

REPUBLIC OF VANUATU
FINAL REPORT



**EDUCATION ON NATURAL DISASTER
PREAPREDNESS FOR SUSTAINABLE
DEVELOPMENT**

*"Building safe, secure, resilient and educated Vanuatu Community through
Education"*

**Prepared by MajorJob ESAU – Director
National Disaster Risk Management Office**

With the support of UNESCO

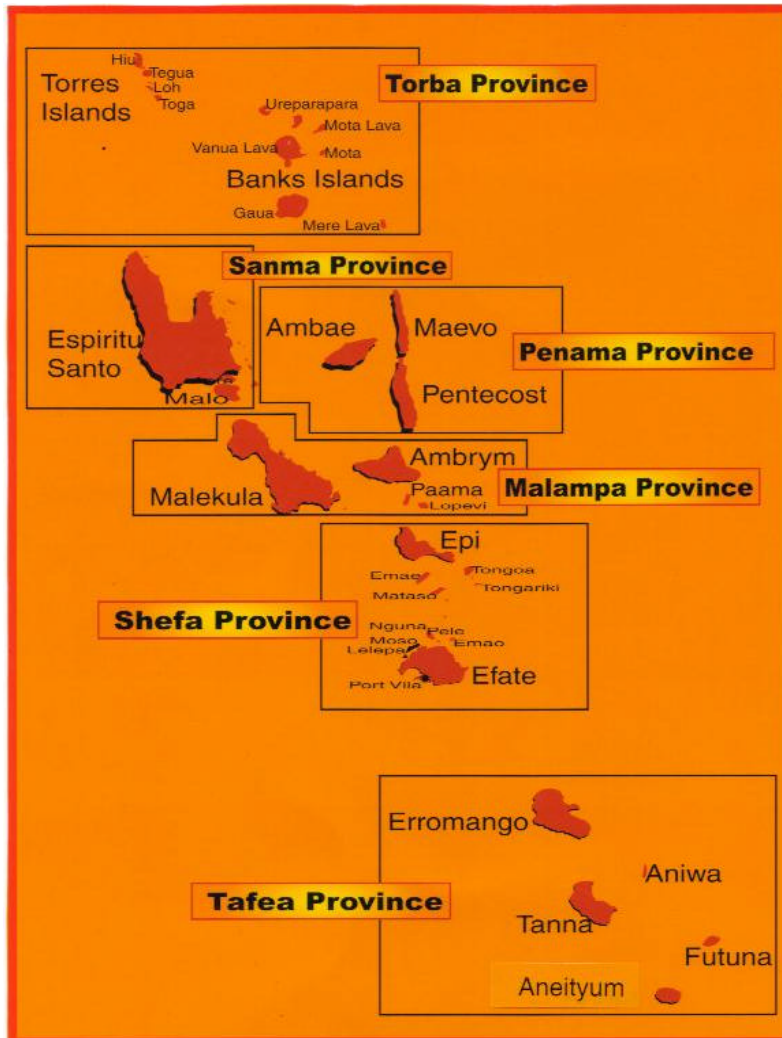
05th July 2008

Introduction	4
Vanuatu National Hazard and Risk Profile.....	6
2.1 Cyclones	6
2.2 Volcanic Eruptions	6
2.3 Floods.....	7
2.4 Earthquakes and Tsunamis	8
2.5 Industrial Accidents	9
2.6 Fires	9
2.7 Vehicle Accidents	9
2.8 Hazardous Materials Accidents.....	9
2.9 Marine Oil Spillages	9
2.10 Aircraft Accidents	10
2.11 Exotic Disease.....	10
2.12 Health Epidemics.....	10
2.13 Drought.....	10
Ongoing and projected natural disaster preparedness related activities within the Republic of Vanuatu.....	11
Situational Analysis	12
Global and Regional Drivers.....	13
National Drivers of the Development of National Action Plan on Disaster Risk Reduction and Disaster Management 2006-2016.....	14
NAP Strategies	15
Women's Role in Disaster Risk Management (Preparing for Disaster).....	16
School Disaster Risk Reduction program.....	17
Disaster Risk Reduction and Disaster Management Issues	18

Stock of work currently being pursued by various entities such as NGOs, community-based organizations and research institutions	19
The organizational structure of government bodies overseeing disaster management.....	22
National Disaster Risk Reduction and Disaster Management Organizational Structure	23
National Disaster Council.....	24
Vanuatu Disaster Risk Management	25
The Disaster Risk Management Model	26
Disaster Management.....	27
(Preparedness, Response, Relief and Recovery).....	27
Disaster Response Functions and Roles	28
Policy Objectives	32
Current situation of disaster management in schools in terms of curriculum as well as response mechanisms and school building structures.....	33
School Disaster Risk Management Curriculum.....	34
Schools Disaster Response Plans	35
Safe, School Building Structure	35
Ministry of Education Key Challenges in Disaster Risk Reduction and Disaster Management.....	37
Educational materials.....	38
Data collection	43
Curriculum recommendations and Conclusion.....	44
Strategies.....	45

Introduction

Figure: 1 Map of the Republic of Vanuatu.

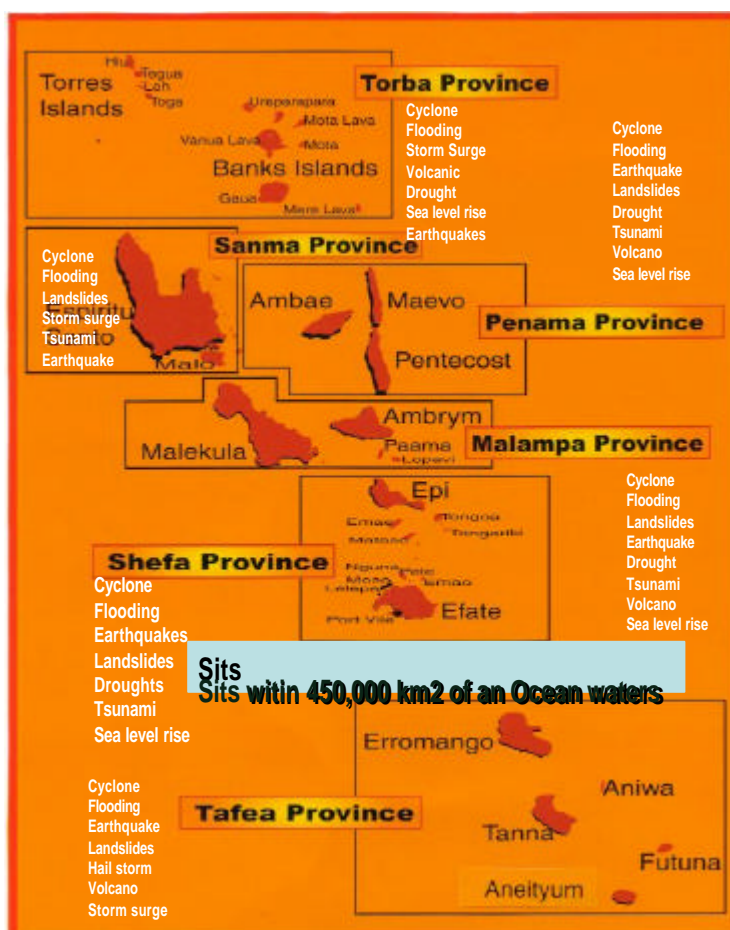


Republic of Vanuatu is an island country consisting of over 80 islands covering the total land area of 12,336 km² and represents only 1.4 percent of 860,000 km² total country area. Vanuatu is located within 450,000km² of ocean waters. The estimated total population is approximately 219 thousand with an annual growth rate of 2.6 percent. Out of this total population, 80 percent are living in the rural areas, engaging in subsistence agriculture and fishing. The country's population density is estimated at 16 persons per km². Vanuatu is divided into six Provinces namely, Torba Province representing Torres and Banks Group in the far North, Sanma Province representing Santo and Malo islands, Penama Province representing Pentecost, Ambae and Maevo islands, Malampa Province representing Malekula, Ambrym and Paama Islands, Shefa Province representing Shepard Group and Efate Islands and Tafea Province representing Tanna, Futuna, Erromango, Aniwa and Aneityum islands in the far south of the country.

Vanuatu's economy is characterized as small open and very vulnerable. The smallness in terms of geographical size coupled with the dispersal nature of the islands, contribute towards the prevailing high cost structure. The small population size partly contributes to the small and underdeveloped domestic markets for goods and services. The openness of the economy in terms of international trade attributes to its vulnerability to external economic shocks given the country is highly dependant on imports.

The geographical location of the country also makes it very susceptible to natural calamities and disasters, which often results in high capital costs and loses. Vanuatu geographical location is sitting on the rim of fire, as well as on the sub-duction zone of two tectonic plates and subjected to frequent earthquakes. Isolation of islands and remoteness of vulnerable communities is quiet a big challenge in terms of sustaining service deliver before, during and after disasters. Education infrastructure development in Vanuatu is demanding but expensive to maintain. Schools are located throughout the country however; some schools are built in high risk areas and are often faced with continued obstruction of these natural disasters.

Figure 2 – Hazard Map of Vanuatu

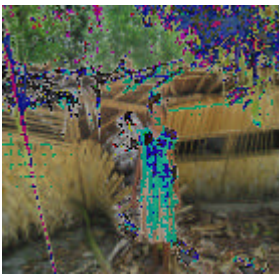


Vanuatu National Hazard and Risk Profile

According to the UNDP Global Human Development Index (HDI) Vanuatu is rated as the most vulnerable state of 110 small development countries by a 1998 report. 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 together with limited financial and technical capacity makes Vanuatu particularly vulnerable to many different hazards and risks.

In particular the following hazards and risks have the potential to create national disasters and severely impact on the sustainable development process and livelihood of the nation.

2.1 Cyclones



Every year, usually between the months of November and April, Vanuatu receives minor to major cyclone activity that causes considerable disruption to community life and damage to infrastructure the environment and social services delivery. The frequency and severity of this hazard and the associated cost of cyclone rehabilitation and recovery programs is increasing and directly impacting on both economic growth and long-term development priorities. Risks associated with cyclonic conditions including storm surge, flooding and landslips are also regarded as a threat to communities, particularly those living in coastal low lying areas throughout the country.

2.2 Volcanic Eruptions



Many of the islands of Vanuatu are at high risk due to volcanic eruptions. There are seven active volcanoes running from the north to the southern part of the country and these are located on the following islands:

- ✚ Gaua in the Torba Province
- ✚ Marum on Ambrym, Malampa Province
- ✚ Benbow on Ambrym, Malampa Province
- ✚ Vui on Ambae, Penama Province
- ✚ Lopevi in Malampa Province
- ✚ Kuwai in Shefa Province

🚩 Yasur on Tanna, Tafea Province

These volcanoes pose different risks to the communities such as:

- 🚩 Volcanic Ash-fall
- 🚩 Volcanic Acid Rain
- 🚩 Volcanic Lava Flow
- 🚩 Volcanic Sulphur Gas
- 🚩 Volcanic Mud Flow

These volcanic risks are continually affecting the safety, livelihood and services of those communities at risk.

2.3 Hail Storm



Republic of Vanuatu has a history of hail storm impacts. Therefore, due to climate change globally, Vanuatu has been affected by hail storm. It has caused significant damage to building, environment due to landslides, mass flooding and heavy droplet of rain causing damages to building etc. Therefore, this natural phenomena has been classified as one of the country's natural hazard.

2.4 Floods



Culturally, communities are most likely located near river banks in low lying areas which are prone to flooding, as well as coastal low lying areas. These villages are vulnerable every year when there is a cyclone or heavy rainfall, because of the associated threat of flooding. Floods can destroy houses, gardens and personal belongings as well as increasing river levels which can causes infrastructure damage to bridges and roads. The current population growth and associated urban drift is increasing this risk as people move to areas they can afford which generally means low lying areas prone to flooding.

Flooding frequently occurs on Malekula, Santo, and Efate, where there are big rivers as well as middle bush on Tanna. However, flooding is also experienced on other islands generally following heavy rain fall periods, which causes damage to gardens and sanitation problems for villages

2.5 Earthquakes and Tsunamis



Earthquake and associated tsunamis present a high, but infrequent risk to Vanuatu. The main threat area is to the northern and central islands, and the islands with active volcanos. Apart from general earthquake damage, volcanic islands can also suffer from landslides, which can inundate gardens, roads and bridges, as well as communities.

2.6 Tsunami

Seismic Risk Management (continue)

Example 2:

The Ms 7.5 November 26, 1999, Ambrym earthquake
A major event in the central Vanuatu back arc

On November 26, 1999, at 13.21 GMT, the central part of Vanuatu, especially the islands of Ambrym and Pentecost experienced a large earthquake with a magnitude Ms 7.5.

This event is one of the largest known earthquakes that ever occurred in these days along the 350 Km-long back-arc compressive belt of the central part of the Vanuatu subduction zone.



Tsunami, has been one of the hazard which the Republic has experienced. One of latest tsunami that hit the northern part of the country claimed 14 lives on the Island of Pentecost. This is becoming an alarm in Vanuatu since the latest in the Pacific hit the Solomon Island, therefore, Vanuatu has identified as another natural hazards which we have to address during awareness or take it further into curriculum development. The fear is that most villages and communities are located in low-lying areas near the coastal location around islands of Vanuatu. Schools are also located near the coastline which are vulnerable to tsunami.

2.7 Industrial Accidents

Port Vila, Luganville and other main centres are developing at an increasing rate. While there are many safety precautions in place, the potential for an accident involving explosive chemicals or volatile fuel is high. The towns are beginning to become more crowded, with people, buildings and an increased number of vehicles on the roads. The potential for 'man-made' industrial type accidents or disasters is increasing and as a result the risk factor is high especially in Port Vila and Luganville.

2.8 Fires



Port Vila and Luganville are the popular tourist destinations as well as the main hub of business developments. Whilst this has many positive economic benefits to Vanuatu it also highlights the need for increased levels of fire protection and public safety to protect lives and property from the impact of fire related risks. The fire risks in the major urban centres are very high and therefore need to be reduced through the effective application of building codes and fire protection standards including strengthening of fire service response capabilities and resources to match the levels fire hazards in country.

2.9 Vehicle Accidents

Increasing volumes of traffic, particularly in major urban centres is another factor that is increasing levels of risk and therefore needs to be addressed through improved road safety education, regulations and law enforcement. Major vehicle accidents have the potential to escalate into major emergencies requiring a coordinated response from a number of key agencies.

2.10 Hazardous Materials Accidents

Increasing volumes of chemical transport vehicles, especially in Port Vila and Luganville, has increased the risks of a major emergency. If such an emergency occurred in the built up areas of Port Vila then large areas of the city would be exposed to toxic and flammable materials causing health problems and damage to businesses, buildings, infrastructure and the image of Port Vila as a safe and friendly environment.

2.11 Marine Oil Spillages

The transportation, transfer, storage and handling of fuel by vessels in and around the urban centres of Port Vila Bay and Loganville means that there is the potential for marine oil spills to occur which could lead to severe environmental damage.

2.12 Aircraft Accidents

The possibility of an aircraft accident at the airport or elsewhere is considered high due to condition of some airports on the islands. In Port Vila, most landing and take-off paths are directly over residential areas and the local capacity to effectively deal with the impact of a major aircraft emergency is very limited.

2.13 Exotic Disease

Vanuatu's beef has been declared as the best in the region. However, it is important that safety is observed at all times through regulations to ensure, livestock export trade is disease free. An outbreak of an exotic animal disease would cripple the Vanuatu economy. Therefore, all steps must be taken to prevent this from occurring. The Agriculture Department and Live Stock Department are lead agencies in developing Animal Exotic Disaster Response Plan, which all other Government, NGO, private operators play an important role to ensure that exotic diseases do not enter the country.

2.14 Health Epidemics

The people of Vanuatu are also exposed to modern transmitted viruses and pathogens. The Ministry of Health is responsible for the monitoring, detection and treatment of any outbreaks. Due to the high travel needs of our people and the tourist trade, the risk of introduce disease is high.

2.15 Drought

Drought is becoming concern for the communities of Southern Islands and some other smaller islands in the Shepherd Groups. This normally leads to lower production of vegetables, root crops and water shortages causing health problems due to unbalanced diet and sanitation problems. It can also lead to school closures due to food shortages and pupils not attending classes.

Therefore, Agriculture, Water Units, and Health Departments need to educate people who are living in these vulnerable areas to change some cultural practices.

Alternatively the authorities should undertake more technical research and obtain data and information into what further mitigation projects can be under taken to minimize or reduce the risks.

2.16 High rise Sea-Level



Republic of Vanuatu as an Island nation covering 12,189 km² of land mass compared with 450,000 km² of the Pacific Ocean waters is a high risks to most low-lying communities throughout the county. The effect of sea-level rise is giving some signal to some Provincial Authorities. Some communities have been relocated to higher ground due to sea-level rise. It is believed that small island nations will continued to faced the impact of climate change, and Vanuatu is one of the country.

Ongoing and projected natural disaster preparedness related activities within the Republic of Vanuatu.

The Republic of Vanuatu islands has faced a lot of past disasters ranging from cyclones, earthquakes, landslides, flooding, volcanic activities etc. Since this nation is quiet small in size much of the area is covered with ocean waters.

The ongoing natural disaster preparedness related activities in Vanuatu is done in ad-hoc basis. Learning about natural disasters is inherited from our cultural value. However, much of the society is been influenced by foreign culture thus taking away our way of natural preparedness. Now that science and technology takes much power we rely on the information provided by science and technical agencies within the Government of Vanuatu or supported externally. Information provided covers;

- ✚ Hazard and Risk assessment.
- ✚ Risk mapping
- ✚ Developing Hazard Mitigation Plan
- ✚ Appropriate policies, legislation and decision making arrangement in place.
- ✚ Application of Comprehensive Hazard and Risk Management tool in development planning and decision making process.
- ✚ Application of standard building codes.
- ✚ Mainstreaming Disaster Risk Reduction and Disaster Management into sector plans and budgetary process.

- ✚ Development of National Disaster Risk Management Arrangement to address Disaster Risk Management at national and Provincial level.
- ✚ Development of Disaster Risk Management Training program.
- ✚ Conduct exercises to test plans.
- ✚ Development of Sector Disaster Response Plans and Standing Operational Procedures .
- ✚ Development of Specific Hazard Response plan
- ✚ Develop and conduct Education and Awareness for (public/sectors/schools).
- ✚ School visitations and presentations.
- ✚ Visitations and discussions held at the local community level society.
- ✚ Promoting and establishing partnership programs with government sectors, scientists, NGOs , private industries and community at large.
- ✚ Promoting whole of country and whole of government policy application in dealing with Disaster Risk Management.
- ✚ Promoting traditional knowledge and practices in Disaster Risk Management business in Vanuatu.
- ✚ Developing and appropriate early warning system for the communities.
- ✚ Monitoring capability and system in place.
- ✚ Improving communication infrastructure coverage throughout the country.
- ✚ Mapping of National available resources and availability.
- ✚ Promoting community participation through partnership program with community NGO agencies such as Vanuatu Red Cross Society, World Vision, US Peace Corps etc..

Situational Analysis

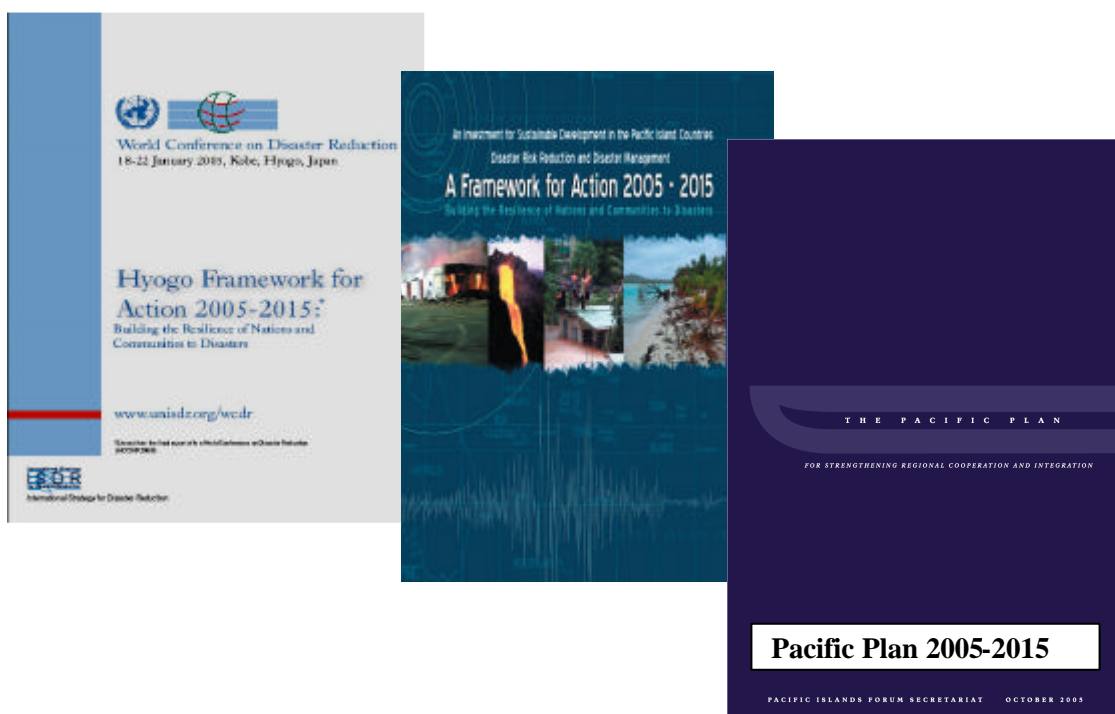
Republic of Vanuatu vulnerability of local communities to disastrous events is increasing not only due to increases in disaster events and also because of population growth and changing lifestyle but from largely subsistence to a more market based living with increased accumulation of material goods, 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 Disaster Risk Reduction & Disaster Management (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 operationalizing 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.

Global and Regional Drivers

As mentioned above, Republic of Vanuatu is not alone. Since we are one of the small island developing state being affected by natural disasters and prone to many more, we welcome Hyogo Framework for Action 2005-2015 to have posed for safe, secure and resilient island communities. This has been one of the strong global drivers calling all UN communities to adapt *Building the Resilient of Nations*.



National Drivers of the Development of National Action Plan on Disaster Risk Reduction and Disaster Management 2006-2016.

Vanuatu Government realized the Disaster Management had been one of the least priorities within the National Priorities consideration for the past 26th years of independence. Until November 2006, when the Hon Prime Minister made the political commitment and accept Disaster Risk Management as a developmental issue and included as a Supplementary into the National Priority Action Agenda 2006-20016. After the Hyogo Framework for Action, the Regional Framework was adapted by Pacific Forum Leaders. Once the Regional Framework was adapted the National Government included Disaster Risk Reduction and Disaster Management into the National Priority Action Agenda which later underpin the 10 years National Action Plan on DRR and DM 2006-2016.

Below are the national drivers for the Action Plan as approved by the government.

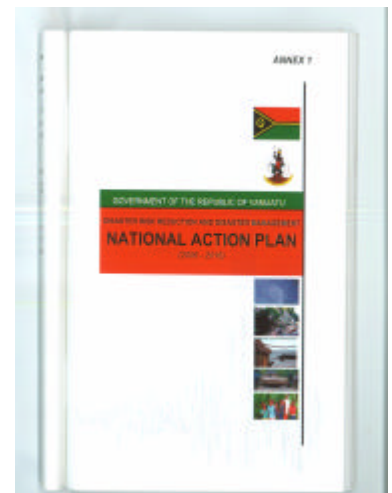


Table 3: below is the overall outcome of where and how Vanuatu would want to go forward in ensuring there is safety, security and resilience to disasters in Vanuatu. These strategies has been adapted and included in the National Priority Action Agenda police for 2006-2016. And this is what Vanuatu as a whole is in the process of implementing within the next ten years or so.

Note that this is the National Government strategies that is expected to be mainstream into all sector of the government, NGOs, private and community in general.

Table 3: Issues and Concern NAP Themes and Strategies

Issue and Concerns	NAP Themes	NAP Strategies
Governance, Policy and Decision Making Context	I. Governance and Policy Context II. Mainstreaming DRR&DM into national planning and budgetary process	1. Strengthen national policy, legislative, organisational and decision making arrangements for coordinated and effective DRR and DM 2 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	VII. Monitoring, Evaluation and Reporting	9. Strengthen monitoring and evaluation of Vanuatu's efforts to ensure progress and improvements in risk

Management		reduction, preparedness, response and recovery against disasters.
Sustained Commitments	VIII. Implementation of National Action Plan	10. Implement the DRR&DM National Action Plan

Women's Role in Disaster Risk Management (Preparing for Disaster)

At the local level, women in Vanuatu are playing an important role in preparing for disaster and transmitting traditional knowledge of coping strategies to the young especially a family unit. In Tanna island, for example, women do the work of providing livelihoods and are the posers of knowledge. It is essential that women be involved in planning preparedness strategies. This is happening in some strong traditional based communities in the country. A way of reducing risks is found at the very remote communities where there are limited government services in terms of modernization.

Traditionally, women's role in Vanuatu society is seen to be caring for a home. And this includes family unit and well being as the first to provide comfort, assurance and survival using her traditional knowledge and practices in times of disasters. This is a *live skill* education system based on our traditional value which can form part of disaster risk reduction curricular at the early age.

Often times women and children are left on other islands whilst the father moved to urban city to find employments to support their family. So women are separated from their husband, which of cause put a lot of responsibility in caring for the family whilst husband is away. In good and disaster times, women will always be on demand to ensure she sustains family welfare. Therefore, in terms of disaster preparedness she applies all she can to ensure there is safe and secure environment for her family.

The Department of Culture has an is currently involve in "*Women's Culture Program*". This program established "*Women Field Workers*" who represent an island or a community mainly at the rural settings. These Women Field Workers are the link from where they are to the Department of Culture. The Cultural Women Program covers:

- ✚ Traditional practices on Food processing and security.
- ✚ Traditional knowledge and skills in building Strong traditional structured houses.
- ✚ Promote traditional healthy food for healthy kids.
- ✚ Protecting and re-promoting local languages and are on going throughout the country.

These Women Field Workers work in collaboration with respective traditional Chiefs network conduct joint consultation on issues relating to culture and traditional issues of sustain value to the country in the future. Vanuatu Department of Culture is aware of western influence which brings a lot changes in culture and life style thus reducing wealth of cultural value. Mothers are concern since technology is

expensive and is not known by whole population, therefore, Vanuatu need to maintain and protect these cultural value that the future generation can be able to be apply in good and disaster times.



Traditional collapse house – TC Funa 2008 (photo by Job Esau)

Re-promoting of traditional disaster coping mechanism is included in the National Action Plan as one of the activity under “*Research of and document traditional wisdom and practices*”. The outcome will be used as data bank of information tools to support disaster risk reduction integrated approach into schools curriculum development. This would be the only option of long term sustain benefit for such a small island nation.

School Disaster Risk Reduction program

The Ministry of Education who is also responsible for education and curriculum development they have developed, *Vanuatu Education Sector Strategy 2007-2016 (VESS)*. Having looked through VESS document, there is no clear mentioned of safety, security and promoting resilient to disasters in schools and communities. This particular statement could be part of School Outcomes at the end of Basic Education under the *quality of LIFE SKILL*. In this section, school safety program can be introduce into teachers and students curricular.



Magam School (Photo taken by Mr Job ESAU



--- Santo East photo taken during WDRD Oct 2007

It is our belief that students will of cause play an important role in disaster risk reduction personally as well as educating their families and communities at large. Noting that most students comes from very remote and isolated communities all around the Republic of Vanuatu.

Integrating Disaster preparedness in school curriculum program it would reduce number of casualties, loose of live and promote awareness and resilient at the community base as well as in schools.

Secondly, students will grow mature in looking after themselves and in future consider safety in live and protection of property and development is important.

Some of these students will become normal fathers and mothers with kids, professional employees in different field such as architect, development planners, teachers, government officials, decision makers at different level, business men and women. Having a change of mind focusing on safety, security and resilient at the early age would bring about a change of mind-set in decision making and policy makers.

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:

- 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 considerations of risk reduction opportunities in a holistic manner and as an integral element of development planning
- a lack of government policy, organizational structures and legislative framework to underpin DRR&DM in a holistic, coordinated and programmatic manner
- 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
- a lack of, or inadequate, quality information about hazards and vulnerability available to all levels of sectors and decision-makers
- disaster risk management is has been regarded as the work of a single agency (National Disaster Management Office) alone.
- That there is no disasters so why concentrate on this issue now.
- We will act when there is a disaster (a reactive approach mentality)
- Disaster in Vanuatu is cyclone only..

Although the Vanuatu Government has developed a ten year National Action Plan on Disaster Risk Reduction Disaster Management 2006-2016, sectors including the Ministry of Education is yet to integrate Disaster Risk Reduction and Disaster Management into their education policy and plan.

However, the Ministry of Education is currently reviewing its education and curriculum policy which the initiative could be introduce to allow for some actions to be undertaken this program in Vanuatu.

Stock of work currently being pursued by various entities such as NGOs, community-based organizations and research institutions

There are a number of NGO in country who have specific scope of work. Most do not have School preparedness program. The only NGOs that engaged in support of government disaster response and relief programs are;

- ✚ World Vision
- ✚ US Peace Corps.
- ✚ ADRA (Seventh Day Adventist)
- ✚ Vanuatu Red Cross Society
- ✚ Caritas Vanautu
- ✚ Jean Vancent De' Paul

Out of the above a few community awareness program and Community Base Disaster Management training has been conducted in collaborations with World Vision, US Peace Corps and Vanuatu Red Cross Society. These program does not target schools but community in general.

The subject of school safety and disaster preparedness program is delivered as an awareness activity only, which is coordinated by the National Disaster Risk Management Office and covers only few schools. This awareness program continuity depends much on availability of funds under the National Disaster Risk Management Office.



Vanuatu also takes part in World Disaster Reduction Day campaign October each year. The above photo was taken during the launching of 2007 WDRD. The program was led by the Vanuatu Mobile Force Band and school students whom the program was targeted in the northern region of Vanuatu.

Table 4: National Government Awareness Agencies

Name of agency Delivering information	Related awareness information
National Disaster Risk Management Office	Policy and legislation National arrangement Standing operation Procedures Action to take before, during and after a hazard impacts. Community early warning system
Geo-hazard unit	All Hazard and risk information Level of alerts What to do during different alerts level. How to prevent from harming. How volcano is form Volcanic risks
Water Unit	Safe and quality water for healthy kid. Flood information and precautions Flood prone
Meteorology Department	Weather and climate updates How /why cyclones are form. Cyclone Impact What to do before, during and after a cyclone Cyclone Early warning system and procedures Climate change impacts
Agriculture Department	Local food security Sustainable Farming system Multiple gardening.

	<p>Land use planning in farming</p> <p>Traditional framing system</p> <p>Traditional food security practices</p>
Department of Land	<p>Land use planning and zoning</p> <p>Sustainable Land Management</p>
Live stock Department	<p>Information on Food and mouth disease</p> <p>Animal Diseases</p> <p>Zoonotic diseases</p>
Quarantine Department	<p>Plant and animal diseases</p> <p>Pest and invasive species</p>
Department of Public Health	<p>Information on Avian Influenza</p> <p>Health Response plan/procedures</p> <p>Safe sex</p> <p>Other youth related health diseases and preventions</p> <p>First Aid program</p>
Police Department	<p>Information on basic Law.</p> <p>Powers of Police</p> <p>Crime preventions</p> <p>Good citizens</p>
Environment Unit	<p>Environment protection</p> <p>Environmental conservation</p> <p>Environment and human safe program activity</p> <p>Environmental Impact Assessment Process.</p>
Department of Lands	<p>Earthquake zones</p> <p>GIS mapping and Modeling</p> <p>Hazard mapping</p> <p>Land use planning</p>

Department of Public Works	Structural engineering and designs National Building Code/Manual Road safety
Fire Service Section	Fire Hazards and impacts Fire safety Use of basic fire equipment. What to do when there is a fire Demonstration and Fire Drill Rescue procedures and information Fire Rescue equipment and demonstration
Department of Cultural Centre	Traditional Food Security and process. Traditional Cyclone proof building Traditional healthy kids program Traditional language

The organizational structure of government bodies overseeing disaster management

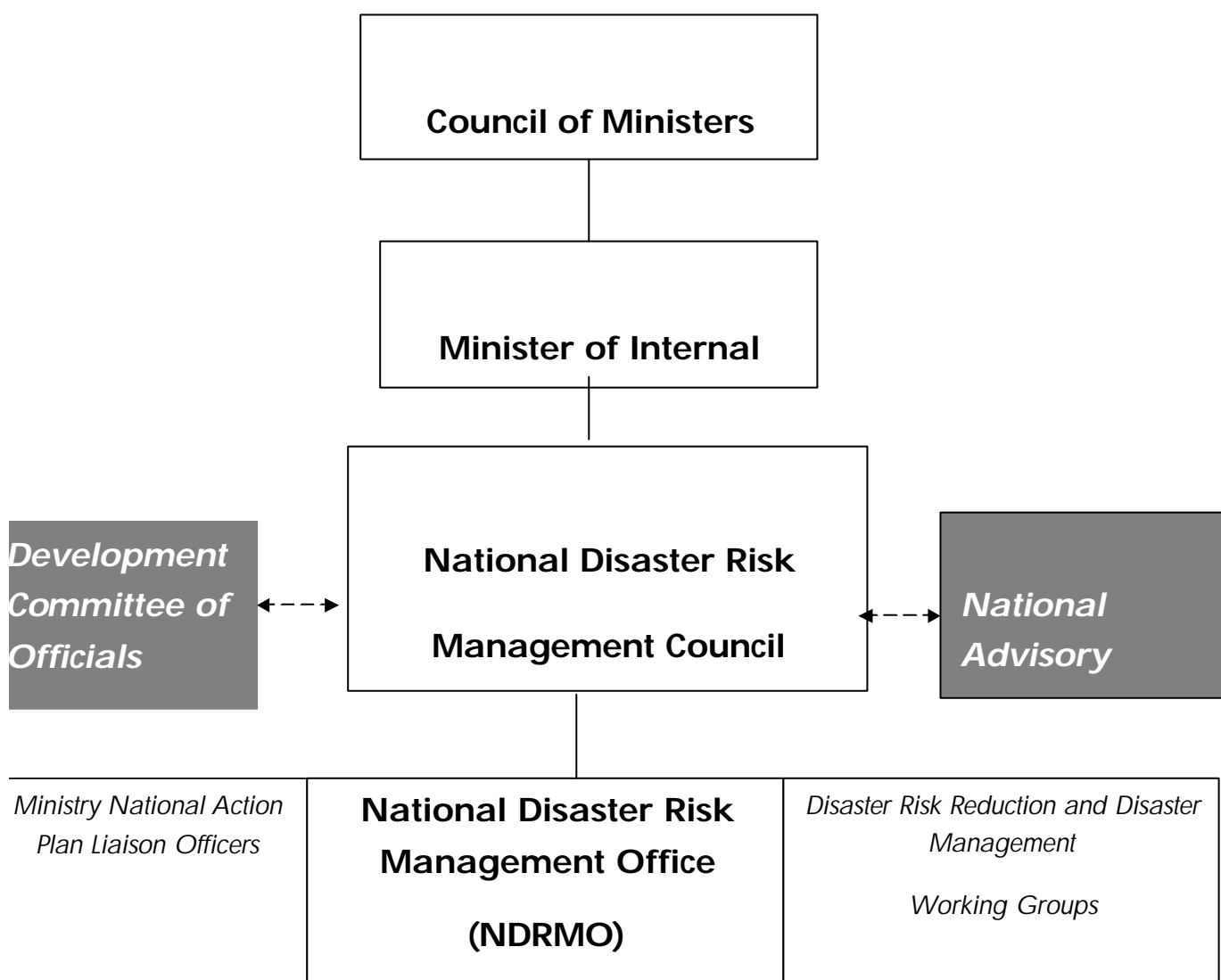
It is widely felt that there is a need for a smaller executive style National Disaster Risk Management Council (NDRMC) to provide policy advice to the Minister of Internal Affairs and strategic direction and guidance to the (NDRMO). To support the work of NDRMC designated Working Groups are to be established as required specifically to translate policy direction into action planning and implementation. These groups are to be established at the discretion of the NDRMC and link closely with the NDRMO and other stakeholders.

The organisational structure for these arrangements is designed to ensure that there is a close relationship between the NDRMC and the National Advisory Climate Change Committee (NACCC) to ensure consistency of purpose for both of these national priorities. The NDRMC will also develop strong links with the Development Committee of Officials (NDC) that consists of key representatives of the responsible agencies for the implementation of the NAP.

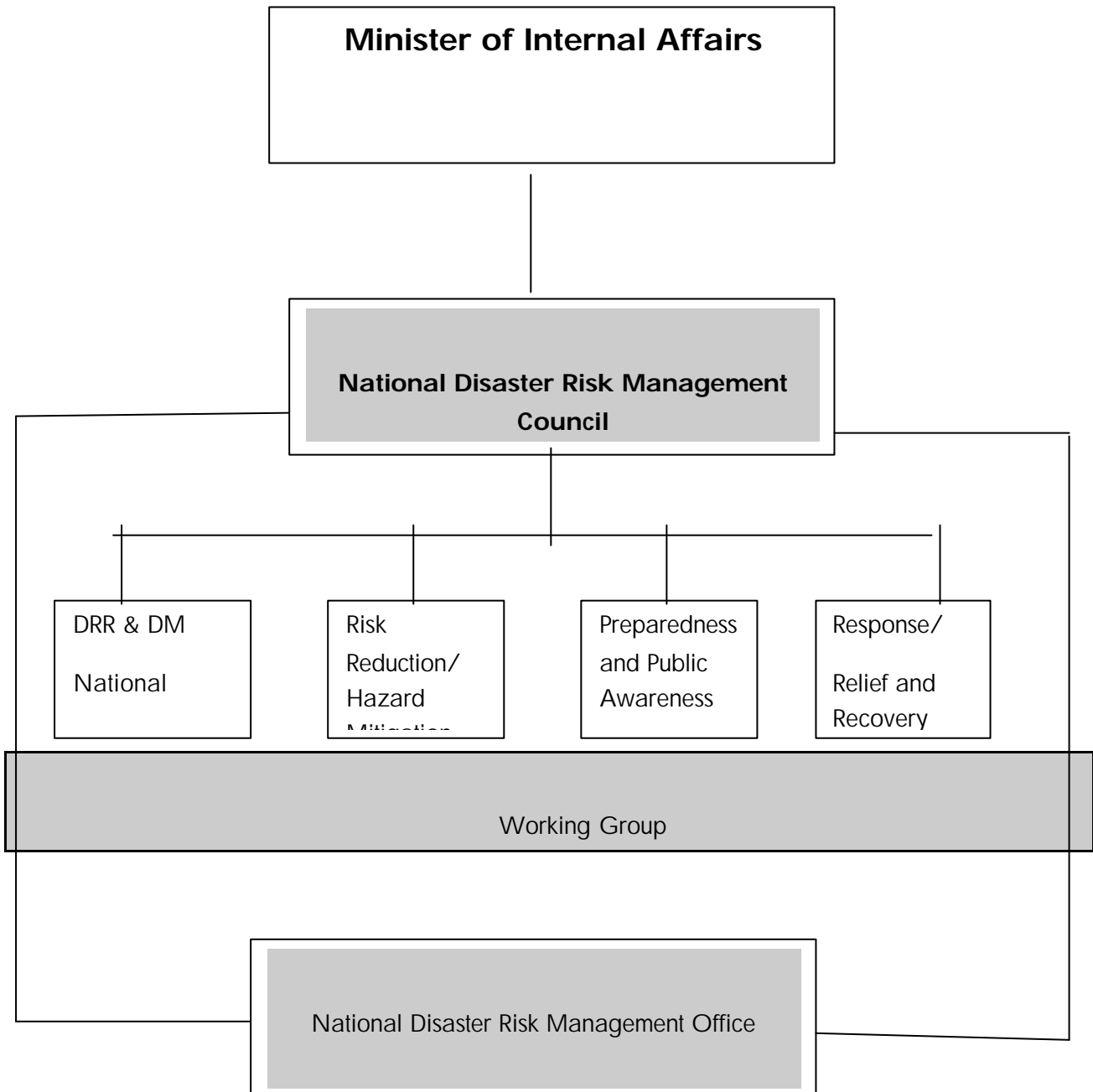
In order to achieve the ‘all hazards’, integrated, whole of government and whole of government approach that is now part of government policy it is felt that all aspects of the disaster risk reduction and disaster management process including the overall direction and guidance of these arrangements and monitoring

and reporting on the implementation of the National Action Plan should be coordinated through one Ministry.

National Disaster Risk Reduction and Disaster Management Organizational Structure



National Disaster Council



Vanuatu Disaster Risk Management

The history of disaster management was known to be responding to cyclone alone and it was based on humanitarian relief aspect only. No one was worrying about risks. Government and community did not take note of preparedness, prevention, mitigation were as important to sustainable development planning and decision making. Therefore, a Reactive Approach policy was the only strategy in place.

As time passes by where Yokohama Strategy was put in place by UN under the IDNDR Decade, which slowly paved the way through the Hyogo Framework, down to Regional Framework and Pacific Plan that actually introduced this proactive model which Vanuatu now adopts.

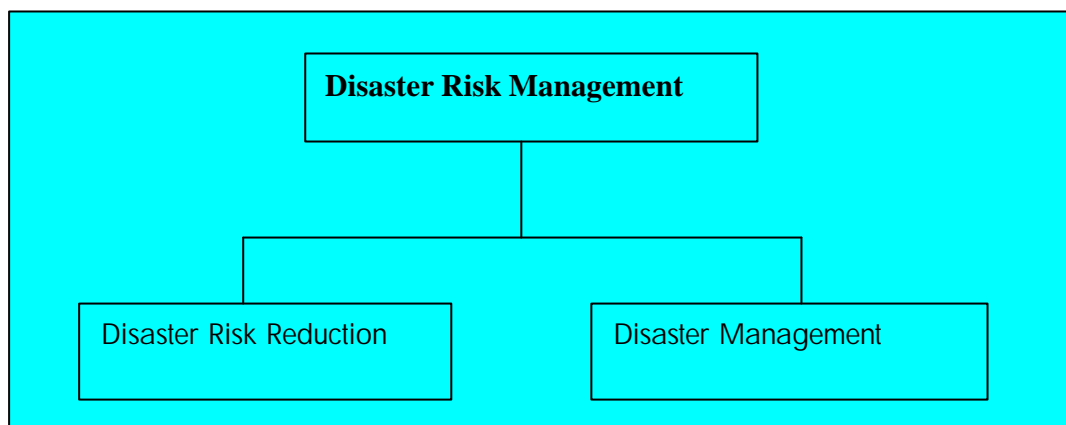
Disaster Risk Management Cycle



The Disaster Risk Management Model

The disaster risk management model that supports these national arrangements provides for an 'all hazards' and integrated approach that embraces all aspects of the disaster risk reduction and disaster management process and requires the commitment of all levels of civil society to engage in the conscious management of risk as an ongoing process to strengthen resilience and reduce vulnerability to hazards.

The Disaster Risk Management Model



Successful implementation of the Disaster Risk Management Model requires:

- Collaborative and coordinated decision making for all aspects of disaster risk reduction (prevention, mitigation and adaptation) and disaster management (preparedness, response, relief and recovery) across all levels and all sectors of government.
- Integration of national, provincial, island, area and community disaster risk reduction and disaster management arrangements.
- Understanding of roles and responsibilities by all stakeholders.
- Involvement and commitment of members of designated committees and working groups.
- Defined and prioritized hazard mitigation plans.
- Application of appropriate hazard analysis and vulnerability assessment tools.
- Development and testing of response plans for all hazards, which are determined to have the potential to become national disasters.
- Command, control and coordination systems.
- Appropriate contingency/support plans and standard operating procedures are developed by sector. And this implies that the Ministry of Education in Vanuatu must develop the Ministry Disaster Response plans addressing different hazard impacts.
- Effective early warning and communication systems.
- Schools awareness and preparedness programmes.
- Relief and recovery programmes support to schools.
- Collaboration and coordination between national government and national and regional partners.

Disaster Management

(Preparedness, Response, Relief and Recovery)

The aim of disaster management is to strengthen the resilience of the nation and its communities to national disasters through the development of effective preparedness, response, relief and recovery programmes and activities. This will require the preparation, review and testing of specific hazard response plans and procedures in order to protect and preserve life, property and essential infrastructure from the potential and actual impact of a disaster.

It also includes contingency or support plans and procedures for all government departments, sectors and agencies to ensure effective response and business continuity during and following national disasters. This requires the undertaking of specific actions, which will ensure an effective response to a given threat and that measures are in place that will lead to the protection of lives, property, major assets and important documents.

The NDRMO is responsible for the coordination and implementation of preparedness, response and the immediate relief disaster management arrangements working closely with all stakeholders to ensure that organizations and communities are aware of potential hazards and prepared to effectively respond.

This requires the coordination of the preparation, review and testing of all disaster related plans and procedures in order to protect life, property and essential infrastructure, which is the fabric of society in Vanuatu.

Effective disaster preparedness activities of course are designed to ensure that vulnerable communities including schools have the knowledge and understanding of the hazards and risks to which they may be exposed in order to strengthen their levels of resilience. The resources and systems needed to cope with the effects of a disaster should also be maintained in a state of readiness in order for them to be efficiently mobilized and deployed when needed. This is where schools safety program is needed. Although some schools have developed safety within a school institution instruction is just another ad-hoc approach. This initiative is taken by few teachers and principals to try to promote school safety and security. There is more than just one school, because it has to become a policy issue so that there can be commitment by all to oversee disaster risk reduction and disaster management as a strong life skill subject in preparing the kid to face future disasters wherever they are.

Disaster Response Functions and Roles

Table 5: Details of response functions and agencies roles only.

RESPONSE FUNCTION	LEAD AGENCY	ROLE	SUPPORT AGENCY/S	ROLE
Health and Medical				
First Aid	Ministry of Health	Coordinating the initial response	Police, Fire and Red Cross	Assist as Required
Transport and movement of casualties	Ministry of Health	Coordinating and providing ambulance services	Police, Fire and Red Cross	Assist as Required
Medical Treatment	Ministry of Health	Providing medical practitioners and hospital facilities	Police, Fire and Red Cross	Assist as Required
Public Health	Ministry of Health	Developing prevention activities and raising public awareness	Red Cross and NGOs	Assist as Required
Management of Deceased Victims	Ministry of Health	Coordinating the management of deceased victims	Police and Foreign Affairs	Disaster Victim Identification Coroner services Repatriation
Mortuary Services	Ministry of Health	Processing and storage	Police and Foreign Affairs	Storage of deceased persons
Counseling and Support	Church	Providing counseling services	Community Leaders	Assist as Required
Fire and Rescue				

Fire Suppression	Fire Service	Coordinating and providing fire suppression services	Police, Water, Health and Community	Assist as Required
Motor Vehicle Rescue	Fire Service	Coordinating and providing motor vehicle rescue services	Police and Health	Assist as Required
Urban Search & Rescue (e.g. structural collapse)	Fire Service	Coordinating and providing initial search and rescue services	Police, Health and Community	Assist as Required
Maritime search & rescue (e.g. vessels, aircraft at sea)	Maritime Authority	Coordinating and conducting search and rescue	Police & Community	Assist as Required
Land Search & Rescue	Police Service	Coordinating and carrying out Search and Rescue	Fire Service, Health and Community	Assist as Required
Evacuation				
Evacuation of people	Police Service	Coordinating and carrying out evacuation and security of property.	Fire Service and Communities	Assist as Required
RESPONSE FUNCTION	LEAD AGENCY	ROLE	SUPPORT AGENCY/S	ROLE
Community Welfare				
Registration of Evacuees	Police Service	Registering evacuees using a prescribed process	Red Cross, Health and NGOs	Assist as Required
Temporary Shelter	Police Service	Coordinating the provision of temporary shelter	Govt. Agencies and Community Leaders	Assist as Required

Emergency Food and Clothing	Police Service	Coordinating the provision of emergency food supplies	Govt Agencies Community and NGOs	Assist as Required
Emergency Finance	Min. for Finance	Coordinating the provision of emergency finance	Community Leaders	Provide funding and setting parameters
Logistics Supply				
Overseas Aid	Ministry of Foreign Affairs	Coordinating emergency external assistance	Min of Finance and Aid Management	Assist as Required
Information Management				
Public Information/Media Liaise	National Disaster Controller	Coordinate the issuing of Public Information and liaison arrangements with the media	Public Information/Media Liaise Officer	To coordinate the representatives of the media and prepare releases for public broadcasts
Enquires about affected people	Police Service	Responding to local and international enquires.	Media Liaison Officer	Assist with enquires regarding affected people
Communications between response agencies	National Disaster Controller	Ensuring there is effective communications links between all responding agencies.	NDRMO and all response agencies	Assist with communications between responding agencies
Impact Assessment				
Initial Damage and	Central Control	Coordinating tasks on	Trained Assessors from various	Provide initial damage and needs assessment

Needs Assessment	Group	behalf of the NDC	agencies and UNDAC if required	reports
Building evacuations	Police Service	Coordinating the safe evacuation of buildings	Fire Service	Assist as Required
Utility services impacts	UNELO	Provision of information on impacts on water and power supplies	Police, Fire and communities	Assist as Required
Assess impacts – roads	Public Works	Provision of information on road damage and access.	Police and Communities	Assist as Required
Assess restoration – Air Travel	Civil Aviation Authority	Provision of information on the safety of air travel and the airport.	Airport Fire Service	Assist as Required
RESPONSE FUNCTION	LEAD AGENCY	ROLE	SUPPORT AGENCY/S	ROLE
Impact Assessment				
Assess restoration – marine	Maritime Authority	Providing information on the safety of marine travel and the seaports.	Port Authority	Assist as Required
Environmental impact	Environmental Unit	Providing information on the environmental impact	Other Sectors	Assist as Required
Chemical/Toxic spill cleanup – Land	Fire Service	Coordinate the clean up of toxic substances on land	Other Sectors including Private Sector	Assist as Required
Chemical/Toxic spill clean up - Sea	Maritime Authority	Coordinate the clean up of toxic substances affecting the marine environment	Port Authority and Oil and Gas Companies	Assist as Required

Policy Objectives

Republic of Vanuatu after Hyogo Framework, the Regional Disaster Risk Reduction Framework together with the Pacific Plan now realize that 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"

The objectives of the current National Action Plan on Disaster Risk Reduction and Disaster Management 2006-2016, which provides a detailed program of action for addressing the national priorities on Disaster Risk Reduction & Disaster Management. The policy objectives for Disaster Risk Reduction & Disaster Management under the PAA are to:

- Recognize 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 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 organizational 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 programs of all Ministries and departments and all levels of government in order to assist communities reduce the risks and vulnerability to disasters;
- Recognise 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 public – private **sector partnerships** ;

- Promote **knowledge based** decision-making, including **traditional** knowledge and know-how about disaster risk reduction and coping mechanism in times of disasters; and
- Provide for a **sustained**, coordinated and **harmonised** support form regional organisations and development partners.

Current situation of disaster management in schools in terms of curriculum as well as response mechanisms and school building structures

Over 500 schools, 797 kindergartens, and several national institutions are under the leadership of school committees, councils and the support of parent-teacher associations, education services covering 65,000 students throughout Vanuatu.

Different schools are build either with local materials, semi-permanent or permanent as shown below.



The Ministry of Education has outlined three category of student outcome as follows:

- ✚ Basic Education (Year 1-8 levels)
- ✚ Secondary level education (Year 9-12 level)
- ✚ Higher Education (Year 13-

Out of the above, Basic Education level is appropriate to start disaster risk management knowledge base which involve Year 1-8. As part of one of outcome at the end of Year 8, the student will have *life skill* in

- ✚ Traditional knowledge and skill
- ✚ Health and nutrition

- ✚ Basic self-confidence and discipline
- ✚ Practical skills for sustainable development and rural living including food security
- ✚ Enterprise skills for generating and managing money.

Disaster Risk management could be added to the above list as it is cross cutting skill which need to be part of this outcome.

School Disaster Risk Management Curriculum

Vanuatu has no existing policy on Disaster Risk management curriculum within the Ministry of Education Curriculum Development program. The only policy that is driving whole of country and whole of government approach in disaster risk management in Vanuatu is mainstreaming Disaster Risk Reduction and Disaster Management into all sector as reflected in the National Action Plan on Disaster Risk Reduction and Disaster Management 2006-2016. This is where the Ministry of Education would include disaster risk management curriculum included in students curricular and teachers curricular.

Students are taught about cyclone, volcano, earthquakes and landslides as part of other subjects such as geography and environment at grade 5-6. Otherwise, no curriculum on disaster risk management to allow the students to build their live skills for the purpose of independency, self-reliance and practical skills in applying risk reduction measurers to improve the *safety, security and resilient of their communities*.



Most schools in Vanuatu are located in remote locality where the students need to be taught on these hazards, risks and what to do when these hazards do occurred. Changing their mind-set at the early age is very important.

Speaking of disaster risk reduction and Disaster Management curriculum in schools, current teachers curriculum do not have DRR and DM curricula. Therefore, teachers are unable to teach this subject. If Vanuatu Ministry of Education integrate disaster preparedness into school curricular it would include teachers disaster preparedness curricular as well.

Schools Disaster Response Plans

As mentioned earlier on that there are 500 schools that spreads across the entire country. Some of these schools are located in high risk locality, for example, close to an active volcano, in a high seismic zone, close to big river and subjected to storm surge and tsunami, low lying and flood prone.

According to our research, no schools has a disaster plan. Ad-hoc arrangement are done as soon as there is a disaster impacts. Therefore, this is an important program for all schools in Vanuatu to have disaster plans so that they can be prepare to response accordingly to certain disasters. In times of disaster both students and teachers depend on the information issued by the National Disaster Management Office which only allows them to build the reactive attitude rather than to be no proactive.

Some Principals and Teachers had taken the initiative to develop “A Safety within a School Institution Instruction” This instruction covers four elements:

- ✚ Hazard and Risk Assessment of Physical Environment of School sites for new schools.
- ✚ School Social and behavioral environment
- ✚ Health and safety services
- ✚ School Health Policy

Apart from this initiative, which did not proceed as desired but has some information which the Education Department could build on. The Principals and Teachers are now being alarm of continuous disaster impacts on schools structure and students in the Asian region and other parts of the world. There is a strong desire to underpin Disaster Risk Reduction and Disaster Management integrated into both school and teacher’s curricular.

Safe, School Building Structure

School constructions in Vanuatu are differ depending on what type of school it is. There is no school building construction standards in Vanuatu. Permanent schools built so far are funded externally, therefore the contractor apply foreign building standards. There is lack of certain building standards code in place at the moment. In most cases building are build according to Australian and New Zealand standards here in Vanuatu. However, Vanuatu has a National Building Code but it has not yet been enacted by the National Parliament yet. However, the Ministry of Education has developed School Maintenance Policy on how to care and manage

school building. There is no clear mentioned of safety and security on education planning and policy.



Stone local built classroom Malo English school



EU project built classroom– permanent

The School Maintenance Policy is developed with the notion of "prevention is better than cure" of which all parties involved must be informed and encouraged to involve, as it will guarantee the longevity of all School buildings.

Building and building maintenance are separate issues faced by the Ministry of Education and it requires a lot of attention when the government at large is promoting policies of access and quality of education. Building maintenance in particular is a national burden which to a larger extent community involvement is heavily relied upon for primary school buildings in particular.

Currently maintenance of buildings is funded by individual schools through annual grants to schools which continues to decline annually and through other sources such as the school fundraisings. Primary school buildings in particular are maintained fully with community support. However given the limited and declining availability of natural resources such as wood and funds, schools and community support tend to lack in some areas therefore buildings maintenance becomes more costly.

The Ministry of Education (MOE) or schools have three main categories of buildings; Permanent Buildings, semi-permanent and temporary buildings.

- a. **Permanent buildings** – Are built entirely of concrete blocks, iron and timber. Most permanent buildings are constructed through funded projects and account for 35 percent of total government school buildings. In the 2007 school survey, 4.30 percent of permanent buildings were recorded to be in poor condition. Permanent built classrooms are build by different contractors using different building codes. Most permanent classrooms built in the country are funded by EU.



Another section of Lycee School is a double classroom
Is an old building that is not safe during earthquake..



Rebuilt Lycee School after 2000 earthquak

- b. **Semi permanent buildings** – Are buildings constructed from a mixture permanent and temporary materials and these buildings made up 30 percent of government school buildings. These buildings are sometimes jointly funded by the government and communities. In the 2007 school survey, 28 percent of semi-permanent buildings were recorded to be in poor condition.



Semi-permanent double classroom in Port Olry.

- c. **Temporary buildings** – Are buildings of local materials including wood, bamboo and thatched materials (Natangura leaves, coconut leaves, etc.). They account for 32 percent of overall school buildings. In the 2007 school survey, 68 percent of semi-permanent buildings were recorded to be in poor condition.

Ministry of Education Key Challenges in Disaster Risk Reduction and Disaster Management

The perception of Disaster Risk Reduction and Disaster Management within the context of Education development is not the priority of the Ministry due to the following challenges:

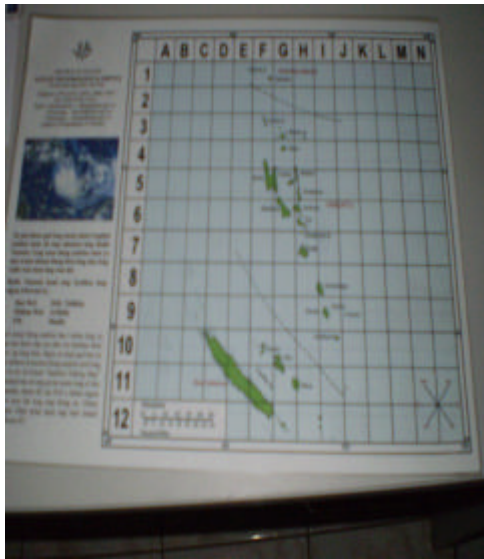
- ✚ That Disaster Risk Reduction and Disaster Management is always the responsibility of National Disaster Risk Management Office to talk about .
- ✚ Teachers have limited understanding of natural hazards, their risks and what action to take before, during and after a hazard impact.

- ✚ Since it is not included in the Education /Curriculum policy it is a matter to only react when there is a disaster.
- ✚ DRR and DM not included in education and teachers curricular due to no policy /legislation to drive it into school program development.
- ✚ There is limited ad-hoc awareness program with limited involvement of Education Authorities, Teachers and students in school safety program.
- ✚ Ministry of Education do not have in place School Disaster Preparedness and Response Plan. Sometimes it is quiet confusion in coordination of disaster and emergency program in school.
- ✚ Remoteness of schools in Vanuatu faced further challenge in limited or difficulty in communication coverage.
- ✚ Management of schools come under different bodies such as Government, Churches, Private, Communities/Parents Association.
- ✚ School safe construction is not consider important, as long as there is a roof, therefore, they cannot withstand different hazards impacts.
- ✚ Apart from schools construction, the teachers house faced the same challenge.
- ✚ Limited involvement of students and teachers in disaster awareness program.

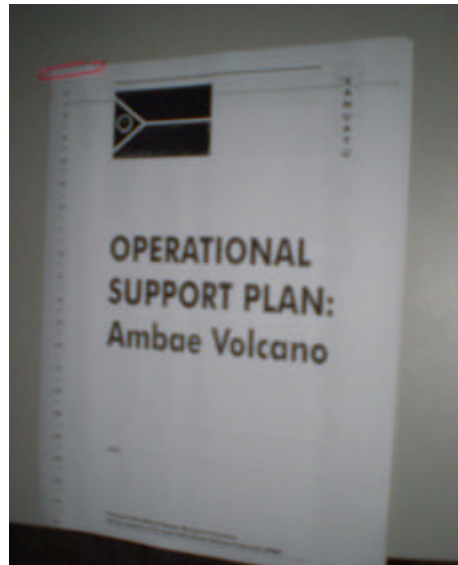
Educational materials

Vanuatu Government has developed some materials used for learning purposes as well as policy documents. Some are identified as awareness materials, others are plans and procedures before, during and after a disaster. Assistance are provided by other NGOs and private institutions who are now thinking of raising awareness and knowledge amongst children and communities throughout Vanuatu.

- ✚ *Cyclone Tracking Map: A Cyclone Tracking Map is developed and used during cyclones. It produce an easy tracking of cyclone movement and direction throughout the country. This cyclone tracking map is publishes and used by every citizen of Vanuatu.*



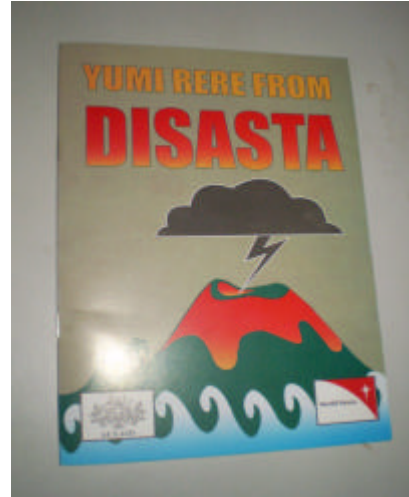
Cyclone Tracking Map



Volcano Support Plan

- ✚ Meteorology Cyclone Guide : *A booklet that has general information about tropical cyclone Advisory System practiced in Vanuatu and a guide to cyclone preparation.*

Cyclone Guide and Disaster Preparedness Guide



- ✚ Effective Cyclone Preparedness: *Effective Cyclone preparedness provide helpful Hints for homes. It covers what is cyclones, pre -season preparedness, During cyclone season, when a cyclone threatens the country*



Actions to take in times of cyclone, Floods and Earthquakes

- ✚ Cyclone color coded early warning: *A cyclone early warning system of informing level of threats of a cyclone by indicating different colors represent different level of threat and what to do at each level.*

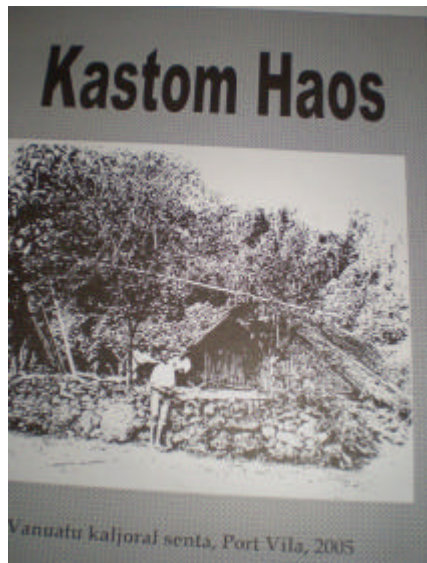


Mothers care for kids in good and disaster times

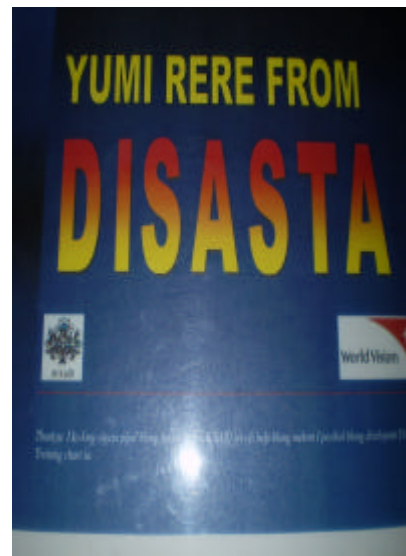


We must be prepare for disaster

- ✚ Hao nao yumi save lanem gudfala fasin long ol pikinini blong yumi: *How parent can care for their kids so that the kids can feel good about it and learn to become better citizen of Vanuatu.*
- ✚ Safety within a school institution: *Safety instructions covering risk assessment of physical environment of a school. The health of kids. Hazards and what to do when there is earthquakes etc in school.*
- ✚ Saeklon Sisen Jek list: *(translated in our National Language) A check list on what the Chiefs and Leaders in a community must follow before, during and after cyclone impact.*
- ✚ Yumi Rere Disaster booklet: *A booklet that has some disaster risk management terminology with their definition written in Vanuatu National Language. It also covers community preparedness and response system.*

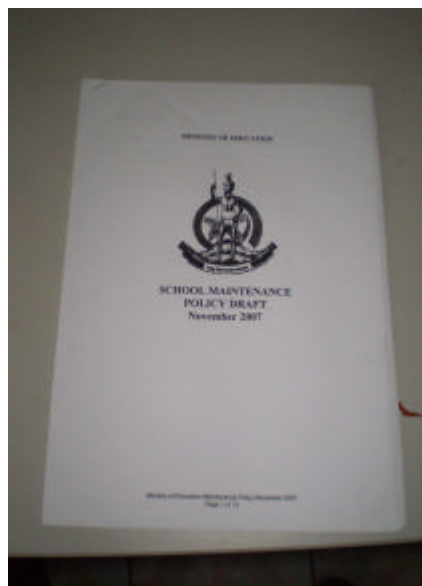


Traditional House

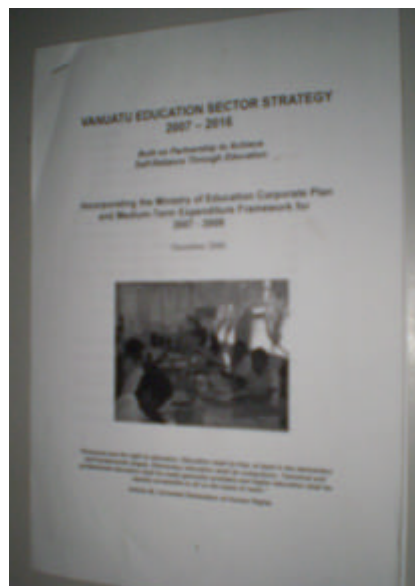


Local language instruction

- ✚ School Maintenance Policy Nov 2007: *School Maintenance Policy is developed with the notion of “Prevention is better than Cure” of which all parties involved must be informed and encouraged to involve, as it will guarantee the longevity of all School Buildings.*
- ✚ Vanuatu Education Master plan Oct 1999: *A document that sets forth the broad strategy for the development of Education system over the next ten to fifteen years and well beyond that. It envisages a redirection of resources to the “delivery of social services especially in education.*
- ✚ Vanuatu Education Sector Strategy 2007-2016 (VESS):



School Maintenance Policy



Vanuatu Education Sector Strategy

Data collection

References: a directory of contact information and focal points for persons/organizations relevant to ENDP

Table 6: Focal points for persons/organizations relevant to ENDP.

Name	Organization/Unit	Position	Contacts details
Mr. Jim Knox Allonson	Ministry of Education	OIC Vernacular – language community schools.	Tel: 00678-22309
Mr Liku Jimmy	Ministry of Education	Policy and Planning Officer	Tel: 00678-22309
Mr. Antoine Thyna	Ministry of Education	Reviewing Officer	Tel: 00678-22209
Mr Joe Iautim	Ministry of Education	Building construction	Tel: 00678-22309
Ms Leisel Masingaw	Curriculum Development Unit	Curriculum officer	Tel: 00678-23508
Mr. Gideon Jacque	Teachers College	Principal	Tel: 00678-23099

Mr Roy Obed	Curriculum Development Unit	Ministry of Education	Tel: 00678-23508
Mr Kalmele Matai	Curriculum Development Unit	Director	Tel: 00678-23508
Mr. Salesa .	Department of Meteorology	Acting Director	Tel:00678-24686
Mr. Brian.	Climate Change Unit	Secretariat	Tel: 00678-24686
Ms. Esline Garabiti	Geo-Hazard Unit	Senior Officer	Tel: 00678-22907
Ms Rosset Kalmet	Water Unit	Senior Officer	Tel: 00678-22423
Mr. Morris Hurrision	Volcanology/Seismic Section	Senior Officer	Tel: 00678-22907
Mr Avia Bomma	Fire Service Unit	Fire Chief	Tel: 00678-22333
Mr John Mahlon Taleo	Central Police Station	Police commander	Tel: 00678- 22222
	Department of Women's Affairs		
Mr Selwyn Garu	Malvatumauri Council of Chiefs	Secretary	Tel:00678-22474
Mr. Nabong Thompson	Vanuatu Cultural Centre	Production	Tel: 00678-25066
Mr. Simon Boe	World Vision	Director	Tel: 00678-22161
Mr. Augustine Garae	Vanuatu Red Cross Society	Senior officer	Tel: 00678-27418
Mr Kevin George	Vanuatu US Peace Corps	Director	Tel: 00678-26160

Curriculum recommendations and Conclusion

Whilst Vanuatu has already pinned down Hyogo Framework and Regional Disaster Risk Management Framework into the National Priority Action Plan, it requires a lot of ground work to be done by sector. A mainstreaming policy of the government has been approved by the Council of Ministers which needs action through various governments agencies and other stakeholders.

The following are the recommended Disaster Risk Reduction and Disaster Management (DRR & DM) Education Strategies:

Table: Recommended MOE DRR & DM Themes and Strategies

Issue and Concerns	Themes	Strategies
Governance, Policy and Decision Making Context	I. Governance and Policy Context	<p>1. Integrate Disaster Risk Reduction and Disaster Management into Education Policy and legislation and;</p> <p>Develop and strengthen Ministry of Education Disaster Risk Management structure</p>
Institutional, Regulatory and Incentive Mechanisms	II Mainstreaming Disaster Risk Reduction to build safe and secure schools for kids and teachers.	<p>3. Strengthen Ministry of Education organisational arrangements, planning and decision-making processes at national, provincial and in schools levels to mainstream DRR (including prevention, mitigation and adaptation),</p> <p>4. Conduct hazard and risk assessment prior to building a school.</p> <p>5. Ensure schools are build according to schools safety standards.</p> <p>6. Conduct vulnerability and risk mapping for all schools environment.</p> <p>7. Involve students and teachers in development of awareness materials and program.</p> <p>8. Integrate Safe construction policy on schools and school safety program be develop.</p>
	III. Strengthening Disaster Management so that students and teachers can response effectively to any disaster impacts.	<p>9. Develop Education Disaster Plan at National Provincial and school level organisational.</p> <p>10. Develop school safety procedures ie earthquake drill etc.</p> <p>11. Conduct exercises and drills on different hazard impacts.</p>
Traditional and Technical	V. Information, Information Systems	12. Understand hazards, vulnerabilities, and schools at risk (hazardscape) as a basis for disaster risk

Knowledge Management	and Knowledge Management as part of curriculum development.	reduction and disaster management . Develop schools risk mapping. 13. Integrate DRR & DM into schools and Teachers curricular 14. Understanding traditional knowledge and practices in terms of food security, building strong traditional cyclone houses applying traditional early warning system. 15. Encourage and engage students and teachers to research into DRR & DM as part of their knowledge based information.
Capacity Development	VI. Capacity Development	16. Develop teachers curricular and conduct training to deliver DRR and DM in schools. 17. Promote students to teach and educate their parents and communities to become resilient to disasters. 18. Strengthen individual, schools and community capacity in DRR&DM.
Implementation and Adaptive Management	VII. Monitoring, Evaluation and Reporting	19. Strengthen monitoring and evaluation of MOE's efforts to ensure progress and improvements in risk reduction, preparedness, response and recovery against disasters.
Sustained Commitments	VIII. Implementation of MOE strategies on DRR and DM	20. Implement the DRR&DM strategies..

Acknowledgement

On behalf of the National Disaster Management Office, we would like to thank UNESCO who have given us this opportunity to explore the safety and preparedness level of education infrastructure and knowledge in the areas of disaster preparedness and the financial support into putting together this report for the Ministry of Education to adapt for the future mainstreaming Disaster Risk Reduction and Disaster Management into curriculum and management purposes. Thanks to those who have given their input into the development of this report to be made available for use.