



**MINISTRY OF FINANCE AND NATIONAL PLANNING**

**RISK SCREENING TOOLKIT**  
**MAINSTREAMING RISK INTO THE NATIONAL**  
**BUDGET AND CORPORATE PLANNING PROCESS**

**FOR PLANNERS IN GOVERNMENT LINE MINISTRIES**

**October, 2017**

## Introduction

This toolkit has been developed as a guiding document for corporate planners of Government Line Ministries to:

- **Identify and assess risks to and from your project or activity**
- **Identify how to manage those risks.** When an issue is identified, the issue can then be referred to the appropriate authority for further recommendations on risk management measures.

This will help planners find ways to improve the resilience of their project or activity, and ensure they are more inclusive and sustainable given the changing climate and environment; and given vulnerability to a range of hazards in the country.

## Objective

By screening their projects and activities for risk, planners will be able to:

- Identify and manage risks in their Corporate Plans and Development Project Proposals
- Support achievement of the outcomes of the Tonga Strategic Development Framework (2015-2025)

## Definition of risk

Risk is the likelihood of a hazard or change occurring, and the probability of damaging consequences for vulnerable and exposed organisational assets, stakeholders, resources and activities. **Figure 1** below shows a common equation used for calculating the risk for a situation or project. A risk is the combination of the probability of a hazard occurring (e.g. tsunami) and its negative consequences on vulnerable elements (e.g. low lying coastal communities).

**Figure 1: Risk Equation**



**A hazard can be natural or man-made and may cause disruption or damage to life, property and or the environment.** There are a number of different kinds of hazards, such as geological (earthquake, tsunami, volcanic eruption, landslide); climate (extreme temperature, drought, wildfire); weather (storm, cyclone, flash flood); biological (epidemic such as Ebola, insect infestation); social (land or natural resource conflict, theft or vandalism); environmental (soil erosion, pollution, loss of biodiversity); economic and organisational (financial, poor management, corruption, political change).

## Completing the risk screening

The risk screening table below is divided into two parts:

- 1) Part 1 – Screening for risks **to** your project or activity
- 2) Part 2 – Screening for risks **from** your project or activity

Within both Part 1 and Part 2, there are three steps:

- 1) **Identification** of hazards or dangers that may prevent the project or activity from achieving its objectives (risks **to**), or be created as a result of the project or activity (risks **from**).
- 2) **Risk rating**. Once potential hazards or dangers have been identified, the next step is to determine how likely the risk is to occur, and how much of an impact this will have if it eventuates. This can be done using the risk rating table below.
- 3) **Risk management**. List ideas on how to manage the problems that have been identified for the project or activity. If you have more than two hazards, it is suggested that you prioritise the hazards with the highest impact rating, and just list management measures for these (e.g. just draft management measures for the hazards with high impacts).

### Risk Rating

The following table shows the appropriate response for different combinations of likelihood and degree of negative effect. **Likelihood** of a risk is the probability or chance of an impact happening as a result of the interaction between a hazard and any vulnerability. **The extent of the negative impact** refers to how serious the impact will be, should it eventuate. Using the table below, you can determine whether: it is considered unnecessary to include risk management measures (don't include), important to manage identified risks (include), or consider cancelling or redesigning this project or activity.

**Table 1: Risk Rating Table** (source: MFNP One Tool Process)

		Assessment of Risk Likelihood		
		Low	Medium	High
Extent of negative impact	Significant	Include	Include	Cancel or redesign
	Moderate	Don't include	Include	Include
	Minor	Don't include	Don't include	Include

If a risk is assessed as having a **low** likelihood and having **minor** possible effect, then there is no need for it to be included as a critical risk, and no need to develop risk management measures.

If a risk is assessed as having a **high** likelihood and having a **significant** possible impact, the whole project or activity should be cancelled or redesigned.

### **\* Potential Impacts and Vulnerable Groups**

Climate change and disaster risk cannot be understood without recognizing the gender and social dimensions of vulnerability and capacity. Gender Mainstreaming ensures that women, men, boys and girls can access, participate in and benefit on equal basis and in line with their specific needs. The Inter-Agency Standing Committee (IASC) Gender Marker and the Pacific Gender and Climate Change Toolkit 2013 shows how projects can be assessed for gender inclusiveness.

As part of this Risk Screening you will consider the **impact** hazards may have on identified on people, the environment, economy, and/or infrastructure (in the Summary tables in Part 1 and Part 2). When considering people who may be impacted by a hazard related to your project or activity, consider the following groups of people:

- Elderly
- Disabled (blind, deaf, mental, mobility, other)
- Women
- Children
- Youth
- Female headed households
- Pregnant women
- Those who are very sick
- Ethnic/religious minorities
- Very poor
- Other groups that may be excluded.

Activities that may increase people's vulnerability may include (but are not limited to): locating it in a hazard prone area, clearing forests or milling of timber, clearing mangroves or wetlands, using scarce community resources, extraction of sand and gravel, community relocation.

Activities that could have un-intended impacts may include (but are not limited to): distribution or redistribution of natural resources such as water or timber, providing goods or assets, such as seeds or tools, providing infrastructure, such as water or sanitation, and providing services such as health.

As an example, if not designed appropriately, projects or activities could contribute to social conflict over resources; or unequal distribution of project resources. This could result in inequalities, discrimination or increasing the vulnerability of marginalised groups.

## Part 1: Screening for risks to your project

This section helps you identify risks **to** and assumptions about your project or activity from potential climate, environmental, disaster, social, economic and operational hazards or changes. Simply tick the hazards or factors that may impact or be relevant for your project or activity (use historical information, community/expert consultation and risk maps for information – see Resources at the end of the document).

	#	Hazard or Factor	Tick if yes		#	Hazard or Factor	Tick if yes
1) Social Factors (TSDF Pillar 2)	<b>Is your project or activity likely to be exposed to social impacts such as land or natural resource conflict?</b>			3) cont.	3.4	Procurement supplies	
	1.1	Disputes over land or water			3.5	Project financing (for instance for ongoing maintenance)	
	1.2	Theft or vandalism		4) Natural hazards (TSDF Pillar 4)	<b>Is your project or activity in a high risk geographical location that could be impacted by natural hazards?</b>		
	1.3	Does not involve vulnerable groups (see * above)			4.1	Cyclone/strong winds	
	1.4	Not obeying rules or laws (e.g. building codes)			4.2	Rough seas/storm surge	
	1.5	Limited community ownership			4.3	King tide	
	1.6	Social norms that are incompatible with the project or activity			4.4	Heavy rainfall/flood	
	1.7	Cultural norms that are incompatible with the project or activity			4.5	Low rainfall/drought	
2) Infrastructure services (TSDF Pillar 5)	<b>Does your project or activity require access to particular economic factors or infrastructure services?</b>				4.6	Volcanic eruption/acid rain	
	2.1	Telecommunications			4.7	Earthquake	
	2.2	Roads		4.8	Tsunami		
	2.3	Electricity		4.9	Landslide/erosion/rock fall		
	2.4	Water		4.10	Bushfire		
	2.5	Sanitation		4.11	Building Fire		
	2.6	Other?		4.12	Road related accidents		
3) Economic factors (TSDF Pillar 1)	3.1	Land, water or construction material		Other			
	3.2	Markets		Other			
	3.3	Skilled labour or labour with certain levels of education		Other			

	#	Hazard or Factor	Tick if yes		#	Hazard or Factor	Tick if yes	
5) Environmental	Is your project or activity dependent on the environment and therefore sensitive to environmental changes?			6) Project/Process Management	Will your project or activity be exposed to external operational factors that may make it more difficult to construct, commence or implement? Or have you made assumptions about external operational factors that are necessary for project delivery?			
	5.1	Change in quality or availability of water (e.g. pollution due to animals)			6.1	Inadequate project / activity co-ordination and management		
	5.2	Change in quality or availability of soil (e.g. salinity or soil degradation)			6.2	Poorly defined roles and responsibilities		
	5.3	Soil erosion (e.g. sand mining)			6.3	Poorly defined implementation timetables		
	5.4	Deforestation			6.4	Ongoing maintenance of project assets, infrastructure		
	5.5	Over fishing or misuse of sea resources			6.5	Poor financial management		
	5.6	Removal of mangroves or wetlands			6.6	Poorly specified and insufficient M&E		
	5.7	Over hunting of animals or gathering of plants, nuts, seeds etc.			6.7	Inadequate technical skills (e.g. engineering)		
	5.8	Dengue outbreak			6.8	Change in scope of project		
	5.9	Diarrhoea outbreak			6.9	Inadequate stakeholder management		
	5.10	Insect infestation			7) Climate change (TSDF Pillar 4)	Is your project or activity dependent upon climate conditions and therefore sensitive to changes in these?		
	5.11	Invasive species (marine or land)				7.1	Sea level	
	5.12	Waste contamination		7.2		Coral bleaching		
Other			7.3	Increase of heavy rainfall				
Other			7.4	Increase in air, water or sea temperature				
Other			7.5	Saltier ground water				
Other			Other					

## Summary of risks to your project or activity

1. List the number of the hazards or dangers you ticked above.
2. List who (see Page 4) or what (e.g. consider the environment, economy, and/or infrastructure) would be impacted if these hazards or dangers occur.
3. Rate the likelihood of the impact, by determining the probability or chance of the impact eventuating.
4. Rate the negative impact if it does eventuate (how bad will it be if it does happen?).
5. Rate the potential impact as low, moderate or high. Do this using the likelihood and consequence table above, based on the likelihood and consequence determined for your project in the columns to the left.
6. List ideas on how to manage these problems for the project. If you have more than two hazards, it is suggested that you prioritise the hazards with the highest impact rating, and just list management measures for these (e.g. just draft management measures for the hazards with high impacts).
7. Identify the link to your Corporate Plan and Budget.

1	2	3	4	5	6	7		
Reference number	Potential impact to your project or activity	Likelihood	Negative Impact	Rate impact	Risk Management	Corporate Plan Link	Budget Estimate	
							Recurrent	ODA
<b>4.13</b>	<i>Water tanks dry up, and children get sick from using unclean water sources</i>	<i>Medium</i>	<i>Moderate</i>	<i>Include</i>	<i>Include training on water system management and maintenance; Ensure that there is an emergency water supply for dry periods</i>	<i>Sect. 4- Page 45</i>	<i>\$100,000</i>	
<b>5.1</b>	<i>Water source for gravity fed water project becomes unsafe to drink due to pollution from pigs</i>	<i>High</i>	<i>Moderate</i>	<i>Include</i>	<i>Fence off the water source; Ensure people keep their animals fenced in</i>	<i>Sect.5 – Page 67</i>		<i>\$200,000</i>
<b>6.1 and 6.3</b>	<i>Project managers on site cannot manage timely delivery of project within allocated budget, so construction is not completed</i>	<i>High</i>	<i>Significant</i>	<i>Cancel or redesign</i>	<i>Need to redesign project or activity</i>	<i>na</i>		

## Part B: Screening for risks from your project or activity

This section helps you **identify risks and impacts** that may arise **from** your project or activity as a result of economic, climatic, environmental, social or disaster related factors. As above, simply tick the hazards or factors that your project or activity may create, impact or interact with.

	#	Hazard	Tick if yes		#	Hazard	Tick if yes
<b>1) Economic</b>	<b>Is your project or activity likely to have negative economic impacts?</b>			<b>3) Environmental</b>	<b>Is your project likely to have negative impacts on the environment? By:</b>		
	1.1	Increased demand for resources			3.1	Using lots of water	
	1.2	Increased demand for services (e.g. telecommunications, water)			3.2	Using lots of minerals/rocks	
	1.3	Increased competition for land			3.3	Using lots of land plants, trees, animals	
	1.4	Increased competition for labour			3.4	Using lots of sea plants, fish, coral etc.	
	1.5	Increased demand for financial services			3.5	Clearing vegetation from land	
	1.6	Providing goods/assets (such as seeds or tools) to particular people and not others?			3.6	Producing lots of solid waste or hazardous waste	
	1.7	Providing infrastructure (such as water or sanitation) to particular people and not others?			3.7	Polluting air, soil or water	
	1.8	Providing services (such as health)			3.8	Distributing or redistributing natural resources (such as water or timber)	
<b>2) Climatic</b>	<b>Is your project or activity likely to contribute to climate change by emitting fossil fuels?</b>			3.9	Clearing wetlands		
	2.1	Cutting down trees		Other			
	2.2	Includes large numbers of cattle		Other			
	2.3	Transportation using fossil fuels		Other			
	2.4	Significant energy use		Other			
	2.5	Significant energy generation		Other			



	#	Hazard	Tick if yes		#	Hazard	Tick if yes
<b>4) Social</b>	<b>Could your project or activity increase the vulnerability of local communities, stakeholders or other people to disasters or climate change impacts?</b>			<b>5) Disaster</b>	<b>Could your project or activity contribute to disaster risks?</b>		
	4.1	Project uses scarce community resources and may distort local economy or cause increased conflict			5.1	Location could cause danger for people (e.g. close to the coast or steep hill)	
	4.2	Project or activity may cause disputes over land title or leadership			5.2	Requires clearing of vegetation on steep slope or coastline that could cause danger for people	
	4.3	Project may cause jealousy because it gives material to only some groups in the community		5.3	Uses lots of water resources or other natural resources, increasing the vulnerability of stakeholders		
	4.4	Project or activity may cause the displacement, relocation or eviction of people		Other			
	4.5	Project or activity does not cater for or consider the needs of elderly people		Other			
	4.6	Project or activity does not cater for or consider people with disabilities (e.g. blind, deaf, mental)		Other			
	4.7	Project or activity does not cater for or consider women and girls					
	4.8	Project or activity does not cater for or consider children and youth					
	4.9	All people do not benefit equally from the project or activity (see * on page 4 for examples)					
	4.10	Project or activity does not cater for the needs of all people (see * on page 4 for examples)					
	4.11	Project may affect people's use of existing services/areas (e.g. children's play area, walking paths)					
	4.12	Project may affect the safety of the community *					
	4.13	The whole community were not consulted about the project or activity					
	4.14	Project will disturb a cultural site					
4.15	Project requires extraction of sand or gravel						

**Summary of risks from your project or activity**

1. List the number of the hazards or dangers you ticked above.
2. List who (see Page 4) or what (e.g. consider the environment, economy, and/or infrastructure) would be impacted if these hazards or dangers happened.
3. Rate the likelihood of the impact, by determining the probability or chance of the impact eventuating.
4. Rate the negative impact if it does eventuate (how bad will it be if it does happen?).
5. Rate the potential impact as low, moderate or high. Do this using the likelihood and consequence table above, based on the likelihood and consequence determined for your project in the columns to the left.
6. List ideas on how to manage these problems for the project. If you have more than two hazards, it is suggested that you prioritize the hazards with the highest impact rating, and just list management measures for these (e.g. just draft management measures for the hazards with high impacts).
7. Identify the link to your Corporate Plan and Budget.

1	2	3	4	5	6	7		
Reference number	Potential impact from your project or activity	Likelihood	Negative Impact	Rate impact	Risk Management	Corporate Plan Link	Budget	
							Recurrent	ODA
4.1	<i>Violence arises between communities who do and don't have fishing special management areas</i>	<i>Medium</i>	<i>Significant</i>	<i>Include</i>	<i>Ensure there is extensive and inclusive consultation with communities with and without SMAs, prior to installation; consult with local police post prior to implementation</i>	<i>Section 2 page 20</i>		<i>5,000</i>
4.8	<i>Construction of the new building will take place next to a school so children may play amongst unsafe debris and/or be exposed to abuse</i>	<i>Medium</i>	<i>Moderate</i>	<i>Include</i>	<i>Ensure children are supervised at all times when playing near construction site; Fence construction site with temporary fencing</i>	<i>Section 5, page 42</i>	<i>25,000</i>	

## Resources for better understanding risks to and from your program/output

There is a wealth of resources available to support you to better understand the risks to and from your project. A selection of these are provided below, but this list is not exhaustive.

Agency	Information available to better understand risks
<b>Tonga Meteorological Office (MEIDECC)</b>	Island Climate Summaries: <a href="http://www.met.gov.to/index_files/Page642.htm">http://www.met.gov.to/index_files/Page642.htm</a> Contact: Ofa Fa'anunu, Deputy Secretary, Meterological Division, MEIDECC
<b>Pacific Climate Change Science Program</b>	Tonga's Future Climate: <a href="http://3u67we1yp0syq605cu82s11h.wpengine.netdna-cdn.com/files/2014/01/10_PSSCP_Tonga_8pp.pdf">http://3u67we1yp0syq605cu82s11h.wpengine.netdna-cdn.com/files/2014/01/10_PSSCP_Tonga_8pp.pdf</a>
<b>Climate Change Division, MEIDECC</b>	JNAP II (in draft mode) Climate Change Policy 2035 Climate Risk Resilience Project – Vulnerability Assessment Framework
<b>Ministry of Lands, Survey and Natural Resources</b>	Geographical Information Systems (GIS): Contact: Rosamind Bing,CEO, Ministry of Lands and Natural Resources
<b>Ministry of Health</b>	<a href="http://www.health.gov.to/">http://www.health.gov.to/</a> Contact: Siale 'Akauola,CEO,Ministry of Health
<b>Ministry of Infrastructure</b>	<a href="http://infrastructure.gov.to/">http://infrastructure.gov.to/</a> Contact: Kelela Tonga, Acting CEO
<b>Ministry of Agriculture, Forestry and Foods</b>	<a href="http://www.quarantine.gov.to/">http://www.quarantine.gov.to/</a> Contact: Viliami Kami,DS,Quarantine Division <a href="http://mafff.we.bs/">http://mafff.we.bs/</a> Contact: Viliami Manu,CEO, MAFFF Division
<b>Environment and Climate Change (MEIDECC)</b>	Environmental Impact Assessments (when triggered), management plans Contact: Lupe Matoto, DS, Environment Division.
<b>Ministry of Internal Affairs</b>	Revised National Policy on Gender and Development & Strategic Plan of Action 2014 – 2018 Gender Mainstreaming Handbook (Draft July2017) Corporate Development Plans (Communities) Island Development Plans (Region) Constituency Council Plans Sports Development Framework <a href="http://www.tongalocal.gov.to">www.tongalocal.gov.to</a>  Contact: Polotu Paunga, Head of the Women's Affairs Unit Contact: Eva Tu'uholoaki, Deputy CEO Local Government and Community Development division Contact: Lu'isa Manuefetoa, Deputy CEO Social Protection and Disability Division
<b>National Emergency Management Office</b>	Natural Emergency Management Plan (NEMP) Village Emergency Management Plan (VEMP) District Emergency Management Plan (DEMP)  Coordinated Clusters Recovery Plan (work in progress) Ministerial Business Continuity Plans <a href="https://m.facebook.com/NEMOTONGA/">https://m.facebook.com/NEMOTONGA/</a> Contact: Leveni 'Aho, Director, NEMO

**Ministry of Finance  
and National  
Planning**

Climate Finance Risk Governance Assessment 2016  
Public Financial Management Roadmap 2010  
One Tool Process 2015  
Contact: Balwyn Faotusia, CEO, MFNP  
Contact