



# National Disaster Management Plan

2017 - 2020

Prepared under section 9 of the Disaster and  
Emergency Management Act 2007



## FOREWORD

Samoa is a country at risk of disasters. Its geographic location and volcanic origins leads to both incredible natural beauty, and a susceptibility to natural hazards such as earthquake, tsunami and cyclone. Human induced hazards are also an inevitable threat of a growing nations.

In the last 10 years' progress has been made in relation to disaster risk management. Most notably the Disaster and Emergency Management Act 2007 was enacted, the National Disaster Management plan was created and updated, and a National Action Plan was enabled. Furthermore, Samoa participated in two Hyogo Framework for Action National Progress reviews, developed Coastal Infrastructure Management Plans, installed an Early Warning System along the south coast, and developed a comprehensive Community Disaster and Climate Risk Management program.

The previous NDMP culminated in key achievements for Samoa, most notably:

- (a) further development of the Act;
- (b) development of the National Action Plan;
- (c) participation in two Hyogo Framework for Action (HFA) National Progress reviews;
- (d) development of the Coastal Infrastructure Management Plans (CIMPs) for all coastal districts in Samoa;
- (e) development of the Community Disaster and Climate Risk Management Programme;
- (f) increased attention to DRR in the policies and plans of several core sectors.

As well as progress, many lessons have been learnt, especially in relation to the devastating impacts from the 2009 tsunami and 2012 Tropical Cyclone Evan. Both of these disasters highlighted Samoa's strengths in relation to disaster risk management, and areas which required attention.

I am proud to present the NDMP 2017-2020 which reflects on these lessons and presents a renewed focus on disaster risk reduction and climate change adaptation for Samoa. It champions a focus on mainstreaming of disaster risk management across all sectors, and aims to create a comprehensive guide on disaster risk management policy and operational procedures.

The Disaster Management Office is excited to work closely with all government, civil society, village, international and private partners to face the challenges of disasters together and share the responsibility of decision making through coordinated and sustained collaboration.

**Ulu Bismarck Crawley**

Chairman, Disaster Advisory Committee



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<b>Version Control</b>		
Versions	Date	Person who made the changes
Draft Version 1	February 2017	ACEO DMO and DMO Staff based on internal review
Draft Version 2	7 March 2017	ACEO DMO based on changes from DAC
Final Draft Endorsed by DAC	17 March 2017	ACEO DMO
Final Draft submitted to Cabinet	October 2017	ACEO DMO based on changes from DAC during DAC Meeting 17 march 2017

## 1.1 DEFINITIONS

The following definitions include definitions used in the Act and other concepts have been defined having regard to their use in the context of DRM in Samoa

**“Act”** means the *Disaster Management Act 2007*.

**“Agency”** means any government organisation, non-government organisation, or lifeline utility with a role in disaster management in Samoa.

**“Community plan”** means any plan prepared under Section 13 or 14 of the Act.

**“Declaration of Disaster”** means the activation of the disaster response provisions of the National Disaster Management Plan by the Chairperson of the National Disaster Council in accordance with section 19 of the Act.

**“Disaster”** means a situation –

- (a) that arises from any happening, whether natural or otherwise, including –
  - (i) any naturally occurring event affecting the whole or any part of Samoa;
  - (ii) any fire caused by any means;
  - (iii) any aspect of the safety of a ship or aircraft in Samoa’s territory;
  - (iv) any outbreak or spread of disease affecting humans, plants or animals;
  - (v) the supply of water or the quality of water resources in Samoa;
  - (vi) the breakdown of telecommunications in Samoa or between Samoa and other countries; and
  - (vii) any other emergency event resulting from systems failure, infrastructure failure or human error; and
- (b) which involves threat or danger to human life or health, or to the environment; and
- (c) which might require response agencies to respond under this Act.

**“Disaster Advisory Committee”** means the Disaster Advisory Committee established under section 6 of the *Disaster & Emergency Management Act 2007*.

**“Disaster management”** means all activities undertaken in accordance with the *Disaster & Emergency Management Act 2007* in disaster preparedness and response, and for recovery from disasters.

**“Disaster risk management”** means all activities undertaken in accordance with the Act in relation to disaster risk reduction and for preparedness for disasters and response to and recovery from disaster.

**“Disaster risk reduction”** means all mitigation activities undertaken in accordance with the Act to reduce the risk of hazards.

**“Emergency”** means a situation in any part of Samoa;

- (a) which is more serious than a disaster;
- (b) which could result or has resulted in causing widespread human, property or environmental losses throughout Samoa or in any part of Samoa; and
- (c) which does require a substantial mobilisation and utilisation of Samoa’s resources or exceed the ability of Samoa to cope using its own resources.

**“Environment”** includes the physical features of the surroundings of human beings, including the land, water, atmosphere, climate, sound, odours, tastes, the biological features of animals and plants and the social features of aesthetics.

**“Hazard”** means something that may cause, or contribute substantially to the cause of, a disaster or emergency.

**“Lead Agency”** means the agency that makes sure a particular response function is achieved. During a national scale response, lead agencies report to DAC located in the NEOC.

**“National Emergency Operations Centre”** means a facility approved to be a disaster coordination centre under section 8(1) of the Act.

**“National Disaster Council”** means the National Disaster Council established under section 5 (1) of the *Disaster & Emergency Management Act 2007*.

**“Preparedness”** means any coordinated efforts and processes taken to ensure communities and response agencies know what to do in the event of a disaster, and include without limitation the development of plans and standard operating procedures, issue of warnings, simulations, training and public education.

**“Period of emergency”** means the period during which –

- (a) a proclamation of emergency has effect in accordance with Article 105 of the Constitution; or
- (b) a declaration of disaster has effect in accordance with section 19 of the *Disaster & Emergency Management Act 2007*; or

**“Proclamation of emergency”** means a proclamation declaring a state or emergency made by the Head of State in accordance with Article 105 of the Constitution.

**“Recovery”** means the medium and long term activities undertaken for physical, social, economic and environmental regeneration after a period of emergency.

**“Resilience”** the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions as defined by the United Nations Office for Disaster Risk Reduction.

**“Response”** means actions taken in anticipation of, and immediately after a disaster or emergency to ensure that its effects are minimised and that people affected are given immediate relief and support.

**“Response agency”** means the agencies referred to in Section 11 of the *Disaster & Emergency Management Act 2007*.

**“Response agency plan”** means the plans referred to in Section 12 of the *Disaster & Emergency Management Act 2007*.

**“Risk”** means the likelihood and consequences of a hazard.

**“Support Agency”** means any agency that carries out tasks to help a lead agency do a specific function during a disaster. Support agencies report to the lead agency.

**“Vulnerability”** the conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.



# PART ONE

# 1 INTRODUCTION

The geographic location and physical environment of Samoa makes the country prone to a number of natural and human-induced hazards. Some of these hazards are seasonal, such as tropical cyclones, floods, and droughts. Others are an ever-present threat, such as earthquakes, volcanic eruption, tsunamis, epidemics, industrial hazards, and exotic plant or animal diseases. Samoa is also experiencing an increase in the frequency and severity of disasters. The potential loss due to disasters is set to increase as the impact of climate change continues to unfold. These have had adverse effects on the communities, the economy, infrastructure and the environment, as well as the development priorities of the country.

Previous versions of the National Disaster Management Plan (**NDMP**) has worked towards the expectation that communities are protected from hazards, and that where emergency situations occur, communities will be well served by effective response, relief and recovery arrangements. A holistic approach to Disaster Risk Management (DRM) is now being promoted - aimed at reducing the impacts of and increasing Samoa's resilience to natural and human-induced hazards. The Government of Samoa has taken steps to realise this expectation through prevention, preparedness, response and recovery planning.

Samoa has embraced the Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR), the World Humanitarian Summit Outcome 2016, the implementation of SAMOA Pathway, the United Nations Sustainable Development Goals and relevant regional frameworks and agreements including the Framework for Resilient Development 2017-2030 – An Integrated Approach to Address Climate Change and Disaster Risk Management to strengthen its efforts towards building resilience at local level.

The impact of some disasters can be particularly severe or widespread and exceed the capability of a single ministry or sector. The Samoa NDMP brings together the efforts of government agencies, civil society, villages, private sector, and development partners to deliver coordinated DRM. The NDMP places emphasis on a mainstreamed and multi-sectoral approach to promote disaster resilience in Samoa, focusing on prevention, preparedness, response and recovery. The NDMP aims to be holistic and address all known hazards that Samoa is vulnerable to, taking into account lessons learnt while building on existing systems and practices at different levels. The approach also aims to improve coordination of operational and management procedures.

## 1.1 PURPOSE OF NDMP

The purpose of the NDMP is to provide a policy framework that promotes a whole-of-country and multi-sectoral approach to disaster risk management at a local, national and regional level. It also provides a framework and mechanism to enable a coordinated national response to threats that have the potential to cause a disaster and recovery from the impacts of disasters.

## 1.2 OBJECTIVES

The objectives of the NDMP are:

- Public leadership, coordination, development and implementation activities for improved disaster risk management;
- Mainstreaming of Disaster Risk Management across all sectors including economic, social and infrastructure sectors and from national level to the villages;
- Promote sustainability by raising public awareness of disaster risk management, including a focus on vulnerable population

## 1.3 GUIDING PRINCIPLES

- Risk reduction, disaster preparedness, response and recovery **are the responsibility of all sectors at all levels.**
- **Risk reduction, disaster preparedness, response and recovery are part of the development process.** Building the capacity of sectors in order to reduce the risks from and respond to emergencies requires strong and long-term commitment and sound managerial and technical programmes. Use knowledge innovation and education to build a culture of safety and resilience.
- **An all-hazard approach is essential.** Planning processes, risk assessment and other tools necessary for disaster preparedness, mitigation and response are similar regardless of the nature of the hazard.
- The capacity of the sectors must be enhanced to face all types of major risks, from epidemics, to natural disasters to technological accidents, well known risks to new or emerging threats. This means that this Plan should build on existing expertise and capacity in all relevant departments and programmes as well as outside guidance.
- **Risk reduction, disaster preparedness, response and recovery are the responsibility of all national actors.** At the national level the ministries are the lead agencies which includes among others, the Samoa Red Cross, non-governmental organizations, private sector, communities and donors.
- **All phases of disaster risk management require a multi-sectoral approach.** At the national and local levels, reducing the impact of emergencies, disasters and other crises requires a multi-sectoral outlook. Proper land use management and design of housing or new health facilities may, for instance, contribute most to decreasing mortality and morbidity. The provision of public health services and medical care for example is dependent on the preparedness of other sectors such as: law and order, transport and communications, lifeline services (water/electricity) and public works, search and rescue and fire services, social services and housing, and others.
- At the international level **Samoa will seek the collaboration of international agencies**, especially those with a specific mandate in managing the risks and promoting disaster preparedness at multi-sectoral level such as United Nations Development Programme (UNDP), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the International Strategy for Disaster Reduction (ISDR), UNICEF, international and regional financial institutions donors, the International Red Cross and Red Crescent Movement and relevant non-governmental organizations.
- **Enhance enabling environment for effective governance arrangements.** A tailored governance structure, which is consistent with whole-of-government governance policy, lays a solid foundation for management oversight by focusing capability and effort to efficiently and effectively implement programs and services in Samoa. Such support includes the development of strategies, norms and standards, advocacy and awareness building, capacity building and transfer of knowledge and management skills as well as the provision of technical advice. The structure should also be sufficiently flexible to enable timely responses to new responsibilities and challenges.

## 1.4 STRUCTURE OF THE PLAN

The plan has two sections: **Part 1** is made up of the national disaster management plan that provides an all hazard framework for disaster risk management planning in Samoa. **Part 2** is the Disaster Response Operational Procedures that guide stakeholders in response.

The essential elements provided for by the NDMP include:

- An effective overall management structure;

- Clearly defined disaster management functions, roles and responsibilities
- An effective focal point for the management of programmes
- Strengthening of the DRM programme support and co-ordination mechanism through the National DRR Platform
- Effective control and co-ordination systems
- Effective communications
- Effective warning, activation and community alerting systems
- Realistic and effective operational procedures
- An actively involved and prepared community

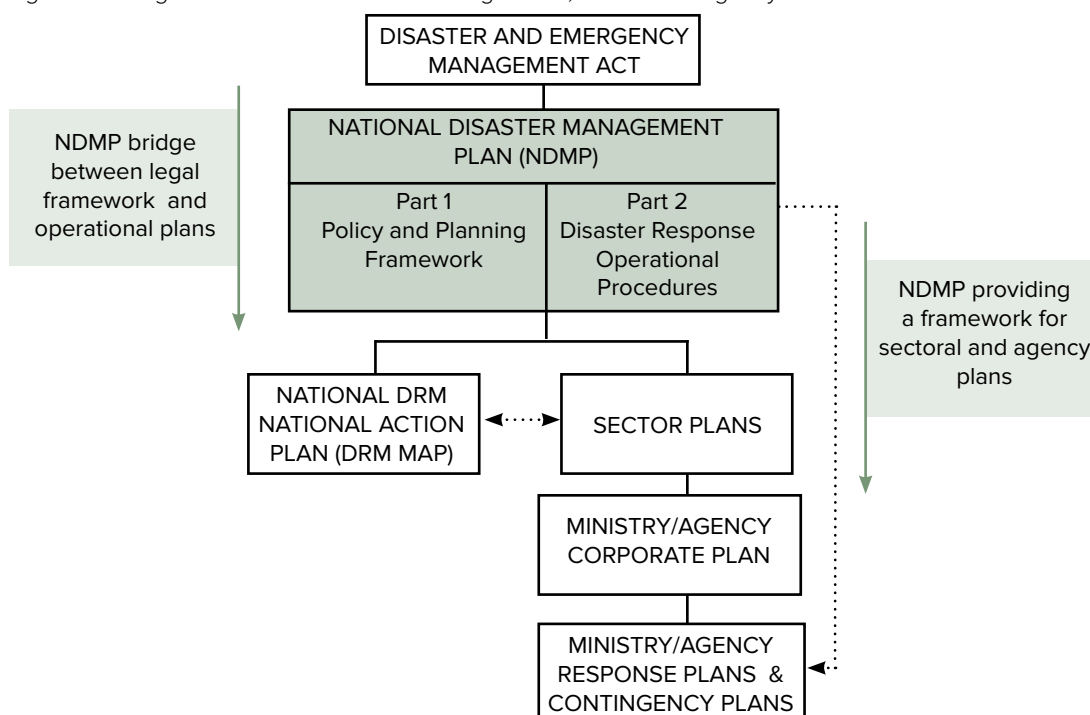
## 1.5 RELATIONSHIP WITH LEGISLATION, POLICIES, STRATEGIES AND PLANS

The NDMP makes provisions for a multi-sectoral approach to DRM and serves as a bridge between the legal framework for disaster risk management in Samoa and the National DRM National Action Plan. **Figure 1** below illustrates the inter-linkages between the legal framework and the operational plans in disaster risk management.

The mandates granted to the Samoa Red Cross Society by the Government of Samoa through the Memorandum of Understanding signed on 3rd November 1983 which was revised and signed in April 2010; and the Geneva Conventions and its additional protocols, to which the Samoan Government reconfirmed its participation on the 1st August 1984, are not affected by this National Disaster Management Plan.

The implementation of the NDMP through the DRM National Action Plan, Sector disaster risk management and climate change interventions will contribute to the achievement of priorities and goals set out SFDRR 2015-2030, SAMOA Pathway, SDGS 2015-2030, World Humanitarian Summit 2016, FRDP 2017-2030, and other relevant international and regional conventions, agreements including the International Convention on the Rights of the Child (CRC), the Convention on Women’s Rights (CEDAW), and the Convention of the Rights of People with Disabilities (CRPD).

Figure 1: Linkages between the NDMP and Legislation, Sector and Agency Plans



## 1.6 MAINSTREAMING

In Samoa disaster risk management and climate change adaptation is linked at the implementation level through joint programming. As it stands, Samoa does not have any “joint” policy or action plan, nor does it have strong institutional linkages between disaster risk management and climate change. DRM and CCA need to be integrated in the different sector plans in order to address the underlying causes of people’s vulnerabilities and contribute to the reduction of people’s risks to disasters.

The importance of mainstreaming DRM and CCA in the development processes such as policy formulation, socio-economic development planning, budgeting and governance, particularly in the areas of environment, agriculture, water, energy, health, education, poverty reduction, land-use and urban planning and public infrastructure and housing, among others. This is achieved through activities such as development of common tools to analyse the various hazards and vulnerability factors which put communities and people in harm’s way.

In general, approaches to DRM and CCA revolve around the following:

- Mainstream DRM into existing policies (i.e., building codes, land use), plans (i.e., SDS, sector plans) and programmes (i.e., capacity training, school curricula)
- Reduce vulnerability through continued and sustained assessments especially in high risk areas. This will be done through geo-hazard mapping, risk assessments especially for high susceptible communities and or/areas and can be used as a basis for the formulation of sector plans.
- Integrate DRM and CCA in all educational levels and in specialized technical training. In addition, use science-based tools to support decisions in identifying, preventing and mitigating potential disaster impacts.
- Raise public awareness of DRM and mitigating the impacts of natural disasters through the formulation and implementation of a communication plan for DRR and CCA. This also includes the formulation of campaigns for increased public awareness of DRR and enhancement of disaster preparedness through multi-stakeholder coordination.
- Increase resilience of communities through the adoption of climate-sensitive technologies and systems and the provision of support services to the most vulnerable communities.
- Strengthen the capacity of communities to respond effectively to climate and other natural and human-induced hazards and disasters. This includes the strengthening of civil society sector participation and private sector; encourage volunteerism and enhance the competence of institutions in social services delivery.
- Institutionalize DRM and CCA in various sectors and increase local government and community participation in DRM and CCA activities.

## 1.7 PHASES IN DISASTER RISK MANAGEMENT

The NDMP provides a holistic approach to DRM. This framework provides guidance for the implementation of appropriate DRM interventions.

The disaster risk management phases including general activities and programs are further illustrated in **Table 2**.

**Table 1: Objectives and activities for disaster prevention, preparedness, response and recovery**

<p><b>Objective</b></p> <p>To reduce the risks of disasters, by recognizing that hazards in Samoa are imminent and finding sustainable ways of living with them.</p>	<p><b>Risk Assessment</b> Hazard and risk mapping to identify high risk areas;</p> <p>Vulnerability and capacity assessments;</p> <p><b>Early Warning</b> Establish early warning systems at national and local level;</p> <p><b>Public Awareness</b> Awareness raising on hazards and risks, and likely consequences in times of disaster;</p> <p>Encouraging disaster risk avoidance behaviour in communities;</p> <p><b>Legislative and policy framework</b> Building codes, land use planning, environmental protection laws and regulations etc;</p> <p><b>Capacity Development and Finance</b> Financial and human resources to support disaster prevention activities at national and local level.</p>	<p>Preparedness To enhance national capacity for systematic response to disaster, by mitigating the risks and consequences of disasters.</p> <p><b>Vulnerability assessment</b> Conduct vulnerability and capacity assessment and monitoring hazard threats at community level</p> <p><b>Early Warning</b> Establish EW mechanisms for all hazards</p> <p>Develop EW mechanisms with clear information and communication flows</p> <p>Develop and disseminate guidelines on EW response at local level</p> <p><b>Capacity Building/Trainings</b> Public education and training of officials, the population at risk in DRM</p> <p>Train and mobilize existing pool of CDCRM trainers to for delivery at local level, and strengthening local level capacity for rapid response</p> <p><b>Contingency planning</b> Contingency planning at national and local level – corresponding to all potential hazards – including preparedness plans for evacuation, relocation to safety, and prepositioning of resources</p> <p><b>Policies</b> Establish policies and standards, organizational arrangements and operational plans to be applied following disasters</p> <p><b>Resource mobilization</b> Develop an integrated resource mobilization strategy to secure funding in the preparedness phase</p> <p>Mobilize financial and human resources to support disaster preparedness and response activities at national and local level – resource mobilization and earmarked emergency funds.</p>	<p><b>Response</b> To prevent unnecessary loss of lives, reduce health impacts and economic loss resulting directly from the disaster.</p> <p><b>Rapid Needs Assessment</b> Rapid multi-sectoral needs assessment of disaster affected communities;</p> <p><b>Protection of life</b> Evacuation, search and rescue of the at risk populations, ensuring that family ties are protected and family members traced and reunified if separated during displacement</p> <p>Security and physical integrity including monitoring and reporting gender based violence</p> <p><b>Health care</b> Treatment and care of those injured;</p> <p><b>Emergency assistance</b> Timely provision of shelter, water and sanitation, food, health and non-food items and safe spaces for vulnerable groups</p> <p><b>Protection of infrastructure</b> Protection of critical infrastructure and services from damage.</p>	<p><b>Recovery</b> To restore and improve, where appropriate, facilities, livelihoods and living conditions of disaster-affected communities to pre-disaster levels.</p> <p><b>Damage and loss assessment</b> Damage and community needs assessments;</p> <p><b>Rehabilitation</b> Restoration of the public health, health care and social services networks to promote resilience;</p> <p>Rehabilitation and reconstruction of destroyed and damaged housing;</p> <p>Restoration of infrastructure systems and services- utilities - energy, water, sanitation, communications, transportation systems, food production and delivery, government facilities,</p> <p><b>Livelihoods recovery</b> Restoration of livelihoods which may include support to production projects, income alternatives and employment for vulnerable families:- seed, fertilizers, tools, minor equipment and small animals</p> <p><b>Replacement of lost or destroyed</b> Documentation in relation to personal identity, property and land ownership and entitlements (e.g. social protection)</p> <p><b>Psychosocial support</b> Counselling of disaster affected;</p> <p><b>Resettlement</b> Find durable solutions to displacement which may include return to places of origin, local integration or resettlement.</p>
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## 2 STAKEHOLDERS

### 2.1 KEY STAKEHOLDERS

The NDMP is based on the innovative utilisation of resources and effective co-ordination of Government agencies, civil society, villages, private sector, and development partners in support of DRM.

**Key stakeholders include:**

- Government Ministries and Agencies which have been allocated disaster management related roles and responsibilities;
- Community Government representatives (Sui o le Nuu and Sui Tamaitai o le Nuu in conjunction with the Ministry of Women, Community and Social Development);
- Village Disaster and Climate Committees (and Village Response Teams);
- Non-Government Organizations (NGO) which have been allocated disaster management related tasks or mandates;
- Private sector; and
- Overseas authorities, development partners and organisations which are engaged in rendering assistance to the Government of Samoa in times of a disaster situation occurring.

### 2.2 DISABILITY INCLUSION IN DRM

Efforts to strengthen mainstreaming of disaster risk reduction across sectors, through priority actions should include systematic and visible integration of commitments to gender equality and women's empowerment, disability, human rights considerations building on the existing body of knowledge concerning recommendations, guidelines and best practices for sector specific gender mainstreaming.

### 2.3 GENDER EQUITY IN DRM

Recognizing that often in disasters it is women, young children, the elderly and people with disabilities that are most severely affected, all programme guidance will ensure that attention to those most vulnerable is incorporated as part of the analysis of the disaster impact, the assessment and the subsequent programming.

The individual plans of each sector will elaborate on the specific cross-cutting actions in their respective areas. For gender this can be done through gender-sensitive policymaking, monitoring and evaluation as well as integrating gender in vulnerability, risk and capacity assessments. Additionally, it requires furthering women's participation and leadership in disaster management, and promoting the systematic collection and use of sex and age disaggregated data and gender analysis.

#### 2.3.1 Gender balanced representation in DRM

Mainstreaming gender perspective in DRM still requires considerable effort at all levels, from local to national. Although there are many examples of the involvement of women in Samoa, women are still largely excluded from important tasks such as formal planning and decision-making. Much still needs to be done to upgrade the skills and knowledge of women in project planning, management, implementation, and monitoring in order to enhance the quantity and quality of women's involvement in DRM. Entry points for amplifying women's voice in disaster risk reduction should also be constantly explored.

# 3 SAMOA HAZARD AND RISK PROFILE

The emphasis of the DRM arrangement contained in the NDMP is on those hazards that have the potential to create significant disaster in Samoa and would most likely require some degree of government coordination to manage. The hazards and associated risks are discussed below.

## 3.1 COUNTRY PROFILE

**Natural Environment:** Samoa has a total land mass of 2,840 km<sup>2</sup>, which consists of two main islands, Savaii and Upolu and seven smaller islands, of which two is inhabited. The capital of Apia is located in Upolu.

About 43% of the land is arable. Samoa has the smallest Exclusive Economic Zone in the Pacific at 98,500 km<sup>2</sup>. Samoa has a tropical climate with a rainy season from October to March, and a dry season from April to September. Climate change, sea-level rise, environmental degradation, pollution, coastal erosion, water quality and resource management are important environmental issues being managed in Samoa.

**Social Environment:** The estimated population is 187,820, with 34% of people living in the Apia urban area and 70% living on the coast. On most key human development indicators monitored by the UNDP, Samoa performs strongly, with a relatively high life expectancy and strong literacy rate. Most Samoans have access to health services including water, sanitation and hygiene services.

The economy is based on agriculture, fisheries, small-scale manufacturing and tourism. It is led by a stable government committed to strengthening economic management and public sector reform. Four major cyclones since 1990 have caused significant economic setbacks, severely impacting the farm sector in particular. Around two thirds of Samoan households depend on a mixture of subsistence and commercial agriculture, and many wage-earning households engage in supplementary subsistence production. Frequency of natural disasters, together with poor land use planning, is threatening existing living standards, sustainable management and future growth prospects. Tourism remains a significant contributor to the economy.

There are signs of emerging inequality with a growth in disparities between urban and rural areas in access to infrastructure and services. Traditional Samoan social structure and associated safety nets are reported to be coming under strain as external influences affect attitudes and aspirations and create pressures for higher cash incomes. Approximately 20% of Samoan households and 27% of the population reside below the national poverty line<sup>1</sup>.

**Built Environment:** Domestic accommodation for most of rural Samoa is the traditional open fale (with no fixed walls). All buildings must meet government building standards in accordance with the National Building Code of Samoa. Mobile and land-line telecommunications services are provided on the major islands of Samoa. Electricity supply is primarily maintained by diesel generators, supported by hydroelectric generation. Electricity service covers most of the islands except some remote areas. Water supply is primarily sourced from natural springs, with the city of Apia serviced by a dam and treatment facility. Septic tanks are the most common form of effluent removal, with Apia and some larger facilities being serviced by sewage treatment plants. Fuel and gas are supplied by ship from international markets.



## 3.2 HAZARD PROFILE

Given its geographic size and location, Samoa is highly exposed to a number of hazards.

**Appendix 2** of the NDMP is a detailed register of hazards and risks.

**Cyclones (Extreme Risk):** The incidence of storms, including tropical cyclones, producing severe winds in the Pacific region is historically high with an average of 10 systems per year; of which 3-5 produce severe impacts with gale force winds. Studies have concluded that no significant change is likely in overall tropical cyclone numbers out to 2050, but there is expected to be an increase in the proportion of categories 3-5 systems. There have been four major cyclones since 1990 which have caused significant damage.

**Floods (High Risk):** Storm surges and flash floods are normally triggered by cyclones and is often the cause of coastal and riverine floods. River flooding is a frequent risk to high volcanic islands such as Samoa due to high rainfall, small river catchment areas, and low lying coastal areas. 2001 floods in Samoa affected nearly 30,000 people. Flooding from heavy rainfall occur more frequently than by rivers overflowing their banks, causing erosion and landslides. Heavy rains alone rarely cause floods. Soil erosion caused by deforestation, inadequate agricultural practices, and increased urbanisation, contributes to increasing flood risks.

**Earthquakes (High Risk):** The Pacific region includes some of the most seismically active areas on Earth, with 81 per cent of the world's largest earthquakes occurring at the edge of the Pacific, known as the "Pacific Ring of Fire". Both shallow (0-70 km deep) and deep (down to 700 km) earthquakes are associated with oceanic subduction zones such as the Tonga Trench connecting New Zealand, Tonga and Samoa. Samoa experiences many thousands of earthquakes every year because of tectonic plate motions. By far most of these earthquakes pass unnoticed by the population, but enough large magnitude events occur for earthquakes to pose a major threat, particularly to the built environment.

**Tsunamis (Extreme Risk):** Though tsunamis are rare they pose a major threat to Samoa as much of the population is located along coast. The earthquake-generated tsunami that hit Samoa, American Samoa and Tonga in 2009 had devastating impact including 186 fatalities.

**Urban Fires (Extreme Risk):**

Fire risks are increasing due to population growth in urban areas and the proximity of buildings urban fires can cause significant damage including economic impacts and fatalities.

**Public Health Crisis (Extreme Risk):** Samoa is vulnerable to a public health crisis. There is potential for communicable and non-communicable disease outbreaks, food and water contamination, chemical, natural and technological hazards, and the health consequences of climate change.

**Environmental Crisis (Extreme Risk):** Samoa is ecologically fragile and vulnerable to environmental degradation of its natural resources, pressures arising as a result of fishing methods, ongoing coastal development, pollution, and natural disasters have adversely affected the coastal resources and marine environment.

Invasive species also continue to be a major threat to Samoa's biodiversity. A long list of non-native species now dominating newly generated secondary forests are classified as invasive or potentially invasive and includes the fire ants, myna bird, bulbul, rats and the African snail with potential to affect the population, compromise infrastructure and have a negative impact on tourism.

Whilst it may be appropriate to list all possible hazards, the emphasis of the DRM arrangements contained in this Plan is those hazards that have the potential to create a significant emergency in Samoa, and would most likely require some level of government coordination to manage. To help meet these and other challenges, there is a need to strengthen capacities for emergency risk management incorporating measures for prevention, preparedness, response and recovery.

<b>Table 2: Highest risk hazards for Samoa</b>	
Hazard	Level of Risk
Cyclone <sup>2</sup>	Extreme
Volcanic Eruption	Extreme
Tsunami	Extreme
Urban Fire (Apia)	Extreme
Public health crisis	Extreme
Environmental crisis – invasive species	Extreme
Flood <sup>3</sup>	High
Earthquake	High
Landslide	High
Forest Fires	High
Aircraft emergency (airport)	High
Hazchem incident – marine	High
Lifeline Utility Failure – water	Moderate
Agricultural crisis – animal or plant disease	Moderate
Civil emergency – external	Moderate
Lifeline Utility Failure - telecommunications	Low
Lifeline Utility Failure – electricity	Low
Single asset infrastructure failure – building collapse	Low
Single asset infrastructure failure – dam	Low
Drought	Low
Aircraft emergency (other location)	Low
Maritime vessel emergency	Low
Hazchem incident – land	Low
Terrorism	Low
Civil emergency – internal	Low

This Plan covers national level response to all hazards that may affect Samoa. Refer to **Appendix 2: Samoa Register of Hazards and Risks**.

<sup>2</sup>Includes storm surge causing coastal inundation and high winds

<sup>3</sup>Inland flooding due to heavy rain

# 4 INSTITUTIONAL FRAMEWORK FOR DRM IN SAMOA

## 4.1 ORGANISATIONAL FRAMEWORK FOR DRM

The core structure of DRM in Samoa is based on the DMO and DAC (through the response agencies and Sectors) forming the focal point for coordination and implementation across all phases: risk reduction, preparedness, response and recovery.

**Figure 3** shows the institutional arrangements for DRM in Samoa.

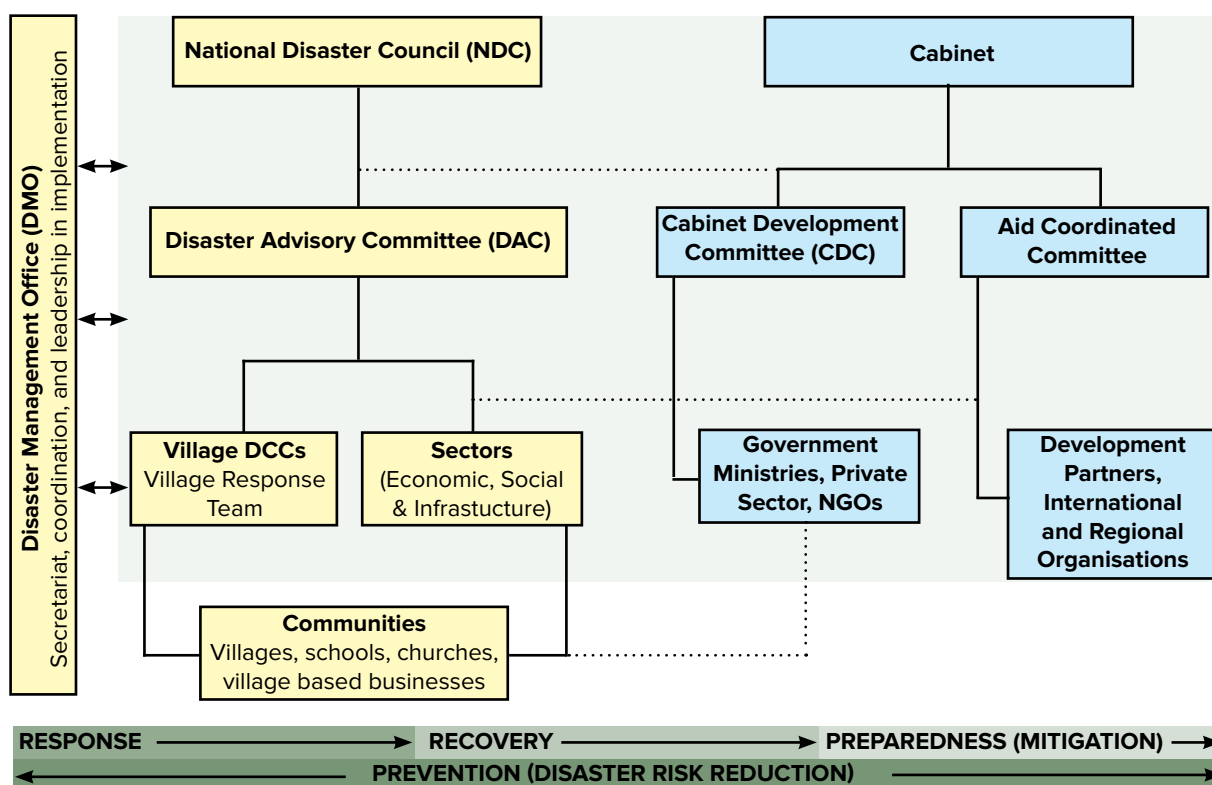


Figure 2: Organisational Structure for Disaster Risk Management in Samoa

## 4.2 ROLES IN THE DRM STRUCTURE

### 4.2.1 National Disaster Council (NDC)

The role of the NDC during disaster response is to provide strategic direction and decision-making as required. The Prime Minister, as Chairperson of the NDC, is in control of the disaster situation. A list of members of the NDC can be found in Appendix 3: National Disaster Council Members.

The **operational** decision making and co-ordination of response activities remains the responsibility of the response agencies and sectors, under the leadership and co-ordination of the Chairperson of the DAC, with technical support from DMO. The NDC will be provided with advice on these issues by the DAC.

The NDC will receive reports from the DAC and should focus on issues and decisions such as:

- Providing advice to the Head of State about whether a proclamation of emergency is required;
- Setting strategic direction; and
- Conflict resolution.

#### **4.2.2 The Disaster Advisory Committee (DAC)**

The DAC is responsible for developing policies and plans. In addition, DAC member agencies are responsible for the roles and responsibilities listed under the NDMP including provision of resources to support implementation.

The DAC includes representatives from government agencies, civil society organisations, academia, the private sector and development partners. The current list of the DAC is included in **Appendix 4**.

The Sectors are the same sectors established under the Sector Planning Manual approved by the Cabinet Development Committee in 2009 and revised and approved in 2015. They are listed in this Plan in **Appendix 6**.

The DAC is authorized to approve plans by response agencies, other agencies and community plans to facilitate and coordinate the performance of response functions, roles and responsibilities under the NDMP prepared under Part IV of the Act.

#### **4.2.3 Disaster Management Office (DMO)**

The DMO is responsible for ensuring the ongoing coordination, development and implementation of disaster risk management programs and activities. The DMO is responsible for administrative, secretarial and other arrangements for the efficient functioning of the NDC and DAC. The Assistant CEO responsible for the DMO is the Secretary of the DAC and NDC, and is responsible for overseeing all administration and activities of the DAC and the NDC.

The DMO undertakes the service delivery role for national risk disaster management, including:

- Leadership for and relationship building across the all sectors, and from national level to local level;
- Supporting development and implementation of plans and policies for disaster risk reduction, preparedness, response and recovery including the NDMP and ensure that gender, people with disabilities and human rights related issues are addressed;
- Support to DAC agencies and DRM Sectors in the development of their own plans and procedures;
- Liaise and assist DAC member agencies and sectors in the performance of their roles and responsibilities in accordance with resolutions and or directives of the NDC/Cabinet and the DAC as advised before and during a disaster;
- Set-up, maintenance (including training for staff), and operational co-ordination of the National Emergency Operations Centre (NEOC);
- Planning and co-ordination of simulations and sector training;
- Monitoring and evaluation of implementation of disaster risk management programmes contained in the NDMP and NAP;
- Administration of the activities of the DAC and NDC.

#### **4.2.4 Communities**

The Village Council and village organisations; or the village Disaster and Climate Committees (DCC)<sup>4</sup>, are responsible for coordinating disaster mitigation and preparedness programmes and activities at the community level, and for coordinating the various village response teams for specific threats.

It is the role of the Ministry of Women, Community & Social Development to support, monitor and liaise with Village Councils and organisations through the “Sui o le Nuu” and “Sui Tamaitai o le Nuu” as they implement disaster management activities, and to keep the DAC informed of the level of village preparedness.

<sup>4</sup>Villages DCCs are established in villages that have participated in the Community Disaster & Climate Risk Management (CDCRM) Programme.

# 5 SECTORAL APPROACH TO DRM

The NDMP has adopted a sector approach aimed at creating coherent and inclusive DRM practices by mobilising government agencies, civil society, private sector and development partners with common interests in a strategic manner.

## 5.1 SECTOR STRUCTURE

Each sector has a designated sector coordination unit. The sector framework encourages communication and information sharing across agencies. The DMO will work with each sector coordination unit to implement DRM and to support them in executing the objectives and responsibilities articulated in each sector plan.

## 5.2 ROLES AND RESPONSIBILITIES

Government agencies and organisations are strongly encouraged to perform the following roles and responsibilities in relation to disaster risk management:

- Undertake DRM and climate change Capability Assessment to identify skills, tools, training and resources required in government agencies, statutory agencies, civil society and the private sector in the area of disaster risk management and climate change adaptation.
- Identifying measures leading to the strengthening of capacity in resilience.
- Development of a risk-based multi-criteria assessment tool to assist in the prioritisation of disaster reduction and adaptation measures within and between sectors
- Develop DRM policies, plans, regulations, strategies and guidelines and submit these to the DMO for inclusion in the NDMP and other related policy documents.
- Ensure that all development policies incorporate and implement disaster risk management measures.
- Strengthen capacity (institutional, systemic, and individual) and ensure adequate skills development, succession planning and knowledge sharing to ensure continuity and skill level maintained for emergency and resilience planning.
- Support Sector Coordinators to actively participate participation in DRM activities, coordinated by DMO.
- Take part in DRM activities as requested by DMO.
- Mainstream, DRR, CCA and other cross-cutting issues into sector planning.
- Integration of DRM considerations in budgetary allocations and human resourcing.
- Foster networks and co-operation between agencies to integrate DRM and CCA by sharing information, technology and professional expertise.
- Plan and monitor sector activities on DRM with common national monitoring and evaluation **(M&E)** tool.

This approach ensures that all organisations, including government, private and community organizations, are involved in DRR and DRM. The former Plan recognizes that the delivery of services will always necessitate community partnerships, collaboration and coordination amongst government agencies, and civil society.

There is a need to provide a strong coordinating mechanism through strengthening the institutional framework for collaboration and sharing (and financial management, human resourcing as well as the use of analytical tools). Establishing a strong institutional mechanism to ensure effective coordination and integration of a disaster risk management risk-based programme to support Samoa's transition to a resilient development path and mainstreaming such a programme into Samoa's ongoing and planned sectoral activities at the national and community levels. Such

a platform should be achieved by making use of existing mechanisms and institutions, shown as the National DRR Platform in **Figure 3**. This approach will promote multi-sectoral and inter-agency coordination, resilience and reduce duplication and inefficiencies.

It should be borne in mind that this Plan does not claim to be comprehensive in the sense that it covers each and every issue relating to DRM in Samoa. Rather, the scope of activities proposed by each of the fourteen (14) sectors below is determined by the key issues that were identified during the situation analysis, the consultations and the national stakeholder’s workshop. These key actions were a combination of the ‘gaps’ that were identified as well as issues that were considered ‘priority issues’ by national stakeholders. The tables below are meant to provide a guideline to sectors.

**Sections 5.4.3 to section 5.4.16** below show the different sectors, their leads/sector coordination units, membership, roles and responsibilities as well as sector objectives, indicators and benchmarks for the four phases of disaster risk management.

### 5.2.1 Agriculture and Fisheries Sector

<b>Sector Objective:</b>	To ensure that actions shall be taken to prevent and prepare for food and livelihood needs of communities prior to, during and after disasters.
<b>Sector Lead:</b>	MAF- Policy & Planning Division
<b>IASC/PHT Cluster:</b>	Food Security (Cluster Lead – FAO/WFP)
<b>Sector Members:</b>	MNRE, MoR, MoH, MWCS, MWTI-Maritime, MESC, SBEC, WBDI, Samoa Farmers Association, CFMAC, Tilapia Farmers Association, Commercial Banks, Conservation International, FAO, SPREP

## FUNCTIONS OF THE SECTOR

### Prevention

#### *Risk Assessment*

- Conduct risk assessments and develop risk maps of the sector’s main livelihood activities to use as decision-making and planning tools for sector agencies and community/commercial stakeholders.
- Develop systematic baseline and pre-crisis food security information as a basis for continuous assessment, monitoring and evaluation in areas prone to recurrent disasters and protracted crisis;
- Conduct food security monitoring and needs assessment.

#### *Awareness*

- Raise awareness amongst communities on disaster risk reduction and impacts on livelihood activities;
- Sensitise community leaders on the need to strengthen village policy to support and help protect household/community livelihood activities;

#### *Capacity development and finance*

- Build institutional capacity to:
  - promote hazard mitigating technologies and practices;
  - protect livelihoods from hazard risks;
  - promote diversification of livelihoods e.g. non-agricultural income generating projects;
  - promote sustainable natural resources management including conservation and protection of underground water;
  - promote sustainable farming and fishing practices and land use planning.

- Develop a monitoring system to enable better tracking of DRR spending and investment across all sector agencies. This will enable improved analysis of trends in DRR spending and contribute to strengthened strategic decision making for DRR investments and programming, as well as, assist in measuring DRR mainstreaming progress.

#### *Legislative and policy framework*

- Review and revise Agriculture and Fisheries legislation and policies to support on-the-ground resilience-building activities.

### **Preparedness**

#### *Assessment*

- Develop, in consultation with the DMO, a disaster assessment tools;
- Conduct Crop Vulnerability and Capacity Assessments and forecasts;
- Conduct ad-hoc assessment missions including sub-sector analysis (nutrition surveillance, livestock, fisheries and infrastructure)

#### *Institutional capacity*

- Sector agencies to review and revise relevant programmes to integrate DRR, improving resilience of all livelihood activities.
- MAF staff to work with communities to develop SMART indicators to monitor and evaluate progress.
- Provide opportunities for sharing and learning by actively participating in the National DRR Platform activities.

#### *Community programming*

- Support communities to understand weather and climate early warning systems;
- Strengthen the integrated climate change adaptation measures in crop and ground cover and water irrigation for farming.
- Introducing improved fishing methods to respond to the impact of climate change on marine ecosystems.
- Promote long-term sustainability of coastal fishery resources including the protection of mangroves and coral reefs;
- Develop strategies to mitigate sea safety during natural disasters and emergency situation (fisheries diseases outbreaks, securing fisheries asset, crew).
- Identify impacts of climate change on agriculture, livestock and fisheries; and develop mitigating strategies.
- Improve the resilience of water resources through the restoration of natural springs and more efficient water uses in the sector.

#### *Resource mobilisation*

- Support (through MAF community programmes) the livelihood component of the Village Mitigation Plans, developed under the CDCRM Programme;
- Identify organizations with items, services or supplies and make arrangements required for emergency operations and arrange to secure these during emergencies.
- Regularly update resource inventory (personnel, equipment and emergency supplies).
- Stock and pre-position food items and livelihood tools where necessary.

#### *Response*

- Assess the range of potential response options for improving the short and long term situation, as well as implementation requirements;
- Conduct rapid food security assessments among newly displaced affected populations.
- Map the affected areas.

- Register households that are food insecure;
- Liaise with Logistics and Shelter sector for timely delivery of food items;
- Provide emergency food rations to affected populations.
- Conduct post-distribution monitoring to continually assess food security status of affected populations;
- Conduct verification of registered beneficiaries for food assistance;
- Ensure effective response is operationalised to ensure desired impact.
- Monitor and evaluation changes in the situation analysis and the impact of response are monitored and evaluated;

#### *Recovery*

- Conduct PDNA for the productive sectors;
- Support production projects, income alternatives and employment for vulnerable families whose economies were affected by disasters;
- Promote diversification of livelihoods;
- Distribute seed and agricultural tools;
- Initiate a livestock restocking programme (revolving) for both small and big livestock;
- Introduce a food or cash for work public works programme;
- Promote appropriate technologies for improved food production.
- Rehabilitate road infrastructure to facilitate supply of food items and access to markets;
- Rehabilitate damaged water supply systems;
- Conduct market analysis;

### **5.2.2 Communication and Information Technology**

<b>Sector Objective:</b>	To raise the profile of DRR and provide information sharing amongst agencies before, during and after a disaster.
<b>Sector Lead:</b>	MCIT
<b>IASC/PHT Cluster:</b>	Emergency Telecommunication Sub-Cluster under Logistics Cluster (Sub-Cluster Lead – WFP)
<b>Sector Members:</b>	Office of the Regulator, BlueSky, Digicel, MCIT, ISP Providers

## **FUNCTIONS OF THE SECTOR**

#### *Prevention*

- Build ICT platform and tools to allow greater connections with policy makers and other stakeholders.
- Consider developing an e-strategy for DRM.
- Incorporating gender dimensions in ICT for all DRM phases.
- Incorporate ICT for DRR as part of sustainable development efforts.

#### *Preparedness*

- Provide information, education and raising public and stakeholders' awareness about disaster risk reduction issues.
- Develop institutional capacity of policymakers and ministry to use ICT for socio-economic development.
- Ensure adequate ICT infrastructure (particularly broadband) is available.
- Provide support to DMO so that relevant, locally generated information, content and research on the regional sector is created and made available to DRM stakeholders.
- Develop detailed hazard risk assessment and detailed risk maps along the coastal areas for determining less hazardous areas and appropriately planning communications infrastructure.
- Ensure telecommunication infrastructure is accessible by DRM stakeholders, as well as communities assessed as most vulnerable.



- Support communications technology (radio, mobile phones, social media), tools for collaboration, and systems related to mapping and sensing in all phases of the disaster management cycle.
- Supporting the development of people with expertise in both disaster management and ICT to increase the likelihood of developing effective ICT for DRR applications.
- Communicating with at-risk communities in a simple and clear language.

*Response*

- Ensure communication remain operational during disasters when contact with communities is critical for liaising and coordination of help and support resources.

*Recovery*

- Develop a recovery framework for the sector using the damage assessment findings.
- Support rehabilitation of damaged infrastructure.
- Establish coordination mechanisms for partners involved in disaster recovery.
- Promote build back better during rehabilitation of damaged electricity infrastructure and housing.
- Prioritize energy supply restoration for the most vulnerable.
- Support recording and dissemination of knowledge and experiences
- Assess possible need of relocation of the telecommunications infrastructure (radio and TV broadcasting receiver/transmitter sites) to higher and safer grounds along coastal areas.

**5.2.3 Community**

<b>Sector Objective:</b>	To promote, facilitate, monitor and evaluate resilient livelihoods for communities with a special focus on vulnerable groups in Samoa.
<b>Sector Lead:</b>	MWCSD
<b>IASC/PHT Clusters:</b>	Protection (Cluster Lead – UNHCR)
<b>Sector Members:</b>	MAF, MCIL, MNRE, Police, Samoa Red Cross, SUNGO, NGOs, UNICEF, UN Women, NOLA

**FUNCTIONS OF THE SECTOR**

*Prevention*

- Promote traditional hazard mitigating technologies and practices;
- Protect livelihoods from hazard risks;
- Mobilize financial and material resources and ensure these resources reach communities.
- Conduct public awareness and campaigns on disaster risk management through (print and electronic media) community meetings and outreach.
- Ensure special needs of vulnerable groups such as women, children, elderly and people with disability are addressed in DRM processes and plans.
- Conducting of public education and awareness programmes to sensitise the community on forest fires and related issues including mobilisation of resources for firefighting.

*Preparedness*

- Implement a strategy to strengthen the livelihood of the population during disaster.
- Identify communities at risk.
- Ensure all future community development projects have DRM and CCA elements.
- Create awareness on Do's and Don'ts related disasters at community level.
- Provide special needs of vulnerable groups such as women, children, elderly and people with disability addressed in DRM processes and plans.
- Promote community participation in disaster risk reduction through the adoption of specific

policies, the promotion of networking, the strategic management of volunteer resources, and the delegation and provision of the necessary authority and resources.

- Develop and maintain an inventory of resources that can be mobilised within the village and another list of resources that would be required from external suppliers.
- Define measures to reduce vulnerability to disasters and build capacity and resilience at community levels.
- Facilitate of the development and implementation of Disaster Risk Reduction activities at sector as well as community levels.
- Facilitate the preparation of community-based or village disaster risk management plans, by providing guidance and technical support to the DMO and other stakeholders.
- Scrutinise project proposals from the Village level and ensure that the said projects are reducing disaster risks.
- Develop capacity of Ministry and communities leaders to significantly reduce disaster risk and build community resilience to disasters.
- Support planting trees and mangroves to reduce coastal erosion and establishing conservation areas (marine or terrestrial) and/or coral gardens to increase resilience to coral bleaching.
- Conduct vulnerability and capacity assessment and monitoring hazard threats at community level.
- Communicate and share lessons learnt from community level vulnerability and risk assessment.
- Develop capacity around community-based disaster planning and collaboration with local NGOs.
- Provide available disaster information to communities that are accessible and specific to the needs of the populations at risk.
- Supports communities to develop abilities to cope with natural hazards through the use of weather and climate early warning systems.
- Develop capacities at the community level to devise and implement contingency planning and simulation exercises.
- Raise awareness amongst communities on disaster risk reduction.
- Map NGOs capacities and identify organizations with services or supplies and make arrangements required for preparedness, response and recovery.
- Regularly update resource inventory (personnel, volunteers, equipment and emergency supplies)
- Mobilize resources for DRM activities for the sector.
- Develop capacity of sector staff and communities to understand risk and resilience.
- Ensure monitoring and evaluation of sector's programmes.
- Ensure Community Disaster and Climate Risk Management (CDCRM) programme implemented at community level.

#### *Response*

- Ensure temporary restoration of vital support services to affected communities.
- Provide support to communities during preliminary survey and analysis of the damaged structures and in collaboration with other ministries.
- Provide support during technical assessment and cost estimation for reconstructing community assets
- Support the DMO in organising training of village volunteers for disaster response.

#### *Recovery*

- Conduct damage and community loss assessment.
- Engage affected community in temporary employment for restoration of services.
- Provide special care for income generation of single women, aged, people with disability, etc.

## 5.2.4 Education Sector

<b>Sector Objective:</b>	To create and maintain safe learning environments, prevent injuries and interruption of education due to recurring natural hazards, teach and learn disaster prevention, and build a culture of safety around school communities.
<b>Sector Lead:</b>	MESC
<b>IASC/PHT Cluster</b>	Education in Emergencies (Cluster Co-Lead - UNICEF & Save the Children)
<b>Sector Members:</b>	SQA, MNRE, MWCS, MWTI, MoH, NUS, ECE, Mission Schools, Private Schools, Post-secondary Technical Institutions, UNESCO, UNICEF

## FUNCTIONS OF THE SECTOR

### *Prevention*

- Recognise and assess the future impact of hazards, vulnerabilities and risks; and identify strengths and capacities in the education sector.
- Physical protection; informed planning, environmental stewardship, disaster-resilient design and construction of educational institutions;
- Develop and enforce building codes and regulations for health and safety to which every educational institution should conform.
- Select safe school sites and design and build every new school outside of hazard zones.
- Integrate disaster risk management in the school curricula;
- Develop the capacity of the ministry in preparing the education system, at all levels, to prevent, prepare for and respond to emergencies;

### *Preparedness*

- Advocate for an emergency component in the education sector plan and budget, including preparedness plans;
- Develop and support training programmes for safe school construction and maintenance;
- Regularly update resource inventory (personnel, equipment and emergency supplies)
- Train teachers in disaster risk management;
- Raise awareness on disaster risk reduction through parent teachers associations;
- Establish educational institutions committees to promote health and safety in the education sector;
- Preposition educational materials for at-risk schools and for provision of temporary schools;
- Conduct school disaster drills or simulation exercises;
- Mobilise resources for DRM activities for the sector;
- Monitor and evaluate sector's DRM programmes.

### *Response*

- Rapid assessment to determine magnitude - number of children affected, availability of teachers, facilities and resources;
- Resume educational activities as quickly as possible by setting up safe temporary learning spaces and provision of educational supplies;
- Mobilise psychosocial support for teachers (provide training) and students (provide recreational activities and where appropriate establish links to basic health and nutrition services);
- Provide emergency assistance to disaster-affected educational institutions;

### *Recovery*

- Provide training to schools on damage assessment tools;

- Assess damages to school infrastructure including water and sanitation facilities, school equipment and learning resources;
- Mobilise resources for rehabilitation of damaged infrastructure and replacement of damaged learning resources;
- Assess psychosocial impact of disaster among affected learners and provide appropriate counselling;
- Develop reconstruction policy to ensure standards for safety (to build back better);
- Institute public works programme for education institutions reconstruction (cash for work);
- Advocate for a DRR component in education sector plan and budget;
- Initiate a gap analysis of local and national capacities in education and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction.

### 5.2.5 Energy Sector

<b>Sector Objective:</b>	To ensure safe, secure and viable energy supply and safety of infrastructure assets before, during and after disasters.
<b>Sector Lead:</b>	MoF – Energy Division
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	EPC, Petroleum Products Supply (PPS), MNRE-Renewable Energy, LTA, MWTI

## FUNCTIONS OF THE SECTOR

### *Prevention*

- Coordinate with sector members and other sectors such as Transport, Communication and Environment to increase resilience of energy generation infrastructure and services

### *Preparedness*

- Ensure energy infrastructure has the capacity to withstand disruption, absorb disturbance, act effectively in a crisis, and recognize changing conditions over time, such as climate change.
- Communicate to infrastructure users and providers understand the outage risks they face and take steps to mitigate these.
- Assess aspects of timing, duration, regularity, intensity, and impact tolerance which differ over time and between communities.
- Encouraging more distributed electricity generation through reducing dependence on imported fuels.
- Collaborate with private sector in terms of data collection, information dissemination as well as monitoring of potential impacts of disaster
- Promote the use of indigenous energy resources and renewable energy technologies;
- Promote partnerships with communities and all energy stakeholders;
- Support Clean Development Mechanism (CDM) and Clean Energy Fund.
- Conduct research and promote the use of bio-fuel.

### *Response*

- Assist with the restoration and improvement where appropriate of facilities, including energy infrastructure of disaster affected communities, including efforts to reduce disaster risk factors.
- Provide training on damage assessment tools.
- Develop capacity to assess damages to infrastructure including energy facilities.
- Mobilise resources for rehabilitation of damaged infrastructure.
- Advocate for a DRR component in energy sector plan and budget.

### Recovery

- Plan back-up energy services in aftermath of disaster.
- Develop a recovery framework for the sector using the damage assessment findings.
- Support rehabilitation of damaged homes and public infrastructure.
- Provide technical advice on the rehabilitation of critical infrastructure.
- Establish coordination mechanisms for partners involved in disaster recovery.
- Promote build back better during rehabilitation of damaged electricity infrastructure and housing.
- Prioritize energy supply restoration for the most vulnerable.

### 5.2.6 Environment sector

<b>Sector Objective:</b>	To improve environmental sustainability and disaster resilience through Green Growth.
<b>Sector Lead:</b>	MNRE
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	MNRE, MCWSD, MoF, MoH, MAF, MWTI, SUNGO, SBS, UNDP, Conservation International, SPREP, METI, OLSSI

## FUNCTIONS OF THE SECTOR

### Prevention

- Collect analyse and disseminate early warning and forecast information.
- Conduct public awareness and campaigns on disaster risk management through print and electronic media.
- Development of and Advocacy Strategy for DRR – adapted to target audience at national, provincial and local level respectively.
- Identify core advocacy concerns, including resource requirements and contribute key messages to broader DRR advocacy initiatives of the NDMP stakeholders.
- Develop an Advocacy Strategy for DRR.
- Promoting diversification of livelihoods e.g. non-agricultural income generating projects; Promotion of sustainable natural resources management including conservation of underground water.
- Promoting good farming practices and land use planning.
- Mobilise resources for disaster mitigation.
- Undertake comprehensive environmental assessment and implement environmental protection measures in rehabilitated and relocated schools.
- Procure and distribute cook stoves and solar lanterns to displaced households to ignite interest in environmental management best practices.

### Preparedness

- Ensure sustainable ecosystems and environmental management.
- Review of environmental and social impacts checklist for projects to include DRR and climate considerations.
- Increase the resilience of Samoa's urban and rural built environment.
- Review of environmental laws and regulations to ensure resilience to disaster.
- Adopt ecosystem approaches to DRR through sustainable management, conservation and restoration of ecosystems in such a way that it also builds the resilience of communities.
- Implement integrated environmental and natural resource management approaches that incorporate disaster risk reduction, including structural and non-structural measures, such as integrated flood management and appropriate management of fragile ecosystems.
- Conduct wild fires mapping hazards.
- Support planting of native, salt resistant trees to reduce erosion and protect infrastructure.

- Establish plant nurseries.
- Develop strategy for reforestation of mangroves and swamps for fish and crab breeding and hazard protection, establishing and monitoring “no-catch” marine protection areas.
- Control activities that affect coastal habitats such as sand mining and illegal waste deposits.
- Conduct minor works, such as culvert crossings or upgrade of drainages from the mangroves to the sea.
- Undertake more research to understand the relationship between disaster risk reduction, climate change biological systems and species.
- Raise the profile of DRR and CCA among policy makers including senior management.
- Identify organizations with required items, services or supplies and make arrangements to secure these during emergencies.
- Consolidate information on Crop assessment, Poverty assessment, Vulnerability forecasts, population surveys and package it for dissemination to the public in English and Samoan language.
- Map resources for sector activities.
- Ensure uniform plan and monitoring of sector activities.
- Conduct emergency drills and simulation exercises.
- Increase the resilience of Samoa’s urban and rural built environment.
- Promote the use of affordable materials and appropriate technologies that will minimise the impact on the environment.
- Strengthen people-centred multi-hazard, multi-sectoral forecasting and early warning systems.
- Promote the sustainable harvesting of trees for firewood.
- Support risk sensitive land use planning to promote sustainable and safer human settlements.
- Include DRR criteria in Environmental Impact Assessments for planned development taking into account climate change.
- Promoting cooperation and information exchange between relevant ministries and levels of government with DMO.

#### *Response*

- Coordinate and lead the initial damage assessments on environment and natural resources
- Compile and provide reports on environmental impacts to DAC, NDC and NEOC
- Liaise with sector members and partners to support initial damage assessments on environment and natural resources
- Coordinate response to removal of waste and debris from affected areas and disposal to landfills
- Ensure continuity of waste disposal and landfill services

#### *Recovery*

- Restore the natural resilience of most affected shorelines to withstand prevailing natural hazard risks through non-structural measures, including beach nourishment, dune construction, planting, and stabilization efforts.
- Assess negative environmental impacts are damage of essential service infrastructure such as of water supply facilities, electricity supply facilities, disruption of roads and community footpaths.
- Ensure any post-disaster activity planned incorporates an environment management framework.

## 5.2.7 Finance sector

<b>Sector Objective:</b>	To reduce the financial impact of disaster on the government and society.
<b>Sector Lead:</b>	MOF
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	CBS, DBS, MoR, MCIL, Samoa Housing Corporation, NPF, Chamber of Commerce, SAME, SBEC, SUNGO, SOEs, CSSP, Audit Office, MPE

## FUNCTIONS OF THE SECTOR

### *Prevention and Preparedness*

- Revise Sector Planning Manual for Samoa to provide guidance as how disaster risk reduction and climate change risk management is to be addressed as a cross-sector issue in sector planning.
- Develop guideline on how to undertake assessments of the costs and benefits of proposed adaptation and disaster risk reduction measures during sector planning processes, which could be included in the revision of the Sector Planning Manual.
- Develop national financial protection strategies to be implemented through a dedicated Disaster Risk Reduction Fund.
- Encourage parliamentarians to support the implementation of disaster risk reduction by endorsing budget allocations.
- Allocate the necessary finance resources at all levels of administration for the development and the implementation of disaster risk reduction strategies, policies, plans, laws and regulations in all relevant sectors.
- Enhancing relevant mechanisms and initiatives for disaster risk transparency which may include financial incentives.
- Establish dedicated DRR budget lines.
- Consider specifying certain percentages of revenue to DRR alone to ensure that DRR activities are supported.
- Strengthen mechanisms for disaster risk transfer and insurance, risk-sharing and retention and financial protection for both public and private investment in order to reduce the financial impact of disasters on Governments agencies and community, in urban and rural areas.
- Ensure a sustained flow of financial resources for DRR and reduced competition with response funds.
- Integrate disaster risk considerations into the design of social protection programs and complement such programs with insurance principles and private sector products.
- Improve insurance requirements for buildings and road infrastructure concessions that align with international reinsurance market technical standards.
- Use disaster risk data to support decision making on financial protection.

### *Response*

- Assess potential post-disaster (short-term and long-term) funding gaps.
- Improve the process for identifying beneficiaries and assessing their eligibility for post-disaster payouts.
- Develop risk market infrastructure to support delivery channels (e.g. underwriting and claims settlement process, delivery channels through insurance intermediaries and alternative delivery channels such as micro-finance, nongovernmental organizations, etc.)

### *Recovery*

- Ensure sufficient financial resources are allocated for recovery programs set out national disaster recovery plans.
- Develop a national strategy for financial protection to clarify contingent liability, secure

immediate liquidity following disasters for the short-term, and ensure longer-term reconstruction financing.

- Improve the financing of restoration and early recovery, recovery, and reconstruction needs.
- Build up multi-year reserves through annual contributions to a response contingency fund set aside for post-disaster response efforts.
- Use risk transfer to access international private reinsurance and capital markets.

### 5.2.8 Health sector

<b>Sector Objective:</b>	To provide comprehensive emergency management, enabling the health sector to mitigate, prepare for, respond to, and recover from emergencies and disasters.
<b>Sector Lead:</b>	MoH
<b>IASC/PHT Cluster:</b>	Health & Nutrition (Cluster Lead – WHO/UNICEF), Sanitation, Water and Hygiene (Cluster Lead – UNICEF), Emergency Shelter (Cluster Lead – IFRC/UNHCR/IOM)
<b>Supporting members:</b>	MNRE, MESC, MWCSO, National Health Services, National Kidney Foundation, Samoa Family Planning, Doctors Association, Nurses Association, Private health service providers, Women CBOs, SUNGO, SBS

## FUNCTIONS OF THE SECTOR

### *Prevention*

- Strengthen disease surveillance and early warning system.
- Conduct vulnerability assessment and risk analysis of health related potential disasters, including identifying crucial needs for vulnerable groups during disaster occurrences.
- Promote hazard resilient construction of new health facilities.
- Implement disaster preparedness plans for health facilities.
- Promote hazard mitigating technologies and practices.
- Prevent and control communicable diseases
- Protect livelihoods from hazard risks.
- Promote an integrated, comprehensive, multi sectoral and multidisciplinary approach to reduce the impact of natural, technological or manmade hazards on public health
- Strengthen the institutional capacity of the health sector in preparedness and risk reduction.
- Strengthen national strategies and plans to address all forms of social disadvantage and vulnerability that have a negative impact on health.

### *Preparedness*

- Identify health facilities that are located in hazard-prone areas, analyse their internal and external vulnerability during emergencies, and increase the hazard resilience of such facilities.
- Prepare and implement hospital disaster preparedness plan for such facilities to be able to deal with emergency situations.
- Prepare plans for tracking and evacuations of mass casualties as a result of a major disaster.
- Develop health care personnel proficient in disaster response (including improved education of nurses, emergency medical technicians, and doctors to have improved knowledge and preparedness of disaster management; Increase knowledge of psychiatrics on rehabilitative dimensions of disasters along with the health care of internally displaced people and women and children issues.
- Improve capacity of NHS to conduct rapid testing when outbreaks occur.
- Establish a national vector/water control programme to address outbreaks.
- Raise awareness through education and forge links between health and climate change,



DRM policies and strategies.

- Strengthen Emergency Medical Points to ensure better coordination in disaster situations.
- Ensure communication and coordination links between hospitals and the National Health System (NHS) and the scene of disaster.
- Build acute health care system for post disaster response through strengthening the existing district development system.
- Establish a system of readiness and list of personnel to be mobilized when warning is received or impact of disaster reported.
- Ensure fast delivery and availability of adequate resources such as drugs, medical equipment and supplies of other logistic materials.
- Put in place practical strategies to address the long-standing issue of human resource, recruitment and retention.
- Conduct Epidemiological Surveillance.
- Pre-position of emergency medical and non-medical supplies.
- Establish epidemic thresholds at local, regional and national levels.
- Monitor and evaluate of sector's programmes.
- Conduct nutrition surveillance and management of moderate and severe malnutrition.
- Estimate cost of interventions above normal to mitigate related risks (costs for immunization, vector control, disease control, health promotion and costs for the health management of gender based violence and violence against women).

#### *Response*

- Promote and protect the health and well-being of affected communities, paying particular attention to the specific needs of vulnerable groups
- Undertake mass casualty treatment and case management.
- Re-establishment of disrupted essential care services for women and children, including the provision of essential drugs, diagnostics and supplies.
- Conduct disease surveillance and strengthening of health service delivery.
- Dissemination of key health education and promotional messages and behaviour-change communication to affected populations on diseases vector control, immunization including food and water quality monitoring.
- Promote safe delivery and provide reproductive health services.
- Conduct nutrition surveillance and management of moderate and severe malnutrition.
- Ensure dissemination and understanding of Ministry of Health and National Health Service Emergency Continuity Response Plan

#### *Recovery*

- Initiate a gap analysis of local and national capacities in health, and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction.
- Assess damages to health infrastructure including water and sanitation facilities, hospital equipment and medical and non-medical supplies.
- Mobilize resources for rehabilitation of damaged infrastructure and replacement of damaged equipment, and supplies;
- Assess community capacity and resources for recovery;
- Assess psychosocial impact of disaster among affected communities;
- Provide psychosocial support and counselling services to communities in need;
- Provide supplementary and therapeutic feeding for children at risk of malnutrition;
- Develop a reconstruction policy to ensure standards for safety (to build back better), right sizing (building to relevant standards), right siting (relocation, land use, and master planning).
- Institute public works programme for health facility reconstruction and volunteers (cash or food for work).

### 5.2.9 Law and Justice sector

<b>Sector Objective:</b>	To build and promote the coherence and further development of national and local frameworks of laws, regulations and public policies for a disaster resilient Samoa.
<b>Sector Lead:</b>	MFCA - Law and Justice Sector
<b>IASC/PHT Cluster:</b>	Protection (Cluster Lead – OHCHR/UNHCR)
<b>Sector Members:</b>	MJCA, AGO, SLRC, MJCA, Police, SUNGO, SVS

## FUNCTIONS OF THE SECTOR

### *Prevention and Preparedness*

- Analyse strengths and gaps in the existing legal framework both in terms of the content of the legislation and its implementation; identify priority areas to address to align with standards set by the global and regional agreements and frameworks.
- Review national and local level DRR laws and regulations tailoring approach to Samoa's natural hazards risk profile and disaster risk governance capacity.
- Encourage the establishment of necessary mechanisms and incentives to ensure high levels of compliance with the existing safety-enhancing provisions of sectoral laws and regulations, including those addressing land use and urban planning, building codes, environmental and resource management and health and safety standards, and update them, where needed, to ensure an adequate focus on disaster risk management.
- Provide guidance to sectors on how to bring national legal frameworks in line with existing international and regional frameworks (e.g. Sendai Framework, Samoa Pathway).
- Assign clear roles and tasks to community representatives within disaster risk management institutions and processes and decision-making through relevant legal frameworks, and undertake comprehensive public and community consultations during the development of such laws and regulations to support their implementation.
- Encourage parliamentarians to support the implementation of disaster risk reduction by developing new or amending relevant legislation.
- Review and strengthen national laws and procedures on international cooperation based on the Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance.
- Promote stronger disaster risk reduction and resilience governance by improving relevant laws and regulations as well as strengthen their implementation and enforcement.
- Provide guidance to sector to Develop supporting policy and regulations.
- Ensure to align future sector respective legal reviews and policies with the review of the DRM Act.
- Develop monitoring and evaluation framework to keep track of whether the legal requirements are actually implemented and to monitor the effectiveness of the legal provisions and their enforcement.
- Promoting cooperation and information exchange between relevant ministries and levels of government with the national DRM focal point agency.
- Support the allocation of necessary resources, including finance and logistics, as appropriate, at all levels of administration for the development and the implementation of disaster risk reduction policies, laws and regulations in all relevant sectors.
- Provide support for establishing dedicated funds for DRR projects under DRM ACT or other laws outside of regular government budgeting.
- Link forest or urban fire prevention and management with DRM laws and institutions.
- Promote the mainstreaming of disaster risk assessments into land-use policy development and implementation.
- Encourage the revision of existing or the development of new building codes and

standards and rehabilitation and reconstruction practices at the national or local levels with, particularly in informal and marginal human settlements.

- Reinforce the capacity to implement survey and enforce codes through an appropriate approach, with a view to fostering disaster resistant structures.
- Formulate public policies, where applicable, aimed at addressing the issues of prevention or relocation, where possible, of human settlements in disaster risk-prone zones, subject to national law and legal systems.
- Mandate training on disaster risk reduction and response in school curricula; and support ongoing requirement for disaster preparedness drills in high-risk areas.
- Ensure inclusion in law and policy of all relevant stakeholders, including women, children and youth, persons with disabilities, poor people, indigenous peoples, volunteers, the community of practitioners and older persons in order to ensure their meaningful engagement.
- Consider review of Fono Village Act 1990 to include DRR to improve linkages, harmonisation and integration between formal and customary and community based justice system.
- Establish public reporting or parliamentary oversight mechanisms for government agencies tasked with DRR responsibilities and ensuring such information is made publicly available
- Strengthen sector human resources capacity to include DRR and climate change.

*Response*

- Reinforce the capacity to implement post-disaster survey and enforce building codes through an appropriate approach, with a view to fostering disaster resistant structures.

*Recovery*

- Encourage the establishment of necessary mechanisms and incentives to ensure high levels of compliance with the existing safety-enhancing provisions of sectoral laws and regulations.

**5.2.10 Public Administration**

<b>Sector Objective:</b>	To build and strengthen the abilities of individuals, organisations, and systems before, during and after a disaster.
<b>Sector Lead:</b>	Public Service Commission (PSC)
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	All ministries - Divisions: corporate services, administration, human resources

**FUNCTIONS OF THE SECTOR**

*Prevention and Preparedness*

- Support Capability Plans of government and statutory agencies to identify and address the skills, tools and training in the area of disaster and climate risk management that will be required by public servants to implement this plan.
- Ensure the integration of disaster risk management and climate change in the job descriptions of CEOs, ACEO, Sector Coordinators and relevant staff
- Foster closer partnerships and more collaborative initiatives within agencies to promote disaster resilience from national to local levels.
- Monitor and evaluate the human resources skills development capability in relation to disaster risk management and climate change.
- Promote and utilize indigenous knowledge and practices.
- Develop capacity of civil servants to engage stakeholders, the ability to motivate and mobilize stakeholders, build consensus, create partnerships and networks, plan and manage large group processes.
- Develop capacity at the policy planning and strategy level relevant to building resilience.

### *Response*

- Provide support to the NEOC to ensure that public servants and other government resources such as vehicles are mobilised to support execution of emergency response functions
- Monitor public servants participation/attendance to the emergency and ensure their safety and security and welfare are well looked after;

### *Recovery*

- Develop technical and organizational capacities of Response Agencies to lead, coordinate, and manage process through proactive recovery planning for early and long-term recovery, competency building in monitoring, strengthen mobilizing resources, and fostering partnerships.

## **5.2.11 Tourism sector**

<b>Sector Objective:</b>	To build and increase the capacity of the Tourism Sector to be adaptive, responsive and able to prepare and recover more quickly from the impacts of climate change and natural disasters.
<b>Sector Lead:</b>	Samoa Tourism Authority (STA),
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	SHA, Chamber of Commerce, Tourist Operators, SBEC, MoF, MoR, MNRE, Savaii Tourism Association, Aleipata Tourism Alliance

## **FUNCTIONS OF THE SECTOR**

### *Prevention*

- Increase the resilience of the tourism sector to disaster and climate change impacts through the implementation of immediate adaptation plans.

### *Preparedness*

- Undertake vulnerability and risk assessments of all tourism sites resulting in the identification of priority sites requiring immediate consideration;
- Formulate risk reduction options for high risk sites and implement risk reduction and adaptation measures.
- Review and revise adaptation plan at priority site on a regular basis.
- Increase the capacity of coastal tourism communities to better prepare for and respond to natural disaster emergencies.
- Enhance the resilience of tourism facilities and infrastructure including key resource supply (food, water, electricity) to the impacts of disaster.
- Mainstream disaster risk reduction into coastal tourism destination planning and development.
- Support local climate change adaptation efforts.
- Support environmental impact assessments of priority sites to determine best protection options, based on earlier vulnerability and risk assessments to be considered in relation to all tourism developments.
- Increase the resilience of the tourism sector to the impacts of disaster through mainstreaming disaster and climate risks into tourism related policy instruments.
- Carry out regular maintenance of coastal protection measures.
- Strengthen human capacity to identify, analyse, implement, monitor, and evaluate cost-effective risk reduction measures.
- Raise awareness at national, sector and community levels about the need to promote and support DRR and climate change adaptation measures.
- Develop sustainable financing mechanisms in support of tourism climate change adaptation actions nationwide.
- Develop natural disaster tourism communications and media recovery plan and ensure formal

channels of communication are established between all relevant disaster management agencies which ensure that accurate information is being rapidly communicated to visitors and potential visitors.

- Prepare and deliver disaster and climate change risks management training program for tourism operators;
- Disaster and climate-proofing of ecotourism enterprises.
- Ensure all tourism operators are trained and connected to the Climate Early Warning and Information System.
- Review the Tourism Accommodation Standards and develop standards to ensure integration of climate change and natural disaster risk resilience measures.
- Promote renewable energy options for the tourism industry.
- Raise awareness at national, sector and community levels by designing and delivering tourism DRR awareness programs.
- Explore opportunities to raise sustainable climate financing from market based economic instruments including insurance cover incorporated into national legislation.
- Raise support for the allocation of funds from national budgets for DRR measures.

#### *Response*

- Coordinate provision of assistance to affected tourist and tourist operators
- Ensure clearance of debris from tourism location and restart at the earliest.

#### *Recovery*

- Lead the PDNA for the Tourism Sector to inform Tourism Sector recovery
- Ensure DRM and CC interventions are integrated in the Tourism Recovery Program and that they are implemented
- Implement Tourism recovery programmes

### **5.2.12 Trade, Commerce and Manufacturing**

<b>Sector Objective:</b>	To provide support to the business community to ensure the resilience of the sector.
<b>Sector Lead:</b>	MCIL
<b>IASC/PHT Cluster:</b>	
<b>Sector Members:</b>	MFAT, MNRE, MAF, MoF, MWCSO, Chamber of Commerce, Small Business Enterprise Centre, SBS, STA, SHA, SAME.

## **FUNCTIONS OF THE SECTOR**

#### *Prevention*

- Ensure that the business community and investors are conversant with relevant laws, policies and regulations relating to the NDMP.
- Conduct periodic monitoring and inspecting premises and storage facilities of businesses that deal with explosives.
- Develop staff knowledge to disaster risk, resilience and climate change adaptation.

#### *Preparedness*

- Assess training needs in the area climate change risks management for MCIL staff and implement appropriate training program.
- Conduct of industry-specific consultations to create awareness of DRM framework, national plan, and local action plans.
- Ensure that existing and upcoming industrial assets and infrastructure are disaster-resistant.
- Ensure proper citing of industriale stablishments considering hazard parameters.

- Make industrial processes and procedures inherently safe.
- Ensure that transportation, storage, handling and usage of chemicals and other hazardous raw materials does not pose a threat to the nearby areas and environment.
- Conduct mock-drills at regular intervals to determine the efficacy of the disaster management plans.
- Assess and retrofit of existing industrial infrastructure.
- Establish linkages between private sector and the community.
- Support networking knowledge on best practices and tools for effective disaster management.
- Develop and implement appropriate risk transfer mechanisms, including micro-insurance for micro and small scale industries.
- Rationalization of national and local land use policy capitalizing on the development and use of vulnerability and hazard maps, with particular adherence to precautionary safety measures against exposure to hazard when setting up business establishments.
- Develop capacity among SMEs and private sector to strengthen planned and adaptive resilience to disaster events through promotion and augmenting organizational resilience particularly on leadership and employee culture.
- Forge pre-disaster arrangements among local governments and between government and private sector.
- Ensure that factories have adequate safety measures, search, rescue and evacuation plans, and that they observe the conducting of safety drills.
- Promote SMEs to establish business continuity, including at community level plans and develop guidebook.
- Provide training program in business management skills in order to ensure that loans beneficiaries do have the necessary knowledge and skills to run businesses efficiently and to repay back their loans.
- Create awareness on insurance schemes.
- Mainstream disaster preparedness into sector plan.
- Provide cash grants to SME to replenish working capital and loan rescheduling.
- Support soft-term credit lines for SMEs to finance the repair and reconstruction of their enterprises.

#### *Response*

- Coordinate and lead initial damage assessment on businesses
- Compile and provide report to NDC, DAC and NEOC on damages to businesses
- Provide training on damage assessment tools and insurance.

#### *Recovery*

- Advocate for a DRR component in trade, commerce and manufacturing sector plan and budget.
- Collaborate with the Ministry of Finance in providing rebate certificates and import permits for goods intended for relief purposes.
- Ensure compliance with quality standards of relief materials.
- Provision of loans: Loans would enable micro-enterprise owners whose shops collapsed or were washed away to rebuild and restock their inventories.
- Build a database of local industries for use in policy analysis and possible future interventions aimed at understanding risks and vulnerabilities of SME sector.
- Fund and oversee a “cash-for-work” scheme that allows affected individuals to work towards recovery and reconstruction to make up for lost income due to disaster.
- Provide low-interest soft-term loans for large industries to replenish raw materials, restore operations, and reschedule non-performing loans.

### 5.2.13 Water and Sanitation

<b>Sector Objective:</b>	To ensure vulnerable persons have protected and reliable access to sufficient, safe water, sanitation and hygiene facilities.
<b>Sector Lead:</b>	MNRE - WSSCU
<b>I A S C / P H T Cluster:</b>	Water, Sanitation & Hygiene (UNICEF)
<b>Sector Members:</b>	SWA, MoH, MWCSD, MWTI, LTA, FESA, SRCS, Samoa Plumbers Association, Independent Water Scheme

## FUNCTIONS OF THE SECTOR

### *Prevention*

- Conduct risk assessments for the sector in collaboration with the DMO.
- Identify appropriate site and construct water and sanitation away from known hazard zones or high risk areas.
- Consider hazard risk in location and construction of water and sewage treatment facilities.
- Protect primary water sources, sanitation, sewage and water treatment facilities from disaster damage.
- Establish and enforce policies and standards for construction of water and sanitation facilities.
- Protect and upgrade village freshwater bathing pools.

### *Preparedness*

- Incorporate climate and disaster resilience into programming.
- Develop and agree on disaster assessment tools.
- Develop sector contingency plan with budget and supply needs and, where possible, pre-position essential sanitation and hygiene supplies, water supplies, purification technologies and chemicals, and tools.
- Evaluate impacts on water quality/availability or on possible disruption to water treatment infrastructure/services from climate change and disasters.
- Establish long-term agreements for procurement of specified WASH supplies, assess local market for potential water-trucking capacity, and ensure the availability of water delivery partners and agreement on methods and standards.
- Train community builders in construction of temporary latrines.
- Identify key resource people and/or institutions with specific knowledge and skills in sanitation and hygiene education and behaviour change for deployment in emergency planning and response.
- Regularly update resource inventory (personnel, equipment and emergency supplies).
- Collect pertinent information on sanitation and hygiene education.
- Train sector staff in water and sanitation
- Promote adaptation actions including water supply.
- Monitor and evaluation of sector's programmes.

### *Response*

- Coordinate response by the sector in collaboration with the NEOC
- Coordinate and lead initial damage assessment on water and sanitation systems, infrastructure, supply/demand
- Compile and provide report to NDC, DAC and NEOC
- Mobilise resources to support implementation of response activities
- Coordinate provision of emergency water supply services in affected areas
- Conduct sanitation, safe drinking water and water conservation education and awareness
- Maintain communication and share information with NEOC, sector members, Water, Sanitation and Hygiene Cluster and other partners;

### *Recovery*

- Coordinate and lead post disaster needs assessment in collaboration with sector members
- Develop a water and sanitation recovery program to inform national recovery program;
- Mobilize resources for rehabilitation of damaged water and sanitation, sewage and water treatment facilities;
- Mobilize communities to participate in water and sanitation recovery;
- Initiate a gap analysis of local and national capacities in water and sanitation, and ensure integration of capacity strengthening in early recovery and transition plans, with a focus on risk reduction;
- Protect rehabilitated water and sanitation facilities from future disaster damage.

### 5.2.14 TRANSPORT

<b>Sector Objective:</b>	To ensure safe, secure and viable transportation modes and infrastructure assets in Samoa before, during and after disasters.
<b>Sector Lead:</b>	MWTI
<b>IASC/PHT Cluster:</b>	None
<b>Sector Members:</b>	LTA, SAA, SPA, SSC, SSS, EPC, SWA, MNRE, MWCSO, MoF, IPES

## FUNCTIONS OF THE SECTOR

### *Prevention*

- Advocate for a DRR component in Transport sector plan and budget;
- Undertake site specific risk assessment with regard to location of proposed transport infrastructure – to mitigate against potential hazards in collaboration with the DMO
- Integrate disaster risk assessment in the planning of transport infrastructure
- Update codes/standards to include resilience and build back better design principles.
- Conduct preventive maintenance of public transport infrastructure.
- Conduct risk assessments on all Transport infrastructure and services in collaboration with the DMO
- Inform industry of building codes and control of development in high risk areas.
- Formulate practical technical standards applicable to road and drainage planning, design and construction and other modes of transport.

### *Preparedness*

- Coordinate drills and simulation exercises to test readiness of the Transport Sector to provide a coordinated response to disasters
- Ensure readiness of all Transport facilities and services to achieve service continuity immediately after impact

### *Response*

- Coordinate and lead initial damage assessment on the Transport Sector facilities/structures/assets, transport networks and services
- Compile and provide report to the NDC, DAC, and NEOC
- Mobilise resources for immediate restoration of transport services infrastructure
- Maintain communication with the Sector members and NEOC

### *Recovery*

- Coordinate and lead post disaster needs assessment for the Transport Sector
- Develop a recovery program to inform the national recovery program.
- Support mobilization of resources towards Transport infrastructure and services recovery
- Support rehabilitation of damaged homes and public buildings.



- Provide technical advice on the rehabilitation of other critical infrastructure (telecommunication, electricity, water and sewage reticulation)
- Promote build back better during rehabilitation of damaged transport infrastructure and housing.
- Enforce National Building Code requirements and monitor compliance
- Provide post disaster psycho consultations for any affected staff within the Transport Sector

**Note:** Other infrastructure related functions that are not under the jurisdiction of the Transport Sector such as the application and enforcement of the Building Code is under the mandated functions of the Ministry of Works, Transport and Infrastructure and therefore recognized under the NDMP as the agency that takes the lead on the implementation of DRM interventions to protect and safeguard other infrastructure that are not transport related.

### 5.3 ROLES IN PREVENTION AND PREPAREDNESS

Stakeholder Group	Roles/responsibility
Cabinet	<ul style="list-style-type: none"> <li>• High level oversight, policy and strategic guidance and direction for disaster risk management implementation and institutional strengthening</li> </ul>
DAC	<ul style="list-style-type: none"> <li>• Policy and planning oversight including the NDMP, DRM NAP and supporting documents, for approval of the National Disaster Council and Cabinet.</li> <li>• Accountable for identification, implementation and M&amp;E of disaster risk management programmes and activities.</li> </ul>
DMO	<ul style="list-style-type: none"> <li>• Act as secretariat for DRM and facilitate regular DAC meetings;</li> <li>• Convener of the National DRM Platform</li> <li>• Follow up on NDMP implementation with Ministries and agencies;</li> <li>• Facilitate reporting to NDC, DAC, Cabinet, development partners and donors;</li> <li>• Provide technical guidance and direction for disaster risk management and support in developing capacity.</li> <li>• Implement disaster prevention and preparedness programs in collaboration with response agencies, sectors, villages, private sector, NGOs and other stakeholders</li> </ul>
Climate Change Division	<ul style="list-style-type: none"> <li>• Policy guidance and direction for climate change adaptation and capacity building</li> </ul>
	<ul style="list-style-type: none"> <li>• Works closely with DMO to ensure mainstreaming of CCA into sector planning and budgets</li> </ul>
Ministries, agencies and local partners	<ul style="list-style-type: none"> <li>• Ministries and agencies: Lead and facilitate the integration of NDMP and actions into Corporate Plans and budgets systems</li> <li>• Local partners: Facilitate integration of NDMP actions into respective planning and budget systems</li> <li>• Facilitate implementation of NDMP in coordination with the DAC/DMO</li> <li>• Ensure progress reporting on NDMP implementation through M&amp;E Advocate for CCA, DRM and resilience</li> </ul>

Community	<ul style="list-style-type: none"> <li>• Support Framework implementation</li> <li>• Participate in DRM and CCA decision-making</li> <li>• Implementation of community disaster risk reduction and preparedness measures</li> <li>• Support the dissemination of awareness disaster-resilience information</li> </ul> <p>Provide feedback to assist monitoring and evaluation and to further improve disaster risk management arrangements, systems, processes and programs</p>
Development partners and donors	<ul style="list-style-type: none"> <li>• All regional and international development partners and donors to liaise with DMO and DAC and other local stakeholders in support of the implementation of NDMP through DRM NAP activities and recommended DRM actions for each of the sectors to strengthen resilience</li> </ul>

## 5.4 ROLES IN DISASTER RESPONSE AND RECOVERY

Ref	Response Functions	Lead Agency	Role	Support Agencies	Role
Health & Medical					
1	First aid	Samoa Red Cross Society	Provide first aid training and first aid services to injured people	Ministry of Police, Fire & Emergency Services, Ministry of Health Village First Aid Response Team Sector: Health	Provide first aid services
2	Transport and movement of casualties	National Health Services	Provide ambulance and medical triage and evacuation teams	Samoa Red Cross Society, Fire & Emergency Services Authority, Ministry of Health, WHO Sector: Health	Provide ambulance and transport services if available.
3	Medical treatment	National Health Services	Provide medical treatment including teams and resources Ensure hospital and health services are running including all medical resources	Hospitals/Medical Centres, WHO, MoH Sector: Health Cluster: Health & Nutrition	Provide Hospital and health services; medical treatment resources Coordinate Health Sector response and Liaison with Cluster Lead and partners
4	Public Health	Ministry of Health	Co-ordinate public health response. Control spread of communicable diseases Provide public health advice Provide resources Liaison with Cluster Lead and partners	Samoa Red Cross Society, Hospitals/Medical Centres WHO & Health & Nutrition Cluster	Assist community based public health activities Provide resources and facilities as requested
5	Management of deceased victims	Ministry of Police	Manage identification, handling, and transportation of deceased victims including personal effects reconciliation, and notifying next of kin.	Health, Coroner, Funeral directors	Provide personnel, facilities and equipment as requested
6	Mortuary services	Coroner (Ministry of Justice)	Provide mortuary services	Ministry of Police, NHS	

7	Counselling & support	National Health Services	Provide psychological support services to those affected by the emergency	Ministry of Health, Samoa Red Cross Society, MWCSD, Aid agencies, SUNGO, WHO, Village response team	Assist with Counselling and support as requested.
Search and Rescue					
8	Land search	Ministry of Police	Co-ordinate search activities for people missing on land and provide required resources	MWTI (roads) FESA	Co-ordinate road access if required
9	Land rescue (e.g. structural collapse, accidents)	Fire & Emergency Services Authority	Co-ordinate rescue of people Provide resources for rescue	Samoa Airport Authority  MWTI (buildings) MWTI (roads) Ministry of Police	Provide personnel and equipment for rescue (as per Airport emergency plans) Provide building plans and structural advice Provide personnel and equipment; access to contractors Cordon off area at risk and ensure safety & security
10	Maritime search and rescue (e.g. vessels, aircraft in the sea)	Ministry of Works Transport & Infrastructure – Maritime  Samoa Ports Authority	Provide “On Scene Commander” Co-ordinate maritime rescue activities  Provide, manage and maintain adequate and efficient port services facilities and security in port	Ministry of Police, Fire Services, Overseas navy personnel, Samoa Airport Authority	Provide personnel and resources (e.g. vessels, communications etc) for rescue
Evacuation					

11	Evacuation of people	MNRE (DMO & SMD)	Evacuate areas required for public safety	MWCSD, MPMC (Press Secretariat), MCIT (Radio 2AP), SQB, Media DMO, Digicel, Bluesky	Utilise communications networks to assist with evacuations
		Ministry of Police, Fire & Emergency Services Authority, Village Council/CBOs	Evacuate at risk areas within villages	SAA, SPA	Utilise siren system to signal evacuation
Community welfare					
12	Registration of evacuees	NEOC Management Unit & Logistics Unit, Evacuation Centre Person in charge	Identify and record information about people affected by the emergency	Samoa Red Cross Society, Caritas/CCJD, Aid agencies, SUNGO, MWCSD, Village Council/CBOs	Provide personnel and information to assist with identification and recording of information about people affected by the emergency as requested  Liaison with village representatives
13	Temporary shelter	NEOC Management Unit & Logistics Unit, Evacuation Centre Person in charge	Establish shelters for evacuees	Samoa Red Cross Society, Hospitals, Caritas/CCJD, ADRA, Aid agencies, SUNGO, Churches, Village Council/CBOs, MWCSD,	Provide resources and facilities to support evacuees including establishment of shelters if possible
14	Disaster food	NEOC Management Unit & Logistics Unit, Evacuation Centre Person in charge	Provide emergency food supplies to affected people	Samoa Red Cross Society, Caritas/CCJD, Aid agencies, SUNGO, Churches, Village Council/CBOs	Provide support for food provision Distribute food in accordance with the SRCS National Food and Nutrition Policy (PK(96)76).

15	Disaster clothing	NEOC Management Unit & Logistics Unit, Evacuation Centre Person in charge	Provide emergency clothing supplies to affected people	Samoa Red Cross Society, Hospitals, Caritas/CCJD, Aid agencies, SUNGO, Churches, Village Council/CBOs	Provide support for clothing provision
16	Animal Welfare	Animal Protection Society	Provide facilities and supplies to ensure the wellbeing of animals affected by a disaster	MAF (Quarantine) Vets	Provide staff, facilities or services as available
17	Disaster Finances	Ministry of Finance	Co-ordinate the collection, allocation and provision of monetary aid to people affected by a disaster.	Aid Agencies, Donors, MFAT	Secure monetary aid
Logistics supply					
18	Incoming resources	Logistics Section of the NEOC	Co-ordinate and prioritise resources (human and physical) needed to respond to emergency event. Co-ordinate procurement, payment, access, staging, distribution and return of resources if necessary	Samoa Red Cross Society, Aid Agencies, DMO  Foreign Government Representatives  SQUIP  SPA, SAA	Provide personnel and facilities to assist with delivery of resources to response agencies to manage the emergency. Access resources from home countries available for emergency response Facilitate border control services Provide facilities for incoming resources
Information management					
19	Public information	NEOC Management Unit & National Controller	Provide information to the public regarding the emergency and the actions they should take. Disseminate warnings as provided by alerting and monitoring agencies Appoint spokespeople for the emergency event. Co-ordinate the provision of information to media agencies (local and international)	All response agencies	Communicate with users of own service as to how the emergency will affect their ability to use the service

20	Enquiries about affected people	NEOC in collaboration with Samoa Red Cross	Provide information about affected people using Tracing programme.	Foreign Government Representatives  Samoa Hotel Association  Ministry of Police  Ministry of the Prime Minister & Cabinet (Immigration)	Collect and provide information to overseas countries about people affected by the disaster Collect information from Hotels for provision to foreign government representatives. Assist in finding missing people and or affected by providing information Provide the list of tourists that entered Samoa before the disaster take place
21	Communications between response agencies and sectors	MNRE (DMO)	Ensure physical communications systems are in place for agencies to communicate with each other. Establish communications protocols and reporting processes.	All response agencies  Bluesky, Digicel, Radio & TV stations  MCIT/OoTR	Report on progress with emergency functions to the Lead Agency Take all effort to restore communications systems. Make available emergency communications systems & resources
Impact assessment					

22	Reconnaissance and needs assessment	NEOC Management Unit & National Controller, DAC & NDC	Co-ordinate reconnaissance of affected areas and disseminate information to response agencies.  Identify required assessment teams and provide necessary support  Provide assessment tools and systems	Response agencies  Village Council/CBOs  MWCSD  MoF/MFAT/Aid agencies	Provide information on damages on own network, assets and services and information on service continuity Provide an initial overview of damages to villages and report to MWCSD. Conduct initial damage assessments on villages, families and their assets and livelihoods affected Provide overseas teams for impact assessment if required and requested.
23	Building Safety Evaluations	Ministry of Works Transport and Infrastructure – Buildings	Co-ordinate assessment of damaged structures to determine if they can be fixed or not. Co-ordinate assessment of structures to ensure they are safe to be re-occupied	Consulting Engineers Aid Agencies in collaboration with MoF and MFAT	Carry out engineering assessments of damaged structures.
24	Building health assessment	Ministry of Health	Co-ordinate assessment of structures to ensure they will not cause health problems if they are re-occupied	WHO	Support public health assessments as required.
25	Utility Services impacts	Utility Operators/Service Providers (EPC, LTA, SWA, Digicel, Bluesky)	Assess and determine damage to utility services and take action to restore services as soon as possible	NEOC	Provide required resources and support where necessary
26	Access impacts - roads	Ministry of Works Transport and Infrastructure – Roads	Determine damage to road networks and restore roads and transportation networks as soon as possible	Ministry of Police, LTA	Manage disruption to traffic flows caused by access disruptions
27	Access restoration - air	Samoa Airport Authority	Determine damage to air transport networks and restore airport facilities and services as soon as possible	MWTI – Civil Aviation	Provide resources and liaise with partners for technical assistance



28	Access restoration - Marine	Ministry of Works Transport and Infrastructure – Maritime	Determine damage to marine transportation networks and ensure facilities and services are restored as soon as possible to allow marine transport to resume	SPA, SSC	Restore facilities and services as soon as possible; inform affected service providers
29	Environmental impact	Ministry of Natural Resources & Environment	Coordinate and lead assessment of impacts on environment Determine impacts to the environment including air, coastal, land and water resources. Compile and report to NDC/DAC and NEOC	MAF, SPREP	Provide resources and technical assistance
30	Agriculture impact	Ministry of Agriculture and Fisheries	Coordinate and lead initial assessment of impact on agriculture and fisheries resources to determine food needs of affected people Liaise with relevant partners including Food Security Cluster on resources required	MNRE, FAO, SPREP	Provide resources and technical assistance
31	Impact on Education	Ministry of Education, Sports and Culture	Coordinate and lead initial assessment on schools and education continuity Provide resources and assessment teams Liaise with partners including Education in Emergencies Cluster	NUS	Provide resources and technical assistance

## 6 IMPLEMENTATION OF THE NDMP

At the national level, implementation of this Plan shall take place through the integration of DRM into relevant national policies and plans such as the Strategy for the Development of Samoa (SDS) and sector plans as well through the development and implementation of respective action plans of government agencies for their respective activities as indicated in the NDMP.

### 6.1 RESOURCE MOBILISATION

Financial resources for the implementation of the NDMP are integral to the budgets of government agencies and sectors, civil society and the private sector in implementing their DRM functions. During disaster response the following sources of funding may be available:

1. Unforeseen budget as allocated by the Samoan Government;
2. Donor Funds available via bi-lateral and multi-lateral agreements;
3. Pacific Catastrophe Risk and Financing Initiative;
4. Contingency Emergency Response Component Fund (CERC Fund).

Non-monetary resources are also available, through bilateral and multi-lateral agreements with development partners, public-private-partnerships, civil society, villages, and diaspora.

### 6.2 COMMUNICATION OF NDMP

In accordance with the Act the NDMP must first be approved by the NDC before being published in the Savali Newspaper and one other widely circulated newspaper in Samoa. The NDMP must be disseminated to all members of the National Disaster Council, Disaster Advisory Committee, government agencies, sectors and any other organisation or persons approved.

The communication of the NDMP and its progress to all stakeholders is critical to the success of the policy and through fostering a change in attitudes and behavior. This will be carried out available avenues including the National DRM Platform, through the SDS and sector reviews, DMO web page, newsletter and social media.

### 6.3 MONITORING AND EVALUATION

Results-based programming will be used to ensure accountability, monitor effective and timely implementation on the NDMP. The M&E process includes sector-wide and community level approach. To monitor and evaluate, indicators will be used against baselines and activities identified in the DRM NAP with the aid of identified means of verification.

The M&E framework will identify appropriate data collection methods, timing of monitoring activities and lead responsibilities.

The M&E framework will ensure coherence with national priorities and can be used by the DAC to undertake national multi-stakeholder consultation processes, as progress is reviewed and challenges are systematically identified. The framework can also identify progress for other DRM initiatives at global, regional and programme levels.

### 6.4 REVIEW OF THE PLAN

As per Section 17(2) of the Act the NDMP must be reviewed every three years or after a significant event. The DAC is responsible for the review and revision.

The NDMP 2017-2020 is a revision of the NDMP 2011– 2014.



# 1 DISASTER RESPONSE OPERATIONAL PROCEDURE

## 1.1 PURPOSE

Part 2 of the NDMP focuses on disaster response coordination and outlines operational procedures and structure for response.

Efficient and effective disaster response is grounded on principles of minimising duplication of efforts and resources, clear understanding of roles and responsibilities, as well as timely implementation of disaster response. Disaster response must be timely and flexible, and responsive to changing characteristics of any given hazard.

The DROP provides the responsibilities that shall be performed by response agencies and sectors, villages, development partners, civil society, private sector and support agencies.

## 1.2 SCOPE

The DROP must be used in the event of a declared emergency or disaster, including when:

- The Prime Minister orders a “*Declaration of Disaster*”; or
- The Head of State makes a “*Proclamation of a State of Emergency*”.

The DROP can also be used to facilitate a coordinated response to emergencies or hazards which do not require a formal declaration.

## 1.3 DISASTER DECLARATION AND EMERGENCY POWERS

### 1.3.1 Declaration of disaster under the Act

The Chairperson of the NDC may issue a Declaration of Disaster. A Declaration can be only be made if in the Chairperson’s opinion:

- a) it is not possible to make a Proclamation of Emergency due to the absence of the Head of State<sup>5</sup>; or
- b) if the circumstances do not warrant the formal Proclamation of an Emergency due to the limited extent of their impacts or likely impacts; and
- c) if the matters that need to be implemented to address the threats can be implemented within a 48-hour period.

A Declaration of Disaster lasts for **48** hours unless a Proclamation of Emergency is made or the National Disaster Council extends the declaration for another 48 hours because the disaster has not ceased.

### 1.3.2 Proclamation of an emergency by the Head of State

The Constitution provides for the proclamation of an emergency to be made by the Head of State acting in their discretion. The Prime Minister may provide advice to the Head of State of the merits of a proclamation of a state of emergency.

The proclamation empowers the Head of State to make orders, as appear to him to be necessary or expedient, to secure the public safety and essential supplies and services, and generally to safeguard the interests and maintain the welfare of the community and country.

<sup>5</sup>Part X of the Constitution of Samoa

Proclamation of an emergency may remain in force for a period of up to **thirty (30) days**.

### **1.3.3 Emergency Powers**

In the event that a disaster or emergency is declared powers are conferred on agencies under the NDMP and their respective Response Agency Plan. The powers conferred are exercisable for the period of the emergency unless they are rescinded or altered by an order made by the Head of State.<sup>6</sup>

During any declaration of disaster, the National Disaster Council may determine that only some of the powers conferred on any of the agencies, organisations or persons under the NDMP may be exercised as the situation requires.

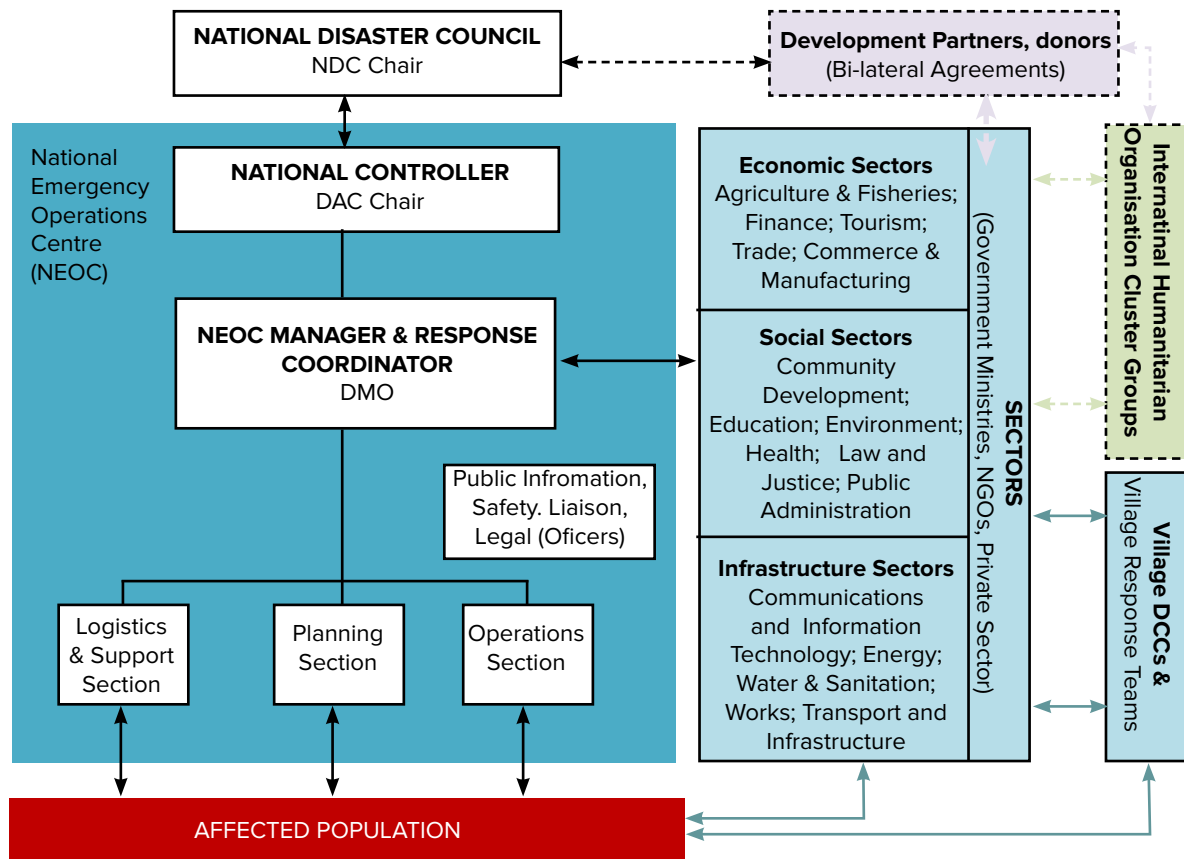
Notably, the Act allows the Commissioner of Police to direct officers to exercise specific powers including:

- a) Direct people at risk or putting others at risk;
- b) Take steps to ensure compliance with directions;
- c) Use reasonable force to remove a person to safety;
- d) Take steps to protect property; and
- e) Require people to leave, or refrain from entering an area where there is a risk to human life or health.

<sup>6</sup>Article 106 of the Constitution of Samoa

## 2 ORGANISATIONAL FRAMEWORK FOR RESPONSE

Figure 3 below is a diagrammatic representation of the national disaster response structure.



### 2.1 ROLES IN DISASTER RESPONSE STRUCTURE

#### 2.1.1 National Disaster Council (NDC)

During disaster response the NDC, led by the Prime Minister as Chairperson, will provide strategic direction and decision-making. The operational decision making and co-ordination of response activities remains the responsibility of the DAC. The NDC will be provided with advice on these issues by and will receive reports from the DAC.

The NDC will focus on issues and decisions such as:

- Providing advice to the Head of State about whether a proclamation of emergency is required;
- Setting strategic direction; and
- Conflict resolution.

#### 2.1.2 NEOC - National Controller

The NEOC is led by the National Controller who reports directly to the NDC Chairperson. The National Controller is responsible for the management and oversight of all incident activities, including developing strategic objectives and approving the ordering and release of resources.

#### 2.1.3 NEOC - Management and Response Coordination

The NEOC Manager and Response Coordinator (MRC) supervises NEOC staff under the direction of the National Controller. The MRC will participate in any decision regarding whether to activate

specific NEOC functional units and may choose to activate the Deputy position and delegate some of the MRC's duties to this Deputy. Depending on the size and scale of the disaster, the MRC may appoint, in consultation with the National Controller and where necessary, the following positions, who will be directly responsible to the MRC:

- The *Public Information Officer* is responsible for the formulation and release of information about the incident to the public, the news media and other appropriate agencies and organisations. The Public Information Officer reports to the MRC.
- The *Safety Officer* responsible for monitoring and assessing hazardous and unsafe situations and developing measures for assuring personnel safety by correcting unsafe acts or conditions through the regular line of authority, or may exercise emergency authority, to stop and prevent unsafe acts when immediate action is required. The Safety Officer maintains awareness of active and developing situations and includes safety messages in each Incident Action Plan.
- The *Liaison Officer* is responsible for communicating with other local government and non-government agencies and will coordinate much of the government liaison work.
- The *MNRE Legal Officer's* responsible for providing legal advice on all aspects of NEOC involvement. The legal officer is not necessarily involved in every incident.

#### **2.1.4 NEOC Intel and Planning Unit**

The Intel and Planning Unit is led by a Unit Head who reports directly to the NEOC Manager and Response Coordinator. The Head of the Intel and Planning Section manages the collection, evaluation, management and dissemination of all operational information concerning the incident. This information is used to assess the current situation; predict the probably course of incident events; prepare alternative strategies; and coordinate and mobilise all available resources. This person is also responsible for the preparation of Incident Action Plans.

The Intel and Planning Section will provide regular reports on the *Resource Status* and *Situation Status*. A number of technical specialists may also work with this section to assist in evaluating the incident and forecasting requirements for additional personnel and equipment.

#### **2.1.5 NEOC Operations Unit**

The Operations Unit is led by a Unit Head who reports directly to the MRC and manages the incidents in the field and assists in the formulation of the Incident Action Plan. The Operations Section includes response and support agency (see **Section 11.1.9**) personnel directly involved with incident activities and most operations section personnel are placed in the field to supervise and accomplish actions set forth in the incident action plan.

#### **2.1.6 NEOC Logistics Unit**

The Logistics Unit is led by a Unit Head who reports directly to the NEOC Manager and Response Coordinator (MRC). The Logistics Unit Head is responsible for obtaining and delivering resources as well as providing all service and support functions for the incident. Approval to order and allocate resources is the responsibility of the National Controller or MRC. The primary responsibilities of the Unit Head include activation of the Logistics Unit and participation in the development and implementation of priorities and objectives for the Incident Action Plan.

#### **2.1.7 Sectors**

First responders to any disaster situation will conduct rapid assessment to provide an initial overview of impact on the ground during a disasters and report to the NEOC.

Each sector will implement response actions listed in their DRM Sector tables (**Sections 5.4.3 to 5.4.16**), Sector Emergency Response Plans.

### 2.1.8 Village Disaster and Climate Committees (DCC)

VDCC and response teams that act as first responders and comprising of the DCC and trained village response teams (RTs) that include the following eleven RTs: Warning, Rescue and Evacuation, First Aid, Security, Damage Assessment, Shelter Management, Water & Sanitation, Bodies Management, Counselling, Relief Distribution, and Projects Management.

### 2.1.9 Response Agencies

During a national scale disaster or emergency all response agencies reports to the National Emergency Operations Centre. For smaller incidents agencies may manage the disaster without the need for national level co-ordination.

Understandably, not every response agency may need to respond to each type of disaster or emergency. This is because the types of functions to be performed vary.

**Table 3** is a guide to the key response. Additional agencies are likely to be required as well as those listed, however the Response and Support Agencies functions are outlined in **Part 1 – Section 5.3: Roles in Response and Recovery**.

<b>Table 3: Key Response and Support Agencies</b>		
<b>Hazard</b>	<b>Key lead agencies</b>	<b>Key support agencies</b>
Cyclone	Ministry of Natural Resources & Environment	Police, MWTI, MAF, MWCSO, SRC, FESA, LTA, SPA,
Volcano	Ministry of Natural Resources & Environment	Police, FESA, MWCSO, Samoa Red Cross, MWTI, LTA
Tsunami	Ministry of Natural Resources & Environment	Police, FESA, MWTI, MWCSO, SRC, LTA, SPA, SAA, Bluesky & Digicel, MCIT
Fire (urban)	Fire & Emergency Services Authority	MNRE, Police, SRC, LTA
Public health crisis	Ministry of Health	NHS, SRC, MWCSO, MAF, SPA, SAA, MNRE
Flood (river)	Ministry of Natural Resources & Environment	MWTI, LTA, FESA, Police, SWA, MoH
Landslip	Ministry of Works Transport & Infrastructure	MNRE, LTA, Police, FESA
Storm surge (including tidal and coastal erosion)	Ministry of Natural Resources & Environment	FESA, MWTI, LTA, Police, MWCSO
Earthquake	Ministry of Natural Resources & Environment	FESA, Police, MWTI, MWCSO, SRC,
Forest Fires	Fire & Emergency Services Authority	MNRE, SRC, Police,
Aircraft emergency (Airport)	Ministry of Works, Transport & Infrastructure – Civil Aviation	Police, SAA, FESA, SRC, MNRE
Hazchem incident – marine	Ministry of Police (Maritime),	MWTI (Maritime), MNRE, SPA
Lifeline Utility Failure - electricity	Electric Power Corporation	
Lifeline Utility Failure – water	Samoa Water Authority	



Animal or plant disease	Ministry of Agriculture and Fisheries	MNRE, MOH
Civil emergency (external)	Ministry of Police	
Lifeline Utility Failure – telecommunications	MCIT	OoTR
Major infrastructure failure – building collapse	Fire & Emergency Services Authority	
Major infrastructure failure - dam	Electric Power Corporation	Ministry of Works Transport & Infrastructure
Drought	Ministry of Natural Resources & Environment	MAF, SWA
Aircraft emergency (other location)	Ministry of Police	SAA, MWTI, FESA
Maritime vessel emergency	Ministry of Police (Maritime),	SPA, MWTI (Maritime), SSC
Hazchem incident – land	Fire & Emergency Services Authority	MNRE
Terrorism	Ministry of Police	Transnational Crime Unit
Civil emergency (internal)	Ministry of Police	MWCSD

#### **2.1.10 International and regional humanitarian partners**

International humanitarian ‘clusters’ will work with the appropriate Sector upon an official request from the Government through the Ministry of Foreign Affairs and Trade. The Standard Operating Procedure to request International Assistance and the Form are in Appendix 7 of this document.

# 3 RESPONSE OPERATIONAL PROCEDURES

## 3.1 NEOC ACTIVATION STAGES

The NEOC will be responsible for signaling the shift from one operational mode to another, as the situation unfolds. Table 4 below details the activation stages for the NEOC. Through all modes, inter-sector and multi-sectoral coordination will continue to be provided by the DAC through the sector leads or coordinators (see **Appendix 6: List of Sector Coordinators and Members**)

Response to a disaster will be undertaken in three stages, as follows:

- Stage 1: Standby
- Stage 2: Action
- Stage 3: Stand-down

This escalation process will avoid over-response, and will serve as a guide for organisations with a role in disaster response as to when they should undertake response activities and implement their own agency response plans.

Table 4 Activation Stages for the NEOC

NEOC Activation Status	Key Activities
STANDBY	Warning phase characterised by actions taken upon receipt of warning of an impending emergency. Activities are directed by the DAC Chair (or National Controller). Activities include: <ul style="list-style-type: none"> <li>• Verify disaster alerts;</li> <li>• Assess situation and when necessary, activate the DROP, response agencies plans and sector emergency response plans;</li> <li>• Convene meetings of the NDC and DAC;</li> <li>• Monitor crisis and ensure preparations in place for evacuation of at risk communities.</li> </ul>
ACTION	Mode characterised by actions to respond to an emergency. Activities include: <ul style="list-style-type: none"> <li>• Declaration of disaster;</li> <li>• Activation of the DROP;</li> <li>• Conduct rapid assessments;</li> <li>• Search and rescue;</li> <li>• Evacuate people at risk;</li> <li>• Provision of humanitarian assistance;</li> <li>• Proclamation of an emergency if situation escalates;</li> <li>• Early recovery</li> </ul>
STAND DOWN	Recovery phase requiring the following actions: <ul style="list-style-type: none"> <li>• Deactivation of the emergency operations;</li> <li>• Continuous monitoring of situation;</li> <li>• Conducting damage, loss and needs assessments;</li> <li>• Prioritising recovery actions;</li> <li>• Preparation of recovery frameworks;</li> <li>• Mobilising resources for recovery.</li> </ul>

### **Stage 1: Standby (Crisis Mode)**

Standby comes into effect when it has been established that a hazard exists, or threatens to affect all or part of the country. The DMO will notify all DAC members, sector leads and village DCCs of the hazard, and place them on standby so they are ready to begin operations or actions immediately if they are called upon.

The DMO will also inform the NDC that response agencies and sectors have been placed on standby. During this stage all response agencies and sectors should check their personnel and facilities are ready for disaster response.

### **Stage 2: Action (Emergency Mode)**

This stage comes into effect when the threat or impact is imminent or has already occurred (with no warning).

The National Emergency Operations Centre will operate, response agencies and sectors coordination units will undertake disaster response as per their response agency plans and sector emergency response plans and other arrangements.

The NDC will be notified that the NEOC is operating, and situation reports will be provided to the NDC, on behalf of DAC agencies by the Chairperson of the DAC.

### **Stage 3: Stand-Down - Recovery Mode**

The NDC is responsible for determining when stand-down from a disaster response should occur. This decision is to be made after consultation with the DAC.

A staged stand-down may be necessary with organisations with limited involvement in the operations being stood down in the first instance.

Following stand-down of emergency response the NEOC will close. Emergency operations then move into the recovery phase. Recovery actions will continue for a significant period of time after disaster response.

## **3.2 RESPONSE ACTIONS**

**Table 5** below shows the step by step chronological procedures taken for all activities intended to save lives, protect property and environment under threats from hazards.

Rapid assessment should be conducted within the first 72 hours of receiving information on a disaster situation. It should identify the problems, their sources and consequences that assist to determine whether response strategies should be mounted. Rapid assessments should be conducted as an inter-sectoral exercise involving a mix of specialists. **An initial damage assessment** should be followed by detailed and continuous assessments that provide more detailed information and updated information on disaster situations. In trying to understand critical needs, resources, and constraints for displaced population, quantifying and qualifying information about the emergency situation is needed.

<b>Table 5: Response Actions Matrix</b>		
<b>Actions</b>	<b>Responsible authority/ agency/sectors</b>	<b>Contact persons</b>
Within 24 hours		
Notify NDC and DAC on the imminent or actual emergency	DMO	ACEO - DMO
Notify Response Agencies and Sector Coordination Units to initiate the appropriate response procedures for the specified emergency.	DMO	ACEO - DMO
Verify the emergency information	Sector Leads	See Appendix 6 for list.
Activate the National Emergency Operations Centre (NEOC) ensuring staffing and maintenance requirement on a 24-hours response capacity at the NEOC.	National Controller	MNRE CEO
Issue early warning information through public media and regional council structures for community action	NEOC MRC	ACEO - DMO
Initiate and coordinate search and rescue, evacuation, emergency health services for those in need of medical services	NEOC MRC	ACEO - DMO, Police Commissioner, Fire Commissioner, SRCS Secretary General, NHS General Manager, Director General MoH
Provide security for evacuated properties and displaced persons.	Police	Police Commissioner
Within 48 hours		
Mobilise and provide personnel, equipment, safety and security and materials to assist affected areas according to identified needs	NEOC	National Controller MCR
Schedule inter-sector and sectoral meetings to share information on the emergency situation	NEOC	National Controller/MCR

Deploy a inter-sectoral rapid needs assessment teams. Refer to Annex 5 for Rapid Needs Assessment template.	NEOC	National Controller/ MCR
Mobilise and support Village DCCs and RTs	NEOC and relevant Sectors	Sector Coordination Units
Deploy additional emergency response personnel if situation is escalating	NEOC	MCR, Operations Unit Head
Within 72 hours		
Undertake initial damage assessments of affected areas. This includes seeking external assistance for arrangements for aerial surveys.	NECO & relevant sectors	Sector Coordination Units
Establish mobile and/or static health services for the affected communities	Health Sector	Sector Coordination Unit
Register affected people (disaggregate by age, gender)	Community Sector	Sector Coordination Unit
Present rapid assessment results to the NDC	National Controller	CEO-MNRE
Provide emergency assistance to displaced people	NEOC	MCR, Operations & Logistics Unit Heads
Develop an inter-sectoral plan of action	NEOC	MCR, Intel & Planning Unit Head, Sector Coordination Units and response agencies
During First Two Weeks		
Continue to conduct needs assessments and review action plans	All sectors	Sector Leads
Scale up further emergency response based on continuing needs assessments	National Controller	MNRE - CEO
Consolidate information on who is doing what, what is being done and where, analyse gaps and flow of assistance	NEOC MRC	ACEO - DMO
Plan interventions for the next three months	NEOC Intel & Planning Unit	MCR, Intel & Planning Unit Head
Conduct detailed damage and loss assessments	Affected sectors	Sector Coordination Units

Develop framework for early recovery	DAC, NEOC	National Controller, MCR, Sector Coordination Units, response agencies
Update situation reports and submit to the NDC	NEOC Intel & Planning Unit	MCR, Intel & Planning Unit Head
After 12 weeks or when emergency situation has improved		
Stand down of the disaster response operations if situation has improved	National Controller	CEO-MNRE
Conduct debriefs (NEOC, Response Agencies and Sectors)	Independent debrief facilitator	DMO, Sector Coordination Units
Review DROP and lessons learned.	DMO	ACEO DMO, response agencies, sectors
Compile reports on the disaster situation for submission to the NDC, DAC and stakeholders	DMO	ACEO - DMO
Conduct financial analysis for disaster operations and include financial report	DMO & MoF	ACEO DMO, ACEO CSD MNRE, relevant ACEOs MoF
Develop recovery framework	MoF, Sectors and response agencies	CEO of MoF, CEOs/Sector Coordinators

### 3.3 INTERNATIONAL ASSISTANCE FOR RESPONSE OR RECOVERY

International assistance arrangements relevant to this Plan will normally fall into one or other of the following categories:

- a) Direct participation in response operations. For example, use of specialist aircraft, personnel, e.g. United Nations Disaster Assessment and Co-ordination (UNDAC) teams, or technical assistance through Clusters, bilateral arrangements, and others.
- b) Provision of urgent relief supplies: For example, provision of emergency food and medical supplies; provision of tents for temporary shelter.

Longer term assistance programmes, though they may be related to immediate response operations in some ways, are managed by the Aid Co-ordination Committee.

#### 3.3.1 Process to request international assistance

Requests for international assistance can only be submitted to aid agencies and donors on the direction of the NDC and when it has become clear that the situation at hand is beyond the capabilities of the existing national resources.

MFAT & MoF through the NEOC will collate requests for assistance from response agencies, sectors and affected communities for presentation to the NDC, and will advise the NDC on the need for international assistance and the availability of that assistance.

Any request for international assistance will have to follow the Standard Operating Procedure to request international assistance and completing the request form in Appendix 7 of this document.

The distribution of aid to communities (including shelter, food and clothing) is to be coordinated by the DAC through the NEOC, in accordance with needs assessments.

### **3.3.2 Arrival of international aid**

The NEOC is responsible for providing information on donors' assistance to Customs and Agriculture & Fisheries personnel to facilitate the necessary arrangements for clearance of all donor assistance being provided for disaster relief purposes. Goods purchased locally with disaster relief funding are to be exempt of duty.

## **3.4 TRANSITION FROM RESPONSE TO RECOVERY**

Recovery begins during the response phase (early recovery) and continues beyond the lifting of the Proclamation of Emergency and completion of the operational disaster response role of the NDC, DAC and NEOC.

Preparation for recovery activities should begin before disaster strikes by laying the foundations for institutional, policy and implementation mechanisms that will ensure the smooth assessment, planning, implementation and evaluation of the recovery plan.

The NEOC will be stood down, but the facilities may continue to be used for recovery management personnel if required, including the coordination of international aid.

## **3.5 DEBRIEFS AND REPORTING**

Following each national scale disaster, it is essential that information is collected to learn from the situation and to enhance future disaster responses.

### **3.5.1 Debriefs**

Operational debriefings should be conducted as soon as possible after the event. These should be addressed in two stages:

1. Intra-sectoral and intra-agency (within each sector and agency) debriefing  
Each sector and agency should review their own operational procedures and response plans, and to allow staff to submit their views on the operation.
2. Inter-agency debriefing  
All agencies that actively participated in the operation should be called together to identify lessons learned and enhancements required for future disaster responses.

The aim of the debrief sessions is to accurately record and understand what activities occurred during the emergency response, to record which activities worked well, and which would need to be enhanced for future operations.

### **3.5.2 Implementation of debrief recommendations**

The DMO in consultation with the DAC is to review the findings of the debriefings and consider amendments or action to improve the disaster management arrangements. Such action may relate to:

- Amendments to plans and procedures, including the NDMP.
- Restructuring of the DMO, including amending organizational roles and responsibilities.
- Identifying and conducting training activities.
- Arranging and promoting public awareness and education within communities.
- Warning, including origin(s), transmission and receipt, processing, dissemination, action taken (by Government and community).

- Functioning of the NEOC.
- Emergency feeding, shelter and welfare arrangements.
- International assistance arrangements.
- Functioning of control and co-ordination.
- Assessment of public education, information and awareness.

Recommendations of the DAC are to be forwarded to the NDC for consideration and direction.

## APPENDIX 1: LIST OF ACRONYMS

CBO	Community Based Organisation
CCU	Climate Change Unit (MNRE)
CDCRM	Community Disaster and Climate Risk Management Programme
CRICU	Climate Resilience Investment Coordination Unit (MoF)
CSO	Civil Society Organisation
CSSP	Civil Society Support Programme
DAC	Disaster Advisory Committee
DCC	Village Disaster and Climate Committee
DEM Act	Disaster and Emergency Management Act
DMAF	Disaster Management Assistance Fund
DMO	Disaster Management Office
DRM	Disaster Risk Management (prevention (DRR), preparedness, response)
DROP	Disaster Response Operational Procedures
DRR	Disaster Risk Reduction
ECE	Early Childhood Education
EEZ	Exclusive Economic Zone
EPC	Electric Power Corporation
GBV	Gender Based Violence
IDA	Initial Damage Assessment
LTA	Land Transport Authority
MAF	Ministry of Agriculture and Fisheries
MCIL	Ministry Commerce, Investment and Labour
MCIT	Ministry of Communication, Information and Technology
MESC	Ministry of Education, Sports and Culture
MFA	Ministry of Foreign Affairs
MJCA	Ministry of Justice and Courts Administration
MNRE	Ministry of Natural Resources and Environment
MoF	Ministry of Finance
MoH	Ministry of Health
MoR	Ministry of Revenue
MRC	Manager and Response Coordinator (NEOC)
MWCSD	Ministry Women, Community and Social Development
MWTI	Ministry Works, Transport and Infrastructure



NAP	DRM National Action Plan
NDC	National Disaster Council
NDMP	Samoa National Disaster Management Plan
NEOC	National Emergency Operations Centre
NHS	National Health Service
NOLA	Nuanua o le Alofa (NGO for People with Disabilities)
NUS	National University of Samoa
OAG	Office of the Attorney General
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PSC	Public Service Commission
SAA	Samoa Airport Authority
SBEC	Small Business Enterprise Centre
SBC	Samoa Broadcasting Corporation
SBS	Samoa Bureau of Statistics
SDGs	Sustainable Development Goals
SDS	Strategy for the Development of Samoa
SFDRR	Sendai Framework for Disaster Risk Reduction
SFESA	Samoa Fire and Emergency Service Authority
SHA	Samoa Hotels Association
SLJS	Samoa Law and Justice Sector
SLRC	Samoa Law Reform Commission
SME	Small and medium-sized enterprises
SOE	State Owned Enterprise
SPA	Samoa Ports Authority
SPREP	Secretariat of the Pacific Regional Environment Programme
SRCS	Samoa Red Cross Society
SROS	Scientific Research Organisation of Samoa
SSC	Samoa Shipping Corporation
STA	Samoa Tourism Authority
SUNGO	Samoa Umbrella for Non-governmental Organisation
SVSG	Samoa Victim Support Group
SWA	Samoa Water Authority
UNDAC	United Nations Disaster Assessment and Co-ordination
UNDP HDR	United Nations Development Programme Human Development Report
UNESCO	United Nations Educational, Scientific and Cultural
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSIDR	United Nations International Strategy for Disaster Risk Reduction
Village RTs	Village Response Teams
WASH	Water, Sanitation and Hygiene

WFP	World Food Programme
WSSP	Water Sector Support Programme (MNRE)
WHO	World Health Organisation

## APPENDIX 2: SAMOA REGISTER OF HAZARDS AND RISKS

Samoa is exposed to a number of hazards, some of which are seasonal, such as tropical cyclones, floods and droughts, whilst other present an ever present threat, such as earthquakes, volcanic eruption, tsunamis, epidemics, industrial hazards, and exotic plant diseases.

Whilst it may be appropriate to list all possible hazards, the emphasis of the disaster management arrangements contained with this Plan is those hazards that have the potential to create a significant emergency in Samoa, and would most likely require some degree of government coordination to manage.

A risk analysis process was undertaken whereby for each hazard, a Maximum Credible Event (MCE) has been identified. These are events which are credible in terms of the magnitude of the consequences and likelihood of occurrence. They are useful to help provide context and understanding of the sorts of events that must be managed, and are also useful for risk assessment purposes.

A qualitative risk assessment approach based on the Australian New Zealand Risk Management Standard 4360 (AS/NZS 4360:1999) has been used as the basis of a preliminary risk assessment.

Each MCE has been assigned a likelihood and consequence rating (refer Tables 2 and 3 for more detail). Together, the likelihood and consequence rating translate to a certain level of risk (Extreme, High, Medium or Low).

The Extreme and High level risks are those that should be the focus of emergency management programmes, including hazard information and monitoring, risk reduction initiatives public awareness and contingency planning.

The level of information upon which this assessment was based varied considerably from hazard to hazard.

**Table 1: Hazards that have the potential to create a significant emergency situation in Samoa grouped by assessed level of risk.**

Hazard	Likelihood	Consequence	Level of Risk	Maximum Credible Event (MCE)
Cyclone <sup>7</sup>	A	4/5	E	Category 5 Tropical Cyclone with winds gusting to more than 100mph. Destructive storm surge and high surf increasing to 24 feet affects the western and northern coastal areas of Savaii and northern coastal area of Upolu. Very destructive storm surges of 15 to 20 feet will affect most of the northern coastal areas of Upolu and southwest coast areas of Savaii and Upolu. Subsistence crops destroyed, severe property damage and unprotected coastal infrastructure destroyed. Many injuries and some loss of life. Power and telecommunications disrupted for several days possibly weeks. Potential for further deaths due to disease. Estimated damage over US\$130 million.
Volcanic Eruption	C	4	E	Explosive eruption on the east-west or north rift zones on Savai'i within the next 50 – 100 years. It is more likely that areas on the northern half of Savai'i will be more vulnerable to the consequent effects. Damage will be greatest on adjacent flora and fauna, infrastructure and lifelines, tourism, subsistence agriculture and fisheries, and general property damage. The airport will be closed for prolonged periods (due to ash). No loss of life anticipated. Some villages may have to be permanently relocated.
Tsunami	C	4	E	A tsunami with a mean run-up of between 7 and 9 metres has a return period of between 50 and 100 years based on a probability analysis of historical records. Significant damage to unprotected coastal areas will occur. Subsistence crop loss and damage to coastal infrastructure. Fishing industry affected. Significant property damage. Loss of life would be expected for both tsunami generated some distance away (e.g. Chile-Peru region) despite warning of approximately 13 hours, and more significantly for tsunami generated in the region (e.g. Tonga-Kermadec trench) as warning periods will be much shorter.

<sup>7</sup>Includes storm surge causing coastal inundation; high winds and rain induced landslips

Urban Fires	C	4	E	Large fire in Apia town area, particularly near the markets. The buildings are all attached/close together with no fire protection, or water supply. Fast moving fire would destroy properties quickly and would be difficult to get under control. Many potential fire sources are present in this area (cooking oils etc). Major economic impact with many injuries and potentially also loss of lives
Public health crisis	C/D	5	E	Outbreak of <i>Avian Influenza</i> with 2 confirmed cases quickly spreading to affect half of the population, with possibly one third of the population (tilize. 55,000) dead within 3 weeks (estimated life of virus). Significant economic impact (reduced workforce), and loss of tourism for a long period. Cost of treatment, funerals, life insurance and NPF payouts crippling for the economy. Destruction of all poultry will be required. Similar effects to 1918 flu epidemic.
Environmental crisis – invasive species	A	4	E	<i>Red Imported Fire Ants</i> are discovered. The ant has a painful bite and makes outdoor living difficult. This impacts on tourism and affects Samoa's outdoor lifestyle. Small animals are also affected and susceptible infrastructure is at risk. Eradication is difficult and very expensive, as they are usually found after becoming established. An eradication campaign in Queensland (Australia) has cost AUS\$75M over 7 years.
Flood <sup>8</sup>	B/C	3	H	Prolonged heavy rainfall in and around Apia, affects roads, blocks drains, flash flooding in locations with the potential to cause a small number of deaths, crops affected. Most effects short lived.
Earthquake	C	3/4	H	A Richter magnitude 8.5+ earthquake with an tilized some 200km southwest of Samoa. This event is likely to generate peak ground accelerations of 0.1 to 0.2g and correspond with a local felt intensity of Modified Mercalli (MM) VII to VIII. An event this size is likely to cause landsliding and damage to unreinforced buildings. A small tilized tsunami may be generated (as it was for the 1917 event of similar size and tilized). No major infrastructure damage or loss of life is anticipated. Crops not affected (cf. tsunami or cyclone).

<sup>8</sup>Inland flooding due to heavy rain

Landslides	B	2	H	<p>Landslides in Samoa are usually caused by heavy rainfall. Earthquakes can also trigger landslides. Landslide hazard zones have been mapped for the whole of Samoa. Instability of soil has also been mapped for the whole of Samoa. If landslides occur, it is highly likely that major damages to infrastructure such as roads, water pipes, electricity, and communication can occur. They are unlikely to cause fatalities as most unstable areas are away from human settlements. There is a lot of quarrying activities which may cause soil instability in the future.</p>
Forest Fires	C	3	H	<p>Large scrub fire threatening one or more villages. Unlikely to cause fatalities as it won't be that fast moving due to fuels being normally fairly moist. Loss of crops likely. Few structures affected. Fire service resources used to protect villages but no capability to fight fire in rural areas. Potential for it to get out of control, particularly on Savai'i.</p>
Aircraft emergency (airport)	D	4	H	<p>A full 747 aircraft (tilize. 400 passengers) crashes on approach to the airport. Many injuries and deaths of both locals and tourists on board. Airport is closed for 1 week. Major impact on the economy due to airport being out of action and tourism is affected.</p>
Hazchem incident – marine	C	3/4	H	<p>Water supply in the city out for more than two days due to a burst main at the start of the system. Most government and private corporations cannot function without water and would have to shut down as there is limited water storage. Many industries (construction, bottling plant) also cannot operate without water. Public health consequences (sanitation); economic consequences for businesses and government. There are many spring that could be utilized as alternate water sources.</p>
Agricultural crisis – animal or plant disease	D	3	M	<p>Taro beetle causing <i>Taro Leaf Blight</i> which seriously affects Samoa's stable crop (taro). Domestic food supply at risk as well as exports. Eradication is difficult and very expensive.</p>
Civil emergency – external	E	3/4	M	<p>Invasion or aggressive take-over. Economic consequences; injuries and possible deaths. Extremely unlikely although consequences would be significant.</p>

Lifeline Utility Failure – telecommunications	D	2	L	3 days no landline telecommunications (major substation failure). Other means of communication available (HF; satellite phone).
Lifeline Utility Failure – electricity	D	2	L	3 days no power in Apia. Apia affected (hospital; govt. services); villages ok.
Major infrastructure failure – building collapse	E	3	L	One of Apia's multi-storied buildings collapses (earthquake or bomb). Immediate area devastated and building collapses. Adjacent buildings also affected. Situation is quickly contained. Some injuries, possible deaths.
Major infrastructure failure – dam	D	2	L	A breach in the face of Afaililo dam (hydro dam) caused by an earthquake. Three villages are located downstream of the dam (in Fagaloa Bay) and would be badly affected. Power supply would be seriously interrupted to those villages relying on power from the dam. An alternative power supply would have to be sourced for the medium long term as the dam is repaired.
Drought	E	2/3	L	A prolonged drought causes the dryout of intakes in rural areas. A lack of adequate water trucks means water supply to these areas is limited initially. Private contractors' water trucks are used at significant cost. Crops fail and there are significant economic losses. The environmental impact is high as streams dry up, compounded by needing to take water from them to augment town supply. Villages suffer as there is limited water storage. There are many springs that could be utilized and alternate water sources.
Aircraft emergency (other location)	D	2/3	L	A medium passenger aircraft (25 passengers) crashes into hills south of airport. No survivors. Recovery efforts difficult. Mortuary facilities stretched.
Maritime vessel emergency	D/E	2	L	A cruise ship moored at the Port is on fire. 1000 people have to be evacuated and temporarily housed. Situation is quickly contained. No security issues.
Hazchem incident – land	D	2	L	Explosion of underground tanks – destruction up to 5 mile radius suggested. Low probability due to safety measures in place. Additional risk as is adjacent to fuel storage tanks.
Terrorism	E	3	L	Bomb goes off in one of Apia's government buildings. Immediate area devastated and building collapses. Situation is quickly contained. Some injuries, possible deaths.
Civil emergency – internal	E	2	L	Political stability makes large riots and other major internal unrest unlikely.

### APPENDIX3: NATIONAL DISASTER COUNCIL (NDC) MEMBERS

Organisation	Representative
Ministry of Prime Minister & Cabinet	Prime Minister, Chairperson
Ministry of Natural Resources & Environment	DPM/Minister, Deputy Chairperson
Minister of Trade	Member
Minister of Fire Service & Tourism	Member
Minister of Finance	Member
Minister of Women, Community and Social Development	Member
Minister of Works, Transport and Infrastructure	Member
Minister of Health	Member
Minister of Education, Sports and Culture	Member
Minister of Agriculture and Fisheries	Member
Minister of Revenue	Member
Minister of Justice and Court Administration	Member
Minister of Public Enterprises	Member

## APPENDIX 4: DISASTER ADVISORY COMMITTEE (DAC) MEMBERS

<b>Core members (Response Agencies as listed in Act)</b>	<b>Representative</b>
Blue Sky	CEO (or nominated representative)
Oceania Gas	General Manager (or nominated representative)
Digicel Samoa Ltd.	General Manager (or nominated representative)
Electric Power Corporation	CEO (or nominated representative)
Fire and Emergency Services Authority	Commissioner (or nominated representative)
Land Transport Authority	CEO (or nominated representative)
Ministry of Agriculture & Fisheries	CEO (or nominated representative)
Ministry of Commerce, Industry and Labour	CEO(or nominated representative)
Ministry of Communication & Information Technology	CEO (or nominated representative)
Ministry of Education, Sports& Culture	CEO (or nominated representative)
Ministry of Finance	CEO (or nominated representative)
Ministry of Foreign Affairs & Trade	CEO (or nominated representative)
Ministry of Health	CEO (or nominated representative)
Ministry of Natural Resources & Environment	CEO (Chairperson of DAC)
Ministry of Police	Police Commissioner (or nominated representative)
Ministry of Prime Minister & Cabinet	CEO (or nominated representative)
Ministry of Public Enterprises	CEO (or nominated representative)
Ministry for Revenue	CEO (or nominated representative)
Ministry of Women, Community & Social Development	CEO (or nominated representative)
Ministry of Works, Transport & Infrastructure	CEO (or nominated representatives) comprising: Maritime Division Infrastructure Assets – Building Infrastructure Assets – Roads Civil Aviation Division
National Council of Churches	President (or nominated representative)
Origin Energy Samoa	General Manager (or nominated representative)
Petroleum Products Supplies	General Manager (or nominated representative)
Samoa Airport Authority	General Manager(or nominated representative)
Samoa Bureau of Statistics	CEO (or nominated representative)
Samoa National Health Services	General Manager (or nominated representative)
Samoa Ports Authority	General Manager (or nominated representative)
Samoa Quality Broadcasting Corporation	CEO (or nominated representative)
Samoa Red Cross Society	Secretary General (or nominated representative)
Samoa Shipping Corporation	General Manager (or nominated representative)
Samoa Tourism Authority	CEO (or nominated representative)



Samoa Water Authority	General Manager (or nominated representative)
Associate Members	Representative
Adventist Development and Relief Agency	Country Director (or nominated representative)
Australian High Commission	High Commissioner (or nominated representative)
CARITAS Oceania Samoa/ CCJD	Country Manager (or nominated representative)
Chamber of Commerce	CEO (or nominated representative)
Chinese Embassy	Ambassador (or nominated representative)
Japan International Co-operation Agency	Resident Representative (or nominated representative)
Embassy of the Government of Japan	Ambassador (or nominated representative)
LDS	Head of Office (or nominated representative)
New Zealand High Commission	High Commissioner (or nominated representative)
Office of the Attorney General	Attorney General (or nominated representative)
Office of the Audit Comptroller	Audit Comptroller (or nominated representative)
Office of the Regulator	Regulator (or nominated representative)
National University of Samoa	Vice Chancellor (or nominated representative)
Public Service Commission	CEO (or nominated representative)
Samoa Bankers Association	President (or nominated representative)
Samoa Hotel Association	CEO (or nominated representative)
Secretariat for the Pacific Regional Environment Programme	Director (or nominated representative)
Samoa Umbrella for Non-Government Organisations	CEO (or nominated representative)
UN Agencies	UN Resident Coordinator (or nominated representatives from UN DMT)
United States of America Embassy	Officer de Charge (or nominated representative)
US Peace Corps Samoa	Country Manager (or nominated representative)
World Health Organisation	Resident Representative (or nominated representative)
Civil Society Support Program	Program Manager (or nominated representative)
Nuanua o le Alofa Inc	Officer Manager (or nominated representative)

## APPENDIX 5: GENERIC TERMS OF REFERENCE FOR SECTOR LEAD

1. Ensure inclusion of key partners for the sector, respecting their respective mandates and programme priorities;
2. Ensure appropriate coordination with all sector partners;
3. Secure commitments from sector partners in responding to needs and filling gaps, ensuring an appropriate distribution of responsibilities within the sectoral group, with clearly defined focal points for specific issues where necessary;
4. Promote emergency response actions while at the same time considering the need for early recovery planning as well as prevention and risk reduction concerns;
5. Ensure effective links with other sectoral groups;
6. Represent the interests of the sectoral group in discussions with the DAC and other stakeholders on prioritisation, resource mobilisation and advocacy;
7. Ensure integration of agreed priority cross-cutting issues in sectoral needs assessment, analysis, planning, monitoring and response (e.g. age, environment, gender, HIV/AIDS and human rights);Contribute to the development of appropriate strategies to address these issues; ensure gender-sensitive programming and promote gender equality; ensure that the needs, contributions and capacities of women and girls as well as men and boys are addressed;
8. Ensure adequate contingency planning and preparedness for new emergencies;
9. Ensure predictable action within the sectoral group for the following:
  - a. Identification of gaps;
  - b. Developing/updating agreed response strategies and action plans for the sector and ensuring these are adequately reflected in overall country strategies;
  - c. Drawing lessons learned from past activities and revising strategies accordingly;
10. Ensure that responses are in line with existing policy guidance, technical standards, and relevant Government human rights legal obligations;
11. Ensure adequate monitoring mechanisms are in place to review impact of the sectoral working group and progress against implementation plans;
12. Ensure adequate reporting and effective information sharing;
13. Advocate for donors to fund humanitarian actors to carry out priority activities in the sector concerned, while at the same time encouraging sectoral group participants to mobilise resources for their activities through their usual channels;
14. Promote/support training of staff and capacity building of partners;
15. Sector Leads are responsible for acting as the provider of last resort (subject to access, security and availability of funding) to meet agreed priority needs and will be supported by the DAC in their resource mobilisation efforts in this regard.

## APPENDIX 6: LIST OF NATIONAL DRM SECTOR LEADS, CO-LEADS AND MEMBERS

Sector	Lead/Co-Lead	Organisation	Designation	Sector Members
1. Agriculture, Livestock and Fisheries	Sector Lead	MAF	Sector Coordinator	MNRE, MoR, MoH-Public Health, MWCSD, MWTI-Maritime, MES, SBEC, WBDI, Samoa Farmers Association, CFMAC, Tilapia Farmers Association, Commercial Banks, Conservation International
2. Communication and Information Technology	Sector Lead Co-Lead	MCIT	Sector Coordinator	Office of the Regulator, BlueSky, Digicel, MNRE-Met. Division, EPC, MCIT
3. Community Development	Sector Lead Co-Lead	MWCSD	Sector Coordinator	DMO, MAF, MCIL, MNRE, Police, Samoa Red Cross, SUNGO, NGOs, UNICEF, UN Women, NOLA
4. Education	Sector Lead Co-Lead	MESC	Sector Coordinator	MWCSD (Youth), MWTI (Infrastructure, Transport) MoH (Public Health, Nutrition), NUS, ECE, Mission Schools, Private Schools, Post-secondary Technical Institutions, UNESCO, UNICEF
5. Energy	Sector Lead Co-Lead	MoF-Energy Division EPC	Sector Coordinator	Petroleum Products Supply (PPS), BOC Samoa, Origin Energy, MNRE-Renewable Energy
6. Environment	Sector Lead Co-Lead	MNRE	Sector Coordinator	PUMA, FESA, SOEs, MCWSD, MFA, MOH, METI, OLSSI, Conservation International, SPREP
7. Finance	Sector Lead Co-Lead	MoF	Sector Coordinator	
8. Health	Sector Lead Co-Lead	MoH-Public Health NHS	Sector Coordinator	MNRE-Environment, Doctors Association, Nurses Association, Private health service providers, Women CBOs, SUNGO

9.	Law and Justice	Sector Lead	SLJS	Sector Coordinator	SLRC, MJCA, Police, DMO
		Co-Lead	OAG		
10.	Public Administration	Sector Lead	PSC	Sector Coordinator	All ministries - Divisions: corporate services, administration, human resources
		Co-Lead			
11.	Tourism	Sector Lead	STA	Sector Coordinator	SHA, Chamber of Commerce, SBEC, MoF, MoR
		Co-Lead			
12.	Trade, Commerce and Manufacturing	Sector Lead	MCIL	Sector Coordinator	MAF, MoF (ADC, CDC, EPPD), MWCSD, NGOs, Chamber of Commerce, Small Business Enterprise Centre
		Co-Lead	MFAT-Trade Division		
13.	Water and Sanitation	Sector Lead	MNRE-WSSP	Sector Coordinator	MoH, MWTI, FESA, SRCS, Samoa Plumbers Association;
		Co-Lead	SWA		
14.	Works, Transport and Infrastructure	Sector Lead	MWTI	Sector Coordinator	LTA, SAA, SPA, SSC, EPC, SWA, MNRE
		Co-Lead			

## APPENDIX 7: STANDARD OPERATING PROCEDURE TO REQUEST INTERNATIONAL ASSISTANCE

### PROCEDURES TO REQUEST INTERNATIONAL ASSISTANCE DURING DISASTER OR EMERGENCY RESPONSE

#### Standard instant response arrangements

Depending on the magnitude of a disaster and whether a State of Emergency has been declared, immediate response arrangements will be necessary, requiring the immediate dispatch of emergency relief assistance and medical personnel. It will not be feasible to await an assessment of the type and extent of assistance required.

MFAT (in conjunction with other key line Ministries) will without delay meet with Development partners / Diplomatic Missions based in Apia on the assistance that can be rendered immediately, whilst awaiting further more detailed survey assessments to be undertaken.

MFAT will prepare the necessary official requests to this effect. Standard arrangements will also apply to facilitate the entry of personnel /technical experts and emergency relief assistance at port of entries and border control.

#### Other Procedures during the aftermath of a Disaster

The procedures are to be followed closely by all Ministries/ Agencies of the Disaster Advisory Committee, Development partners and international aid agencies.

Any requests for international assistance whether it be in the form of personnel/technical assistance, humanitarian relief aid, equipment etc. should be clearly detailed on the attached international assistance request form. The form must be endorsed by the Chief Executive Officer of the Ministry concerned or Head of the Requesting Agency.

Any requests should be for resources either not available readily in Samoa or in limited supply, or where such resources are required to assist with the emergency relief and recovery efforts and responses.

#### Procedures:

1. All DAC agencies including the Sector members MUST use the prescribed form duly signed by the Head of the Agency /Ministry. The form must be submitted to the National Emergency Operation Centre (NEOC) (via email and hand deliver) for coordination of requests.
2. The NEOC Logistics Unit (which includes a Representative from the ACC, MOF) will compile the list of all requests from the DAC Agencies and Sectors and submit it to the Ministry of Foreign Affairs & Trade.
3. To expedite the request process, MFAT will do either of the following to ensure the request is submitted to Development Partners and International Aid and humanitarian agencies in a timely manner:
  - i) Submit the list as is to the Development partners/ Aid agencies pending submission of a formal request ( signed letter by the CEO, MFAT or the Chairman of the National Disaster Council) or
  - ii) Submit a formal request together with the list submitted by the NEOC/ACC.

4. MFAT will inform the NEOC Logistics Unit on the status of the requests including details of assistance that will be rendered by the respective agencies and partner governments.  
Such information will include:
  - i) Resources offered by the International Aid agencies, international humanitarian organizations and overseas missions
  - ii) the name of the international aid agency or humanitarian organization or the country that will provide these resources;
  - iii) the means of transportation to Samoa and the expected date of arrival
5. MFAT will facilitate clearance in collaboration with Border Control Ministries - Customs, PMs & Cabinet (Immigration), Samoa Airport Authority, Ministry of Health, Samoa Ports Authority, Ministry of Agriculture (Quarantine) , Police, MWTI
6. Other international assistance offered  
All humanitarian relief agencies/ international aid agencies who wish to offer assistance whether it be in the form of technical personnel and/or relief items will need to contact the Foreign Ministry and submit a list of items/personnel etc. This information will be relayed to the NEOC to determine the extent and quantity of assistance required.



