong

Mr John Bailie, Mr Lennox Vuti, **Parsons** Millennium Challenge Account Project

Mr Allen Faerua

Ms Anthea Toka Country Programme Officer Oxfam - Port Vila

Deputy Commissioner New Zealand High Commission - Port Vila Ms Mary Oliver

NZAID DPA 1 Mr Johnson Vora New Zealand High Commission

National Disaster Committee

Cherol Ala DPA DPA Job Esau **NDMO** George Pakoa Songi DPA DPA 1st PA Joe Bormal Carlo MOIA

Esline Garaebiti **DGMWR** Joel Path Member National Disaster Committee

Johnson Wapaiat Chair National Disaster Committee Mr Len Tarivonda Director Public Health Ministry of Health - Port Vila

11) Face-to-Face Sectoral Consultation:

- Central Agencies
- Meeting with the Director General of the Prime Ministers' Office, Mr Jean Sese
- Consultation with the Department of Economic and Social Development (DESD), Ministry of Finance
- Consultation with Mr Wycliffe Bakeo Manager REDI Programme, Department of Provincial Affairs
- Meeting with Department of Provincial Affairs
- Sector Consultation Risk proofing the REDI programme
- Ministry of Internal Affairs
- Police Department
- **National Disaster Committee**
- Consultation with Mr Russell Nari, Director General, Ministry of Lands and Natural Resources (MLNR)
- Vanuatu Meteorology Services
- Civil Aviation Authority of Vanuatu, MIPU
- Department of Ports & Harbors, MIPU
- Meeting with Mrs Jo Dorras, Script Writer, Wan Smol Bag Theatre
- Meeting with Mr Alan Churchill, Manager, Safety and Compliance, Airports Vanuatu Limited (AVL)
- Vanuatu Tourism Office
- Vanuatu Maritime Authority (VMA)
- Meeting with Mr Barry lata Manager, Aneityum Tourism Project, Aneityum
- Peace Corps Vanuatu
- Ministry of Health

- Meeting with Chief Murmur Kalkot & Mr Kalsev, Peace Corps Volunteer
- Meeting with Dickinson Tevi, Accounting Consultant, Vanuatu Malvatumauri Council of Chiefs (MCC)
- VANGO
- Wan Smol Bag
- Red Cross Society
- FSP
- Vanuatu Council of Churches (VCC)

12) Development Partners in Vanuatu:

- AusAID, Port Vila
- NZODA
- European Union in Vanuatu
- Mr Christian Curran, Security Advisor to EU, based in Canberra
- France and China Embassy's
- Millennium Challenge Account (MCA)
- JICA
- UNICEF and World Health Organization (WHO)

SUPPLEMENTARY PRIORITIES



ACTION AGENDA





GOVERNMENT OF THE REPUBLIC OF VANUATU



PRIORITIES AND ACTION AGENDA 2006-2015

SUPPLEMENTARY FOR

MAINSTREAMING

DISASTER RISK REDUCTION AND DISASTER

MANAGEMENT

"An Educated, Safe, Healthy and Wealthy Vanuatu"



The Vanuatu DRM&DM process was supported by the Pacific Disaster Risk Management Partnership Network, particularly the following partnership members:









The World Bank

Pacific Islands Forum Secretariat

Pacific Regional Environment Programme

United Nations Development Programme

International Strategy for Disaster Reduction

Pacific Islands Applied Geoscience Commission

1. BACKGROUND

Vanuatu is under constant risk of hazardous events such as volcanic eruptions, earthquakes, cyclones, tsunami, floods, storm surges, and fires; the associated economic and social costs of disasters are always large. Communities, economic and social development in Vanuatu will continue to be affected by such disasters unless disaster risk reduction and disaster management (DRR&DM) are addressed by the whole country at all levels and incorporated into Vanuatu's Priorities and Action Agenda.

Vulnerability of local communities to disastrous events is increasing not only due to increases in disaster events but also because of population growth and changing lifestyle from largely subsistence to a more market-based living with increased accumulation of material goods, and infrastructure development.

In the light of recent regular disastrous events and increasing concerns over growing vulnerabilities to disasters, the Government has made commitments under the Pacific Plan to mainstream DRR&DM into all development decision-making in an effort to reduce risk and strengthen the resilience of communities.

This is a huge challenge, particularly since this is taking Vanuatu into uncharted waters of operationalising the Hyogo and Regional Frameworks of Action for Disaster Risk Reduction and Disaster Management, endorsed by the Vanuatu Government and other regional leaders. Vanuatu is one of the first countries in the world to systematically implement the Hyogo Framework for Action and the Regional Frameworks of Action for Disaster Risk Reduction and Disaster Management and to develop its National Action Plan for DRR&DM.

Disaster risk management comprises two main elements: (1) disaster risk reduction – prevention, adaptation and mitigation; and (2) disaster management – preparedness, response and recovery. An integral element of disaster risk reduction is the considerations of risk to disasters across all sectors and in the national planning and budgetary processes. Mainstreaming DRR&DM considerations into the national planning and budgetary process is identified as one of the key strategies under the Hyogo Framework for Action and the Regional Framework for Action for DRR&DM, together with mainstreaming DRR&DM into decision-making processes across all sectors and all levels of government and communities.

Vanuatu's national planning and budgetary process is linked to its Priorities and Action Agenda (PAA), which is an integration and prioritisation of action agendas contained in Comprehensive Reform Program (CRP), Business Forum Outcomes and the Rural Economic Development Initiatives (REDI) Plans. Vanuatu first produced a PAA in 2003 and its most recent revision, covering 2005-2007, provides a link between policy and planning with the limited resources the government controls. The 2005-2007 PAA has been endorsed by the Council of Ministers and outlines the most urgent and important outcomes of these programmes that will be targeted in the medium term.

The PAA 2003 summarised the refined national development policies, which was endorsed by the Council of Ministers (COM) and the Development Committee of Officials (DCO). The Prime Minister during the CRP summit of November 2002 announced Government's commitments to the priorities listed below.¹

- 1. Improving governance and public service delivery by providing policy stability and fiscal sustainability via a strengthened law-enforcement and macroeconomic management capacity and a small, efficient, and accountable government.
- 2. Improving the lives of the people in rural areas by improving service delivery, expanding market access to rural produce, lowering costs of credit and transportation, and ensuring sustainable use of natural resources.
- 3. Raising private investment by lowering obstacles to growth of private enterprise including lowering costs of doing business, facilitating long-term secure access to land, and providing better support services to business.
- 4. Enabling greater stakeholder participation in policy formulation by institutionalising the role of chiefs, non-governmental organisations, and civil society in decision-making at all levels of government.
- Increasing equity in access to income and economic opportunity by all members of the community. Specific areas of focus include: enabling universal access to primary education by school-age children, universal access to basic health services, and inducing increased employment opportunity for those seeking work.

In 2005, the Government, recognising that the current PAA does not fully address disaster risk reduction and disaster management issues and challenges, requested the SOPAC/PIFS/UNDP/World Bank Partnership to help develop a supplementary PAA on DRR&DM, to complement the current PAA, 2005-2007. This draft supplementary PAA focuses on an additional strategic priority of 'Safety, Security and Resilience' of Vanuatu. It is, however, emphasised that disaster risk management is a cross-cutting issue that affects all walks of life, as well as all development priorities and programmes. As such, DRR&DM considerations need to be reflected in the national Vision, Medium Term Strategic Framework and the Strategic Priorities². These changes are included in this supplementary PAA, together with a detailed strategic priority on 'safety, security and resilience'.

¹ There was no reference to natural hazards or disasters in a country that is especially prone to such hazards, nor any mention of the need to protect the people from harm, either from natural hazards or criminal activities.

² In addition changes need to also be made throughout all the chapters of the PAA to fully reflect that disaster risk management is a development issue and as such needs to be fully considered in all areas of development; the current PAA and the supplementary PAA (this document) is expected to be combined when the PAA is next reviewed.

The current Chapter 9 on Infrastructure, with changes to reflect DRR&DM considerations, is attached as Annex 1 to illustrate the suggested changes that may need to be made to all the chapters in the current PAA when next revised. When the current PAA is revised, the supplementary PAA on 'Disaster Risk Reduction and Disaster Management for A Safe, Secure and Resilient Vanuatu' is expected to be incorporated into the next PAA together with changes to other chapters³.

The supplementary PAA also identifies key policies and high-priority strategies required to increase community safety, security and resilience to disasters using general principles articulated in the Disaster Risk Reduction and Disaster Management Regional Framework for Action 2005-2015, the World Bank Policy Note (*Not If, But When....*) and the Pacific Plan, adapting them to meet the specific conditions in Vanuatu.

This supplementary PAA was prepared in tandem with Vanuatu's National Action Plan for DRR&DM, which provides a detailed programme of action for addressing the national priorities on DRR&DM. Thus, these two documents must be considered as a package when considering DRR&DM actions for the country.

2. INTRODUCTION

The national Vision for Vanuatu is based on the recognition of the need for economic growth – that this growth must be led by the private sector and that Government's role is to create an enabling environment for both domestic and foreign investors whilst ensuring that development is sustainable.

The Vision reflects the people's expressed wishes for more employment and economic opportunities through

NATIONAL VISION

"An Educated, Safe, Healthy and Wealthy Vanuatu"
By 2015 Vanuatu will have achieved a significant increase in real per capita incomes, along with steady growth in levels of employment. Within the region, Vanuatu will be among the leading countries in achieving the Millennium Development Goals in education, health, environmental management, security and other key social indicators. Public sector reforms will have raised standards of governance, levels of productivity in the civil service, and will have resulted in higher standards of services and managerial accountability. Through continuing structural reform, Vanuatu will have established an effective enabling environment to sustain the significant private sector growth, which it aims to achieve in output and employment.

which to earn income, for better health and education, and the provision of basic infrastructure for themselves and especially for their children, and a wish for social stability **and community safety and resilience.**

To accomplish the broad goals, or development outcomes, outlined in the National Vision, the PAA identified seven Strategic Priorities to provide medium-term milestones against which progress can be measured. The Strategic Priorities provide policy direction at the overall national (macroeconomic) level. Strategic Priorities focus on key results or changes that must be achieved in the society and economy in order to take us towards the Vision.

³ This may also be a good opportunity to rationalise the different national development policy documents, including PAA, CRP and the Medium Term Economic Framework.

Strategic Priority: Safe, Secure and Resilient Vanuatu

Vanuatu is regularly subjected to volcanic eruptions, cyclones, earthquakes, droughts and floods. Some of these events are increasing in frequency and variability; as are extreme events due climatic to variability and sea level rise associated with human induced climate changes (see Figure 1 for location map).

STRATEGIC PRIORITIES

- Private Sector Development and Employment Creation
- Macroeconomic Stability and Equitable Growth
- Good Governance and Public Sector Reform
- Safe, Secure, and Resilient Vanuatu
- Primary Sector Development (natural resources and the environment)
- Provision of Better Basic Services especially in rural areas
- Education and Human Resource Development
- Economic Infrastructure and Support Services

Increasing population, uncontrolled growth of urban centres and spontaneous peri-urban settlements are contributing to increased levels of vulnerability. The potential for devastating cyclones and earthquakes in fast-growing urban areas, such as Port Vila, highlights the need for a more coordinated approach to urban planning as natural hazards can trigger other hazards in a domino effect.

The impacts of disasters on lives and livelihoods of people, as well as damage to physical infrastructure, are large, affecting both the social and economic fabric of communities. For example, Cyclone Uma in 1987 cost the private sector about US\$25 m in damages, together with infrastructure damages of another US\$25 m. The Government in its effort to rebuild the community incurred a national budget deficit increase of about US\$8.5 m – US\$10.6 m. The 2002 Port Vila earthquake damage and loss was estimated to be over US\$2.5 m, whereas Cyclone Ivy in 2004 incurred a loss of around US\$6 m, affected about 50,000 people and the loss of one person's life (McKenzie *et al.* 2005)⁴.

These impacts affect Vanuatu's ability to meet the needs and aspirations of its people and to address the sustainable development goals at national, provincial and community levels which are articulated in the Comprehensive Reform Programme (CRP) and Priorities and Action Agenda (PAA), and also reflected in the Rural Economic Development Initiative (REDI).

Historically, Vanuatu has demonstrated resilience to natural hazards and an ability to rebuild its subsistence economy and societies, using traditional knowledge and external disaster relief and other development assistance. However, the capacity of Vanuatu to effectively deal with the impacts of major disasters remains fragile, particularly as more parts of the country become urbanised and traditional knowledge has been lost. The challenge of achieving sustainable development goals, including the reduction of poverty, increasing economic growth and protection of the environment, will be undermined unless the potential impact of hazards on vulnerable communities and economies is addressed.

⁴ McKenzie, E., B. Prasad and A. Kaloumaira (2005). Economic Impact of Natural Disasters on Development in the Pacific. Suva, Fiji, SOPAC and USP.

The risks posed by such hazards can only be effectively reduced and managed as part of a sustainable development process that adopts a broader and more integrated approach to disaster risk reduction and disaster management (DRR&DM). This will involve the proactive management of disaster risks and reduction of vulnerability, expanding beyond the traditional approach to disaster preparedness, response and recovery, and adopting a strategic approach to improve and strengthen development effectiveness and efficiency by emphasising DRR&DM.

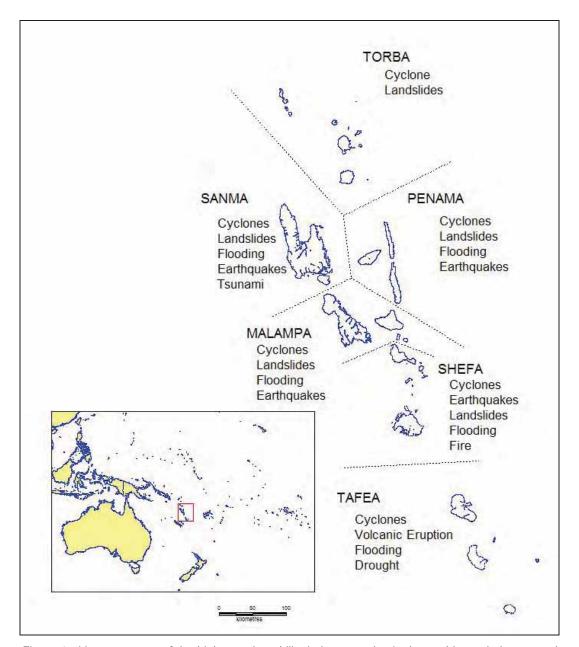


Figure 1: Vanuatu – one of the highest vulnerability index countries in the world, regularly exposed to a wide range of hazards.

3. KEY ISSUES AND CHALLENGES FOR DRR & DM

There are a number of issues and challenges with regard to DRR & DM that face Vanuatu, including those related to governance, policy and decision-making; institutional, regulatory and incentives for disaster risk management; traditional and technical knowledge management; and capacity development. These issues and challenges are explicitly addressed in the National Action Plan, linked to this supplementary PAA under six thematic areas and eight strategies⁵. The National Action Plan for the DRR&DM is equivalent to a Ministerial/Sectoral and/or Corporate Plan linked to the PAA as illustrated in Figure 2.

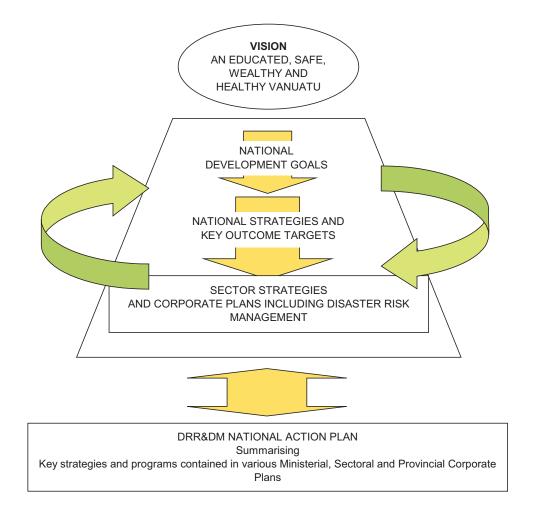


Figure 2: Linking the DRR&DM NAP to the PAA.

_

⁵ The National Action Plan also includes two additional themes on monitoring, evaluation and reporting and implementation.

Governance, Policy and Decision-Making Context

The key issue for disaster risk management in Vanuatu has been the tendency to assign responsibility to a small under-funded National Disaster Management Office, rather than mainstreaming disaster risk reduction into all sectors. A key challenge is for the political leadership to assign coordinating responsibility at the highest level possible.

Given high-level coordination and oversight, the next major institutional challenge is to ensure that all sectoral agencies mainstream disaster risk reduction and disaster management into their sector strategies, allocate adequate resources, train their staff, and maintain effective contingency plans. The national Government too, must mainstream DRR&DM into their macroeconomic policy and fiscal management and national budgetary processes such that disaster risk management is highlighted as a budget line item, against which progress and outcomes must be reported.

Responsibilities for disaster risk reduction must be clearly distinguished from those for disaster management. However, disasters are everybody's business and risk management should not be left up to the Government alone. The private sector and communities must be fully involved and held accountable wherever appropriate.

An important aspect of disaster risk management in Vanuatu is to take an "all-hazards" approach. While it is the collective risk of volcanic eruptions, earthquakes, tsunamis, cyclones that make Vanuatu such a disaster-prone country, other man-made risks such as aircraft crashes, oil spills, shipping accidents and epidemic outbreaks also need to be considered.

Vanuatu has a National Disaster Act 2000 and a National Disaster Plan 2004. However, even where plans and regulations are in place, lack of enforcement remains a major challenge in Vanuatu. Moreover, these legislation and associated regulation needs to be reviewed and revised in the light of the integrated and whole-of-country approach to disaster risk reduction and disaster management now adopted by Vanuatu.

(DRR&DM National Action Plan: Themes I & II)

Institutional, Regulatory and Incentives Mechanisms for DRR&DM

For DRR&DM, a combination of traditional and scientific knowledge-based strategies should be given priority. Traditional knowledge about disaster reduction and coping systems in times of disaster need to be documented and built on, through community-based disaster risk management programmes and awareness raising. Such traditional knowledge and methods needs to be integrated with the disaster risk management methods based on more technical knowledge based on scientific, economic and social science understanding.

Regulatory – A wide range of practical disaster risk reduction instruments needs to be given adequate resources, including "disaster-proofed" building codes, amended engineering design standards, coastal land-use planning. Institutional designs, including response procedures and measures in response to early warnings, preparedness drills and pre-positioning disaster relief packages (such as water, medical kits, and emergency food rations), keeping evacuation routes open, and improving communication systems for the outer islands are also priority needs.

Incentives – In the past, the Government has largely adopted a "wait and mitigate" approach to disaster risk management, confident that the donor community would respond to any humanitarian crisis caused by a disaster in Vanuatu. Donors have perpetuated this approach by not insisting that disaster risk reduction be built into all externally-funded development projects. Disasters are by definition uncertain events, so in some cases it is rational not to waste precious resources on avoiding or mitigating an event that may never happen. A key challenge, therefore, is to get the incentives right to invest in disaster risk management, and to prioritise "no-regrets" actions that are worthwhile doing, even if the anticipated risk never eventuates. Instruments such as private insurances, reinsurances against disaster events should be promoted at least for the commercial sector.

(DRR&DM National Action Plan: Themes III & IV)

Traditional and Technical Knowledge Management

For effective DRR&DM, the availability, communication and understanding of context-specific robust information about hazards and vulnerabilities by communities at risk is critical. Vanuatu regularly monitors and communicates some hazards, such as meteorological hazards, and such temporal and geographic information are located with different departments. Vanuatu also has a wealth of traditional knowledge about disaster risk reduction and coping mechanisms in times of disasters, which needs to be combined with technical knowledge, and appropriately managed to support communities at risk in their DRR&DM efforts.

Wide-ranging tools and methods are available for knowledge management, including hazard mapping and vulnerability assessments, and economic benefit cost assessments. These together with geographic information systems, more effective communication strategies using all forms of medium, and appropriate language and mode of communication, could help underpin disaster risk reduction strategies and community based planning and response programs.

(DRR&DM National Action Plan: Theme V)

Capacity Development

To build safe, secure and resilient communities against disasters, appropriate capacity of individuals, communities, government agencies and non-government organisations is necessary. At the government official level, focus of capacity development would vary depending on the role the officials play. On the one extreme will be skills in highly sophisticated tasks such as hazard modelling and monitoring, social, technical and economic vulnerability assessments, impact assessments, etc. – on the other, capacity development could focus on designing risk reduction strategies and preparing corporate plans and budgets reflecting DRR&DM considerations. Capacity at the community and individual level could include basic understanding of the local hazards; community hazard and vulnerability assessment; and preparing (for example their own) risk reduction and response strategies. In addition, the enabling environment, such as the legislative framework, organisational arrangements and decision-making processes within which individual communities and agencies operate needs to be also improved. Strengthening of systemic capacity could, for example, mean establishment of a single government organisation that monitors and assesses all hazards under the same Ministry.

(DRR&DM National Action Plan: Theme VI)

Implementation and Adaptive Management

For sustained development and maintenance of DRR&DM, a long-term commitment is needed from national government, NGOs, communities and NSAs, as well as regional and international partners. Furthermore, a degree of flexibility is needed in the implementation of strategies and activities, such that there is regular monitoring of performance and evaluation against the desired goals and adaptation over time. Regular monitoring and evaluation of DRR&DM is a challenge, particularly when financial and technical resources are limited. A common monitoring, evaluation and reporting on DRR&DM NAP linked to annual corporate reporting and regional and international commitments could help overcome this burden.

(DRR&DM National Action Plan: Themes VII & VII)

4. POLICY OBJECTIVES

The objectives of this supplementary PAA are the same as the specific objectives of the National Action Plan, which provides a detailed programme of action for addressing the national priorities on DRR &DM. The policy objectives for DRR&DM under the PAA are to:

- recognise disaster risk management as a development issue and mainstream all-hazards risk management into all sectors and decision-making processes at all levels of government, including national planning and budgetary processes;
- recognise disaster risk management as a whole-of-country responsibility and actively
 engage communities, NGOs and the private sector in disaster risk reduction and disaster
 management efforts;
- ensure the establishment of a strong governance framework for DRR & DM, with clear policies and legislation, accountable institutional and organisational arrangements and connections across and within levels of government, sectors and communities;
- ensure adequate resources and appropriate coordination mechanisms are devoted to disaster risk reduction and disaster management;
- integrate disaster risk reduction concerns into policies, plans and programmes of all ministries and departments and all levels of government in order to assist communities reduce their risks and vulnerability to disasters;
- recognise that disaster risk management is about supporting communities to reduce and manage risks, and empower communities by providing appropriate and timely information; building their capacity to use this information to make informed decisions; and promoting community-based disaster risk management through participatory planning and publicprivate sector partnerships;

- promote knowledge-based decision-making, including traditional knowledge and knowhow about disaster risk reduction and coping mechanisms in times of disasters; and
- provide for a sustained, coordinated and harmonised support for regional organisations and development partners.

5. NATIONAL PRIORITIES AND STRATEGIES

National priority strategies for DRR&DM under this supplementary PAA reflect the strategies identified in the National Action Plan. These strategies are consistent with the issues raised in various situation analyses and findings during broad consultations with key stakeholders at national, provincial and community levels. These priority strategies are summarised in Table 1, together with the respective NAP themes.

6. PERFORMANCE INDICATORS

Performance indicators for the Prioritised Strategy on a "Safe, Secure and Resilient' Vanuatu covered in this supplementary PAA could be divided into indicators for monitoring progress against the key strategies and monitoring performance against the overall goal of the supplementary PAA.

Progress indicators:

- Establishment of an appropriate organisational arrangement, together with supporting legislation, and allocation of financial and human resources for DRR&DM across all sectors.
- Number of ministerial/sectoral/provincial/corporate plans and annual budgets that explicitly reflect DRR&DM considerations.
- Number of communities with their disaster risk reduction and management plans or strategies completed and/or strengthened, together with the number of programmes implemented at the community levels.
- Integrated information systems for DRR&DM established and context-specific information made available to communities to inform their planning and management decisions.
- Number of training courses conducted and their effectiveness in empowering individuals and institutions in DRR&DM.

Performance indicators:

- Reduction in loss of life, property and infrastructure due to disasters.
- Improved resilience of communities and economies to disasters.

Table 1: Issues and Concern under NAP Themes and Strategies.

Issue and Concerns	NAP Themes	NAP Strategies
Governance, Policy and Decision-Making Context	I. Governance and Policy Context	Strengthen national policy, legislative, organisational and decision making arrangements for coordinated and effective DRR and DM.
	II. Mainstreaming DRR& DM into national planning and budgetary process	Mainstream DRM&DM into national macroeconomic policy and fiscal management, and national budgetary processes.
Institutional, Regulatory and Incentive Mechanisms	III. Mainstreaming Disaster Risk Reduction	3. Strengthen organisational arrangements, planning and decision-making processes at national, provincial and community levels and NGOs at all levels for mainstreaming DRR (including prevention, mitigation and adaptation), recognising its cross-sectoral dimensions.
	IV. Strengthening Disaster Management	4. Strengthen national organisational, decision-making processes and operational arrangements for Disaster Management (DM), (preparedness, response and recovery).
Traditional and Technical Knowledge Management	V. Information, Information Systems and Knowledge Management	5.Understand hazards, vulnerabilities, and communities at risk (hazardscape) as a basis for disaster risk reduction and disaster management. 6. Improve, strengthen and integrate technological and information
		systems to support DRR&DM at the national, provincial and community levels.
Capacity Development	VI. Capacity Development	7. Improve and strengthen capacity for disaster risk reduction and disaster management at the ministerial, national, sectoral and provincial levels, 8. Strengthen individual and community capacity in DRR&DM.
Implementation and Adaptive Management	VII. Monitoring, Evaluation and Reporting	9. Strengthen monitoring and evaluation of Vanuatu's efforts to ensure progress and improvements in risk reduction, preparedness, response and recovery against disasters.
Sustained Commitments	VIII. Implementation of National Action Plan	10. Implement the DRR&DM National Action Plan.

ANNEX 1

An example of suggested changes to the current PAA to mainstream disaster risk management

PRIORTIES AND ACTION AGENDA, 2005-2012 (PAA)

CHAPTER 9: SUPPORT SERVICES: INFRASTRUCTURE AND UTILITIES

9.1 SECTOR OVERVIE

Reliable and competitively priced economic infrastructure and utilities are essential services needed to support national development. Without such services new productive investment will be difficult to attract, and the objectives of creating additional employment and other income-earning opportunities for the people will not be achieved. Infrastructure is essential for maintaining services in times of crisis and is an important government asset that must be protected from damage associated with disasters.

Poor transport and communication services, their high costs, and poor maintenance of infrastructure assets, particularly (but not only) in the rural areas, have been identified as major constraints to development by communities, especially rural communities, Government and aid donors. Vanuatu has a high incidence of destructive cyclones and periodic droughts. There is also increased climate variability, as part of worldwide trends for climate change. While the weather cannot be controlled, accurate forecasts and forewarning of potential disasters are important for safety as well as economic development such as agriculture and marine activities, including fishing.

Private sector monopolies operate most electricity, water supply, domestic gas and telecommunication services while Government and public enterprises play a major role in the transport sector. In comparison to many neighbouring Pacific Island countries the quality of urban power, water and communications utilities in Vanuatu are of a high technical standard. But the costs to the consumer are also very high to the extent that these are generally believed to be hampering growth of enterprises, and constraining the development of tourism. Effective regulation and monitoring of concession agreements in electricity, water and telecommunications are seen as essential to improving services and reducing costs.

Reform of Government activities in the sector has been undertaken with the separation of regulatory and operational functions in the marine and aviation transport sectors and the corporatisation of commercial activities with Airports Vanuatu Limited and Post Vanuatu Limited. There are also plans to establish a Land Transport Authority as a separate regulatory authority for land transport and also a need to establish a Transport Planning Committee within the ministry of Infrastructure and Public Utilities.

Efforts have also been made to improve the operations and efficiency of public enterprises in general with the design of a divestiture program to increase private sector participation in the operation and maintenance of services. However, this has met with limited success and continuing subsidies have been a substantial drain on government's budget. This lack of progress is reflected in the high level of subsidies and transfers to public enterprises, which were equivalent to 6% of GDP in 2004. This reduces the funds available for priority sectors such as health and education. There is therefore still much to be done to improve the performance of both infrastructure and utilities service providers. The government is in the process of setting up a Regulatory Authority.

9.1.1 Meteorological Services

Over the last two decades the Vanuatu Meteorological Service has suffered a steady decline in resources. This is affecting the service's ability to provide accurate forecasts and forewarning. With the likely increase in extreme weather events associated with global warming, this key agency needs to be strengthened.

9.1.2 Power

Less than 20% of the total households enumerated in the 1999 National Census reported having access to electricity. The remaining households indicated other sources of light such as gas, kerosene, wood, etc. The information suggested that excluding the two municipality areas, Lakatoro, Lenakel and other privately operated sources of power supply, more than 80% of the population of the country living in rural areas do not have access to electricity and are still using traditional means for their sources of light.

The Port Vila and Luganville municipal electricity networks are operated and maintained by UNELCO through concession contracts that extend to 2031 and 2010, respectively. There are presently just fewer than 5,000 customers on the Port Vila network and nearly 1,000 customers on the Luganville network. *Nevertheless there is reliance by the commercial and public sector on the municipal electricity networks, which consequently suffer during power outages.* The Public Works Department had, until recently, the responsibility for operations of the provincial town electricity supplies at Luganville, Isangel on Tanna and Norsup/Lakatoro on Malekula but these are now operated and maintained by UNELCO. Power to Luganville is largely supplied by the Sarakata hydro-electric scheme funded by the Japanese in 1994. Consumers in Luganville pay similar prices as in Port Vila where electricity is exclusively provided by diesel generators. Savings on fuel costs from the hydro-generation have been used to extend the electricity reticulation on Santo and used to provide solar powered systems in rural villages. There is a need for enhanced oversight of the Sarakata "Fund" to improve the transparency.

Government, through its Energy Unit of the Ministry of Land and National Resources, undertakes the electrification of the smaller village communities. Around 500 solar powered systems are operating for rural health clinics, schools and private homes. These systems were financed through the Sarakata Fund and through donor assistance but are maintained by the Energy Unit. The Energy Unit is also involved in the identification of other means of electricity generation and is promoting a number of mini hydro schemes as well as geothermal power for Efate and other Islands.

9.1.3 Telecommunications

Tele-density (defined as telephone lines per 100 people) is a key indicator of access to telecommunication services. Vanuatu has about 12 connections per 100 people according to the 1999 Population Census. This compares with Fiji and Palau which both have twenty connections (fixed and mobile connections) per 100 people. Tele-density in rural areas of Vanuatu is much lower. The MDG goal for communications is "In conjunction with the private sector, make available the benefits of new technologies, especially information and communications."

Despite the low access, Vanuatu has a modern telecommunications system serving all urban areas and most rural areas. Telecom Vanuatu Limited (TVL), partly owned by Government, has exclusive rights under a concession contract to operate domestic and international services (including Internet) to the year 2012. There are currently 6,944 fixed lines but with the introduction of mobile phones (particularly prepaid mobile phones) there has been a quantum leap in the number of phones – some 15,400 as of January 2006. Although Internet charges are comparatively high, TVL does provide a free service to schools that have computers and electricity supply to operate them.

In times of disasters, isolated communities become more isolated, particularly when communications infrastructure is damaged. It is crucial that emergency lines or other forms of back-up communication systems are already in place and maintained such that communities at risk are easily reached.

9.1.4 Transport

9.1.4.1 Air Transport

Air transport plays an important role in both domestic and international transport, therefore a regime of primary legislation and operating rules conducive to sustainable air transport operations is of paramount importance. Whilst marine transport provides the basis for domestic freight and passenger traffic domestic air services provide vital links

for many people on a more regular basis, for the development of tourism and enterprise activities and for emergency services. Competitively priced international services are critical for the promotion of the nation's tourism industry. Maintaining both international and domestic air-services is therefore of vital importance.

Stability of the operating environment for the national carrier Air Vanuatu and for operation of domestic air services is critical for the long-term financial health of the aviation sector. New international competition from low cost carriers has raised the number of tourists but creates a challenging competitive environment for Air Vanuatu.

Airports Vanuatu Limited operates the three main airports at White Grass - Tanna, Bauefield – Efate and Pekoa – Santo while the remaining 26 outer island airstrips are maintained and managed by the Public Works Department through a contracting arrangement. *It is crucial that airports remain operative in disaster periods*.

As with all infrastructure the maintenance of aviation assets is a critical issue, especially as safety and security concerns are paramount. The location and local climate of many rural airstrips make maintenance very difficult and costly.

9.1.4.2 Land Transport

Public Works Department has a National Road Inventory with a recorded 1,766km that is the responsibility of PWD and 225km that is the responsibility of provincial Government. The condition of the road network is poor due to inadequate funds and machinery for maintenance *and the harsh environment that some roads pass through.*

Limited institutional capacity in terms of staffing, budget and machinery at both national and provincial level has hindered planning and the development and maintenance of the road network. The new program for roads and infrastructure being developed under the Millennium Challenge Account will have a major impact on the nation's road network and provides an ideal opportunity for examination of design and maintenance standards. This will add considerably to the importance of developing a sound and adequately resourced road-asset maintenance program.

The proposal to establish a Land Transport Authority within the Ministry of Internal Affairs to regulate licensing and safety is under active consideration by Government. The proposal to establish a transport Planning Committee within the Ministry of Infrastructure and Public utilities is also under active consideration by the Government. *The proposed mandate of the Planning Committee could include infrastructure design and maintenance standards*.

9.1.4.3 Marine Transport

Vanuatu relies heavily on

Vanuatu relies heavily on marine transportation for its trade and domestic travel between islands. It is also the main means of bringing export crops and produce from the rural and outer islands to markets. Many have likened it to the backbone of domestic freight transport in Vanuatu, and considerable attention has been given over the years to the importance of improving the efficiency of inter-island shipping to reduce internal transport costs. This has included expenditure on port facilities to consolidate freight handling and reduce shipping costs⁶. In 1999 the Coastal Trading Act was abolished and the VIPA Act amended to allow for foreign ownership of vessels over 80 tonnes. As a result a number of foreign owned vessels now ply Vanuatu's waters and shipping services have significantly improved.

There are a total of 22 public ports and wharves in Vanuatu though the two most important are at Port Vila and Luganville. Five main agencies/ groups are involved in the marine infrastructure sector, their roles are summarised in Figure 9.1.

Safety at sea has been a concern and considerable efforts have been undertaken to ensure that Vanuatu ports and shipping safety standards are compliant with international standards. In 2004 a port security plan and port security regulations were introduced to improve management, safety standards and enforcement in the maritime industry and to conform with the new International Ships and Port Facility Security Code (ISPS).

⁶ For example, the ADB Multi Project in 1989, and prior to that there is evidence of considerable activity in the construction of new wharves and jetties around the time of independence.

9.1.5 ater Supply

The Port Vila water supply system is owned by the state but operated by UNELCO under a concession contract that runs to 2032. Water supply systems in Luganville, Lakatoro and Isangel are government owned and operated by PWD. Government, through the water section of the Department of Geology and Mines, as well as NGOs, assist with the development of village water supply systems and watershed management. This assistance includes the provision of training to village dwellers to maintain their own water systems, although this has met with limited success.

Approximately 80% of the population have access to improved water services (reticulated supply and rainwater catchments tanks) and over 80% of the population have access to improved sanitation (reticulated

FIGURE 9.1: INSTITUTIONAL STRUCTURE FOR MARINE TRANSPORT

- Ports and Harbours Department responsible for operation and management of the main ports at Port Vila and Luganville.
- Vanuatu Maritime Authority regulatory authority established in 1999 to ensure safety standards, licensing and administration of shipping and maritime and seafaring acts and search and rescue.
- Vanuatu Maritime Training School situated in Santo provides training for fishermen and local and international seafarers.
- Shipping Industry which until 1999 was essentially restricted to Ni-Vanuatu operators and now includes around 120 ships (up from about 67 in 1999) capable of inter-island transport as well as an informal sector of smaller boats. This number has increased as the Government has recently introduced two additional vessels donated by the Government of the Peoples Republic of China.
- Provincial Government responsible for operation and management of designated ports.

and non-reticulated solutions such as improved pit latrines). The MDG goal for water and sanitation is to "Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation."

9.1.6 Pricing and Regulation

The high cost of electricity, water and telecommunications, due to high cost of operation, contributes to the high cost of doing business in Vanuatu. In the case of electricity and water supply provided by UNELCO, prices are set according to an agreement with Government, under the Ministry of Lands. The price is indexed to a variety of inputs and there is no scope within the agreement and concession contract to take account of increased economies of scale. In the case of telecommunications there are no limits on the prices that can be charged. In the case where the Public Works Department provides utility services, revenue generated is generally insufficient to maintain the assets. This is in contrast to those utilities owned or operated by the private sector. The complexity of the issues pertaining to utilities has been discussed at length in various reports. Costs are relatively high for electricity and telecommunications for a variety of reasons.

9.2 KEY ISSUES AND C ALLENGES

The constraints and challenges in providing adequate and efficient infrastructure, utilities and supporting services are both physical and structural. The country is widely scattered and the island geography is often rugged. The costs of providing infrastructure, transport, power and communications services in such circumstances are high and the economies of scale are small. Vanuatu is also highly vulnerable to natural disasters arising from its climate and geology, which can lead to serious disruptions to supplies and services.

Land transport is constrained by the poorly maintained road network. In addition road regulations are outdated and there is a need to control road occupation properly and clarify road administrators for respective roads and the roles governing safety, bus and taxi fares and licensing. The amendment of the Public Road Act and establishment of a Land Transport Authority has been proposed to overcome these weaknesses.

Critical issues in marine transport, centre on the lack of access to capital for ni-Vanuatu wishing to start businesses in the shipping industry. Constraints to access to capital arise from the doubtful viability of many inter-island shipping services as a result of the widely scattered geography and the vulnerability of assets, and consequent risks of loss,

from natural disasters including cyclones. Operational efficiency of marine transport in Vanuatu is constrained by outdated design and equipment. This problem is compounded by poor maintenance. Port Vila and Luganville wharves serving coastal and inter-island trade are cramped, lack adequate cargo shades and passenger handling facilities and are poorly maintained.

In summary the improvement of telecommunications services will be largely the responsibility of the private sector with government involvement being in setting up the regulatory environment for the private sector supply and competitive pricing.

The challenge for government is therefore to address the structural weaknesses in the management and operation of infrastructure and utilities, and to seek more cost-effective and efficient alternatives where possible. Potential alternative power and energy sources need to be examined, efficiencies maximised, *design standards revised and enforced,* costs minimised and prices set competitively, commensurate with providing satisfactory standards of service to all islands, and providing support to the achievement of strategies in other sectors.

9.3 POLICY OB ECTIVES

Based on the key issues and challenges, policy objectives are to:

- 1. ensure the provision of commercial, quality, efficient, and competitively priced infrastructure, utilities and services, either through public enterprises or through private sector partnerships and competition;
- 2. encourage the development of a competitive private sector involvement in the provision of utilities and services;
- 3. minimise subsidy requirements for public utilities;
- 4. ensure economic infrastructure and support services are available to other sectors to enable all stakeholders to achieve their own sector objectives; and
- 5. ensure that critical transportation remains viable and operational during disaster events.

9.4 PRIORITIES AND STRATEGIES

9.4.1 Air transport

Priorities in the air transport sector are to:

- 1. provide safe and secure domestic and international air transport operations, *according to ICAO standards*;
- 2. provide efficient and cost effective services to passengers and cargo traffic both domestically and internationally.
- 3. ensure adequate maintenance of existing airports and airstrips, *especially ensuring that they remain operative in natural disasters*; and
- 4. provide safe and reliable airport services to cater for growth in domestic and international passenger and cargo services.

9.4.2 Land transport

Policies in land transport sector will continue to stress the need to provide and adequately maintain an appropriate land transport system that enhances the social and economic development of the country. Priorities are to:

- 1. properly maintain the road network through *better design to withstand an acceptable level of risk from a particular hazard*, more effective management and more funding;
- 2. improve road administration by amending the Public Roads Act and the regulation of land transport services through a review of existing land transport legislation and the establishment of a Land Transport Authority;

- 3. review Infrastructure Master Plan, prioritise projects and only construct new roads when economic benefits have been demonstrated; and
- 4. promote the use of bio-fuels and other alternative energy sources where economically feasible.

9.4.3 Marine transport

Government policy for marine transport will concentrate on developing and maintaining Vanuatu's shipping infrastructure so that people, communities and business can effectively participate in national and international trade. Priorities are to:

- 1. maintain and upgrade existing infrastructure;
- 2. improve management of the sector through improved consultation with ship owners and other stakeholders;
- 3. improve operational efficiency in the ports and eliminate subsidies; and
- 4. improve and maintain safety standards through regulatory measures and seafarers training.

9.4.4 Meteorological services

The service's role is providing timely and accurate meteorological information to meet the needs of all people living in Vanuatu and to incorporate the climate change issues into the national development plans. This requires:

- 1. restoring and upgrading the basic infrastructure and operations, *especially to provide early warning systems*;
- 2. putting in place an appropriate local capacity building program to improve scientific/technical staff resource levels and to upgrade skills; and
- 3. building climate change and other risk management issues into National Development Plans, sector plans, medium-term framework plans, corporate plans, REDI plans, and urban development plans.

9.4.5 Power, water and telecommunications

For the power, water and telecommunications sectors the priorities are to:

- 1. reduce the cost of services, particularly of electricity and communications including internet;
- 2. improve the regulatory framework to more effectively enforce contract conditions, and encourage additional competition in these sectors where possible;
- 3. extend the coverage of rural electrification by the most cost efficient means;
- 4. promote the use of renewable energy, especially where these can be used effectively in remote locations;
- 5. extend communications services to remote areas by using innovative technology options;
- 6. extend the coverage of improved water supplies in rural areas;
- 7. provide training in maintenance of village water supplies in conjunction with Provincial Governments; and
- 8. install outer island communication and emergency links.

9.5 PERFORMANCE INDICATORS

Performance of the sector in meeting its objectives and delivering on the priorities will be measured through:

- air transport Nil air traffic accidents per year causing loss of life; passenger movements; airstrip closures; AVL profitability; Air Vanuatu profitability; *time taken to get airports running again after a disaster;*
- land transport kms of new roads constructed; kms of roads maintained; bio-fuel use;
- meteorological accuracy <u>and timeliness</u> of forewarnings;
- marine transport safety record; level of subsidies; port and handling charges
- power average price measure; power consumption; access of population to electricity; time taken to get powerlines repaired after a disaster;
- telecommunications average price measure; traffic volume; internet usage; tele-density (MDG); outer island links; and
- ater average price measure; water consumption; access of population to improved water supplies (MDG).