IMPROVING THE EFFECTIVENESS OF OVERSEAS DEVELOPMENT ASSISTANCE IN TUVALU

GUIDANCE NOTE FOR ASSESSING AND APPRAISING POLICY RISK

SPREP
Secretariat of the Pacific Regional Environment Programme

The **Pilot Program for Climate Resilience: Pacific Regional Track (PPCR-PR)** is a regional program which aims to strengthen integration of climate change and disaster risk considerations into 'mainstream' policy making and related budgetary and decision-making processes (i.e. 'climate change and disaster risk mainstreaming').

The PPCR-PR is implemented by the Secretariat of the Pacific Regional Environment Program (SPREP) and Asian Development Bank (ADB) and is funded through the Climate Investment Funds (CIF).

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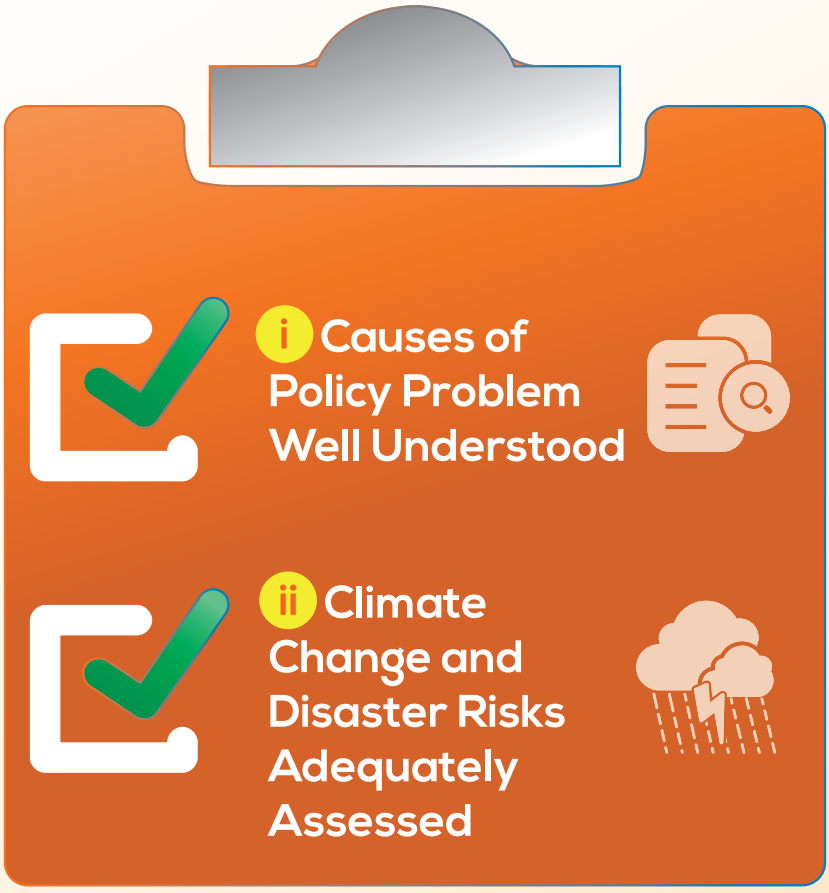

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Introduction

The Government of Tuvalu (GoT) is undertaking a reform program to improve the effectiveness, efficiency and resilience of its overseas development assistance (ODA). This work has lead to the development of a *Tuvalu National Aid Policy (2012),* and updates to the *Tuvalu Budget Manual (2014)* and *Tuvalu Government Financial Instructions (2016)* – amongst other things.

To support the operation of these reforms an ODA Handbook has been developed along with a series of supporting guidance notes and tools.

This document is the supporting guidance note to assist with **assessment and appraisal of policy**[1] **risk**.

The primary target audiences for this guidance note are:

- GoT officials who are responsible for preparing ODA proposals; and
- GoT officials who are responsible for reviewing and appraising new ODA proposals, including risk elements.

The Guidance Note is also intended to be used by Development Partners of Tuvalu to assist them with the process of aligning and harmonising with GoT systems – as agreed under the Paris Declaration on Aid Effectiveness.

The approach outlined in the Guidance Note is consistent with the international risk management standard *ISO 31000:2009*.

The approach further features an emphasis on climate change and disaster types of risk. This reflects the situation in Tuvalu where climate events (e.g. extreme tide events, drought) impact on a wide range of different ODA policies – oftentimes substantially. Moreover, in the medium and long-term future, these risks are expected to further increase under the effects of **human-induced** climate change – presenting as a major development challenge for Tuvalu.

STRUCTURE OF THE GUIDANCE NOTE

The structure of this Guidance Note is organized into two parts as follows:

Part A sets the scene for undertaking risk assessments, and appraising risk elements of ODA proposals in Tuvalu. This section firstly provides a general overview of policy risk assessment and how it is used within the Tuvalu policy cycle. It then describes the key concepts that need to be understood in order to perform and appraise policy risk assessment.

Part B provides some more detailed guidance to assist with conducting and using risk assessment for ODA policy planning. This section firstly explains a simple methodology – the Risk Matrix – that can be used by GoT officials and Development Partners to conduct risk assessments. It then provides a set of checklist questions that can be used to appraise whether risk assessments have been properly undertaken and are effectively used to informed design of the ODA policy proposal.

Concluding remarks are also offered at the end.

In addition, some further guidance and information is provided in the appendices:

- Appendix 1 briefly describes preparatory work that should be undertaken prior to starting a risk assessment; and
- Appendix 2 provides a worked example of a (climate change and disaster) risk assessment using the Risk Matrix methodology.

The development of this Guidance Note has been supported by the Secretariat of the Pacific Regional Environment Program (SPREP) and the Asian Development Bank (ADB) through the Pilot Program for Climate Resilience: Pacific Regional Track (PPCR-PR). More information on the PPCR-PR can be found at https://www.climateinvestmentfunds.org/cif/node/7295.

1 This terminology is consistent with the Tuvalu Budget Manual. "Policy" can take a range of different forms, including new regulation – such as through the introduction of certain licensing requirements or taxation; as well as the delivery of direct programs to the community such as education services or health care services. It is a generic term to capture all Government interventions that are proposed through the annual budget and related ODA procedures.

PART A. Setting the Scene

Overview of Policy Risk Assessment

A policy[2] is often affected by factors or events that are random in nature and which are fully or partly outside the control of the organisation(s) responsible for implementing it. When these events occur, they can affect the extent to which an ODA policy is able to achieve its intended development objectives – or even cause it to fail.

Risk assessment is a type of policy analysis which seeks to understand how and to what extent these risk events are expected to affect an ODA policy, and to determine the most appropriate measure(s) to treat them (if any).

There are a range of different methodologies that can be employed to undertake a risk assessment. These methodologies include qualitative methodologies such as the Risk Matrix and Environmental Impact Assessments, as well as quantitative methodologies such as cost-benefit analysis (CBA). All risk assessment methodologies however share a common sequence of core steps. Namely, (i) to identify risks, (ii) analyse the significance of these risks, (iii) determine whether the risk is acceptable or tolerable, and – in most methodologies – (iv) select the best measure(s) to treat key risks.

The primary use of risk assessments is to help inform modifications to the design of a ODA policy. Where risk assessments are done well and are effectively used, they contribute to the formulation of better quality policy proposals that are more likely to achieve their development objective(s).

Risk assessments are typically undertaken by officials who are responsible for preparing the ODA proposal. This is done in communication and consultation with internal and external stakeholders, and is typically compiled into an assessment report. Development Partners also frequently assist in undertaking risk assessments – especially for ODA proposals that are initiated by Development Partners.

When is information and knowledge generated from Risk Assessment used?

In Tuvalu, the information and knowledge generated from a risk assessment is used at a number of different stages of the policy life cycle. Risk assessment reports used to help inform foci of Monitoring and Evaluation (M&E) work provides an overview of a policy cycle for Tuvalu and shows how key risk assessment information and knowledge – as documented in a risk assessment report- is used within this. Risk assessment reports used to help inform foci of Monitoring and Evaluation (M&E) work also shows where a risk assessment should ideally be undertaken.

2 This terminology is consistent with the Tuvalu Budget Manual. "Policy" can take a range of different forms, including new regulation – such as through the introduction of certain licensing requirements or taxation; as well as the delivery of direct programs to the community such as education services or health care services. It is a generic term to capture all Government interventions that are proposed through the annual budget and related ODA procedures.

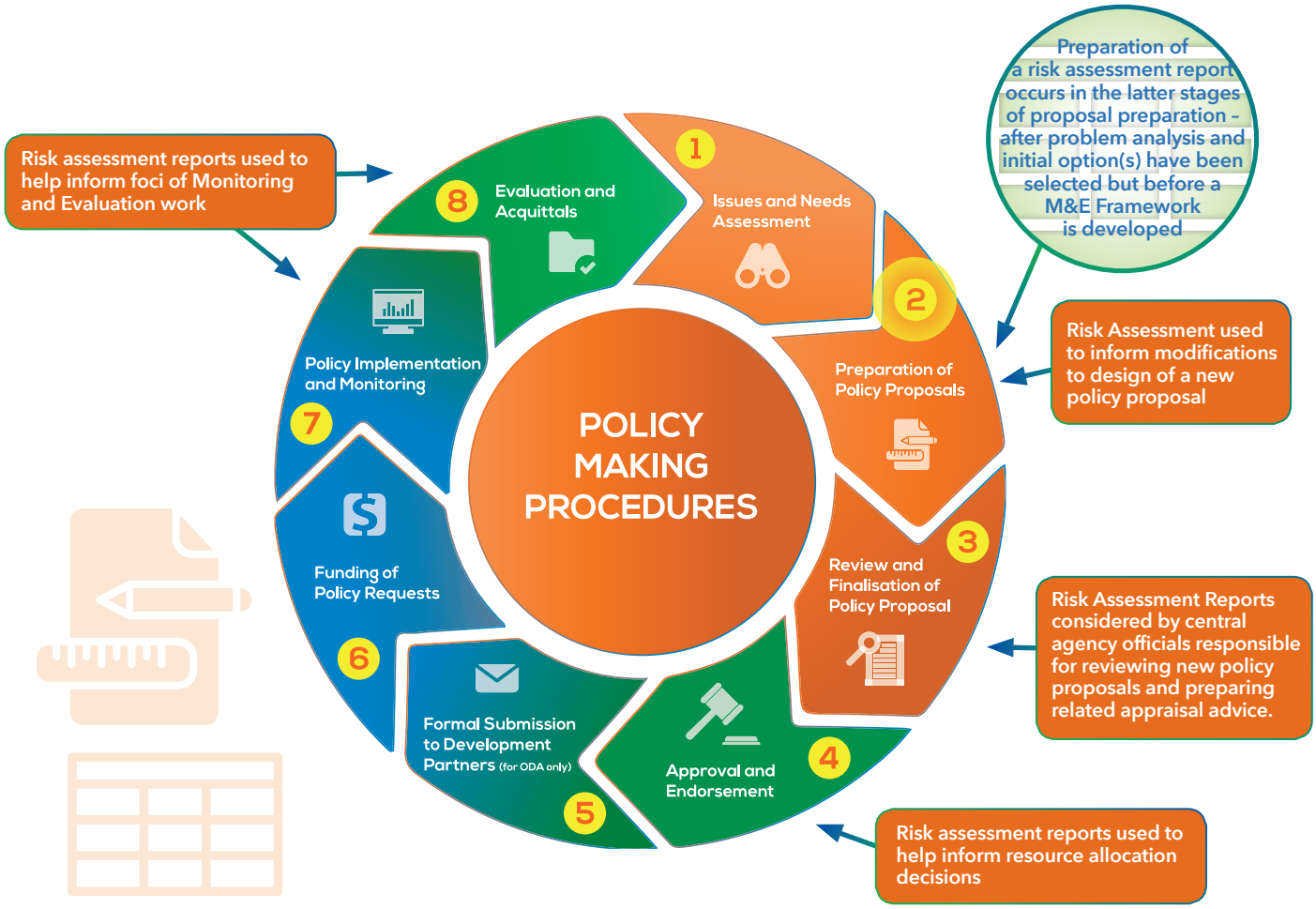


FIGURE 1. STAGES OF THE TUVALU POLICY CYCLE AND HOW RISK ASSESSMENT INFORMATION AND KNOWLEDGE IS USED WITHIN THIS

Source: this representation of the project cycle is taken from the Tuvalu ODA Handbook which in turn is based on the Tuvalu Budget Manual (2014) and Tuvalu Government Financial Instructions (2016) – amongst other things.

As can be seen in Risk assessment reports used to help inform foci of Monitoring and Evaluation (M&E) workFigure 1 above, information and knowledge generated from risk assessment is primarily used by officials responsible for preparing a new policy proposal – to inform the design of the proposal (i.e. part of stage 2).

Importantly, risk assessments are also used by central agency officials to help them make an appraisal of the quality of the ODA proposal (i.e. stage 3: appraisal of new policy proposals) and prepare related advice. The purposes of appraisal advice are to (i) assist line agencies responsible for preparing the new policy proposal to improve the quality of a ODA proposal (including on risk aspects); and (ii) help inform decisions made by Cabinet (and other committees as appropriate[3]) about whether the proposal is a worthwhile use of resources and should be progressed.[4] Where an appraisal finds this risk assessment work has not been adequately done, advice will be provided back to officials responsible for preparing the new policy proposal to assist them to change and improve this aspect(s).[5]

Further, risk assessments are a key input to the development of a Monitoring and Evaluation (M&E) framework for the policy – so that risks can be adequately monitored and adaptively managed throughout implementation. More detailed guidance on how risk assessments are used to help develop M&E frameworks is provided at the supporting guidance note to assist with development of Monitoring and Evaluation Frameworks for ODA project/programs – entitled '*Guidance Note for Developing a Monitoring and Evaluation Framework'.*

3 refer to the Tuvalu ODA Handbook for committees responsible for approving and endorsing new policy requests outside of the budget cycle.

4 In this way, central agencies play a very important 'gate-keeping' function to ensure that risk assessment work is done properly and risk treatment measures included in project design are cost-effective and supported by sound evidence.

5 In practice, ODA proposals may go through several revisions and iterations before they are progressed further along the ODA procedure. Iteration is an important part of developing good quality proposals and making informed decisions.

Key concepts of policy risk assessment

This section outlines the basic concepts that need to be understood in order to perform and appraise a policy risk assessment.

As mentioned above, a policy is often affected by (random) events or factors that can affect the extent to which a policy is able to achieve its intended development objectives – or even cause it to fail. The expected impact on the policy from an event is referred to as 'policy risk'.

The magnitude, or importance, of a given policy risk is a function of the likelihood (or probability) that the event will occur during the life of the policy and the consequence(s) for the policy (or impact) if the event were indeed to occur.

This can be represented using the standard risk equation in Box 1 below.

BOX 1. STANDARD RISK EQUATION

Policy Risk=Likelihood of random event occurring×Consequence for Policy (of random event)

Policy risk can arise from a range of different events, or sources. These sources can be political (e.g. changes in Government policy directions, new legislation), financial (e.g. material changes to foreign exchange rates), operational (e.g. changes to policies, practices or leadership of partner organisation – affecting cooperation), social, or environmental in nature (e.g. drought or cyclone event).

Policy risks are not necessarily inevitable. They can be managed or reduced by incorporating one or more risk treatment measures into the policy design (and/or related M&E framework).

The specific treatment measure(s) that can be incorporated will depend on the nature and extent of the policy risks at hand. Treatment measures typically fall into one of six categories as outlined in Box 2 below.

BOX 2. CATEGORIES OF RISK TREATMENT MEASURES

i. removing the risk source
ii. changing the likelihood
iii. changing the consequence
iv. sharing the risk with another party or parties (including contracts and risk financing)
v. accept and retain the risk by informed decision
vi. avoid the risk by deciding not to start the policy or activity that gives rise to the risk

Adapted from Joint Technical Committee OB007, Risk Management (2009)

SPECIFIC CONCEPTS OF CLIMATE CHANGE AND DISASTER RISK

Climate change and disaster risk is a type of policy risk where the random event is a climate or geological event.

Climate-events include such things as cyclones, extreme tide events, and drought. They can occur as part of natural climate fluctuations (i.e. variability) and can also arise from longer-term changes in climate (such as changing temperatures, rising sea level or glacial melt) – as influenced by human-induced climate change. Climate events may be rapid or slow in onset, lasting for a few hours or leading to longer-term changes.

Geological events include such things as earthquakes and volcanic eruptions. They are not influenced by human-induced climate change.

The standard risk equation adapted for climate change and disaster risk specifically is described in Box 3 below.

BOX 3. CLIMATE AND DISASTER RISK EQUATION

Climate change and disaster risk =Likelihood of climate/geological event occurring ×Consequence (of climate/geological event)

where, *Consequence =Function (Exposure, Vulnerability)*

The likelihood component of the climate change and disaster risk equation outlined in Box 3 above refers to the frequency and/or intensity of the relevant climate/geological event.

The consequence component of the risk equation refers to the impacts on policy-related assets and populations, if the climate/geological event were indeed to occur. These impacts, in turn, depend on:

a. the **exposure** of policy-related assets and populations to the climate/geological event (e.g. infrastructure located in cyclone path, crops located in coastal flooding hazard zone); and

b. the **vulnerability** or susceptibility of assets and population to damage and loss from the climate/geological event, if it were to occur (e.g. fragility of infrastructure construction, sensitivity of crop to saline conditions).

A further dimension of climate change and disaster risk which is important to understand is climate change uncertainty. In the medium to long term future, the forecasted likelihoods of certain climate events occurring (e.g. frequency and intensity of cyclone or drought events) are expected to change due to climate change. However, the extent (and direction for many climate variables) of this change is unknown. That is, the likelihoods of some climate events in the medium to long term are uncertain[6].

This uncertainty has implications for how precisely a given climate change and disaster risk can be analysed and, in turn, how the risk should best be treated. In these instances, the key thing to recognise is that uncertainty is present. There is not always 'one right' assessment of risk. Selection of risk treatment measures must therefore take this into account. Two key principles can be kept in mind when designing risk treatment measures under conditions of climate change uncertainty:

- **Incorporate flexibility**: allow for the possibility of adjustment in the future to cope with effects that are more or less severe than anticipated, or to adapt incrementally. For example, building a flood barrier that can be extended in the future. Or by installing rainwater collection units that can be incrementally expanded in the future.
- **Increase resilience:** design the activity to tolerate a wider range of climate conditions, while retaining the same basic structure and functioning. For example, by building a bridge higher than otherwise would be done. Or by installing a larger size rainwater rank than would otherwise be done.

Examples of how flexibility and resilience measures have been incorporated into a Tuvalu ODA policy – the Tuvalu Community Biogas Project – is provided at Appendix 2.

6 The reason for this uncertainty is, among other things, (i) global climate models do not know with a sufficient degree of confidence by how much temperature and precipitations will increase from a given increase in greenhouse gas emissions, and (ii) global climate models are limited in their ability to predict climate at the regional or local level. The further into the future we look, the greater this uncertainty is.

PART B. Guidance for conducting and using policy risk assessment

This section provides guidance for performing a risk assessment of an ODA policy proposal and ensuring the assessments are effectively used.

The first part provides an overview of a simple risk assessment methodology – the Risk Matrix. This guidance is intended for GoT officials (and Development Partners) who are responsible for preparing ODA proposals.

The second part outlines a set of checklist questions that can be used to appraise whether risk assessments have been completed to an adequate standard and that findings and recommendations from the risk assessment have been appropriately incorporated into the ODA proposal. This guidance is intended for central agency officials who are responsible for reviewing and appraising new ODA policy proposals.

The Risk Matrix: a Simple Risk Assessment Methodology

As mentioned in Part A, there are a number of different methodologies that can be employed to conduct a risk assessment. The Risk Matrix methodology is a qualitative methodology that is commonly used by Development Partners in the Pacific region.

A key advantage of the Risk Matrix is that it is relatively straightforward and easy to apply. Officials from a range of disciplinary backgrounds can use it.

Another key advantage is that it is versatile – it can be used to assess a wide range of different risk types. Also, the level of detail or rigour that is applied can be adjusted/tailored according to the scale or importance of the objectives and resource consequences in view as well as the perceived threat that risk events present to the policy.

The remainder of this (sub)section provides a brief explanation of the Risk Matrix methodology. It firstly provides an overview of the methodology and the broad steps that are involved. It then provides some further detail on the key aspects of the method – outlining a set of 'rubrics' along with the 'risk matrix' that are employed. And lastly, a brief explanation is provided on how uncertainties can be accounted for in the Risk Matrix methodology.

A worked example of the Risk Matrix method (for the Tuvalu Community Biogas Project) is also provided at Appendix 2. To aid with understanding of the methodology, it is suggested that readers refer to this example as they read the following explanations.

OVERVIEW OF RISK MATRIX METHODOLOGY

The methodology employed in the Risk Matrix is essentially to populate the table outlined in Table 1 below. As can be seen, this table comprises of three broad components:

1. nature of risk
2. magnitude of risk, and
3. risk treatment measure.

TABLE 1. RISK TABLE[7]

1. NATURE OF RISK		2. MAGNITUDE OF RISK (WITHOUT RISK TREATMENT)			3. RISK TREATMENT MEASURE(S)	
Event	Elements of policy affected by event, if it occurs	Likelihood of event occurring (almost certain, likely, possible, unlikely, rare)	Consequence of event, if it occurs (insignificant, minor, moderate, major, severe)	Overall risk rating, without risk treatment (low, medium, high, extreme)	Risk treatment measure	Overall risk rating, with risk treatment (low, medium, high, extreme)

Source: Adapted from Australian Government (2003) and New Zealand Ministry of Foreign Affairs and Trade (2009)

The three components of the Risk Table should be populated as sequential steps – from left to right.[8] As such:

1. The first step is to identify and describe the nature of the risks. This is essentially to identify the events or factors that may affect the policy (e.g. a storm surge hazard event) and then to describe the potential consequence this factor or event would have on the policy – if it was to occur (e.g. damage to road infrastructure constructed as well as losses incurred by road users).
2. Here, practitioners should focus on key events or factors only. Typically this is around five to eight events/factors per policy.
    - **i.** The second step of the risk matrix approach is to assess the magnitude of each key risk. This involves using a set of 'rubrics' along with the 'risk matrix' to make a determination of:
    - **ii.** the likelihood of the random event occurring [refer Table 2],
    - **iii.** the significance of the consequences should the event occur [refer Table 3], and
    - **iv.** based on these two components, make a rating of the risk level [using After determining the likelihood and consequence of a particular risk event using Table 2 and Table 3, the risk matrix is then used to make a rating of the risk level (either low, medium, high, or extreme).

As can be seen in Table 4, the risk matrix sets out the likelihood of a given risk event occurring along the rows of the matrix (categorised as almost certain, likely, possible, unlikely, and rare); and sets out the consequences for the policy from the event across the columns of the matrix (categorised as insignificant, minor, moderate, major, and severe).

The rating of the risk level is ascertained by finding the cell of the matrix where the relevant category of likelihood intersects with the relevant category of consequence for a given policy risk.

For example, suppose a policy faces a drought event that is expected to occur with a likelihood of 'possible' and which would have 'major' consequence for the policy if it were in fact to occur. Using the matrix, the practitioner moves across the 'possible' likelihood row until it intersects with the 'major' consequence column. The resultant cell is an orange cell designated H (high). The rating of the risk level for drought risk is thus assessed as high.

Taking another example, suppose a policy faces an extreme tide event that is expected to occur with a likelihood of 'almost certain', but which would have only 'minor' consequences for the policy each time it occurs. Moving across the 'almost certain' likelihood row of the matrix until it intersects with the 'minor' consequence column, the applicable cell is a (different) orange cell designated H (high). The rating of the risk level for coastal flooding risk is also high.

7 Note, the Risk Matrix can be extended to also include columns for 'responsibility [for implementing risk treatment measure]' and 'timing [for implementing risk treatment measure]. This extended Risk Matrix is a basic form of Risk Management Plan and can be included in the ODA policy design documentation.

8 Note, before starting a risk assessment, it is important to firstly establish a sound understanding of the policy design and context. This forms the foundation of the risk assessment work. Some brief guidance for undertaking this preparatory work is provided at Appendix 1.

This is the core part of risk matrix methodology. Further guidance for completing this step is provided below (i.e. the 'Rubrics and Risk Matrix' sub-section).

3. And the third step of the risk matrix approach is to determine what risk management measure is appropriate.

   This step should make efforts to identify and compare a range of alternative options that could potentially be taken to treat the risk – in order to determine the best response. The recommended treatment response should generate benefits which exceed its costs.

   Moreover, this step should also outline what the corresponding level of risk is once the treatment measure is incorporated into the policy design (to reduce the risk).[9]

RUBRICS AND THE RISK MATRIX

As mentioned above, the core parts of the risk matrix assessment methodology (i.e. step 2) are undertaken utilising a set of 'rubrics' and the 'risk matrix'.

Rubrics used here are essentially a scoring guide to help practitioners make assessments of the likelihood and consequence domains of risk in qualitative terms.

The rubric for likelihood is divided into five criteria or categories – 'almost certain', 'likely', 'possible', 'unlikely', 'rare'. Table 2 below provides a description for each of these categories. Similarly, the rubric for consequence is also divided into five criteria or categories – 'insignificant', 'minor', 'moderate', 'major', 'severe'. Table 3 below provides a description for each of these categories. Practitioners use these rubrics to determine the category of likelihood and consequence that best applies to the particular risk they are assessing.

Practitioners should also make efforts to reference technical studies, reports, expert opinion etc utilised in making these determinations[10]. This helps to establish the evidencebase of the assessment.

TABLE 2. LIKELIHOOD RUBRIC[11]

LIKELIHOOD	DESCRIPTION
Almost certain	Expected to occur in most circumstances
Likely	Will probably occur in most circumstances
Possible	50/50 that it might occur at some time during the life of the policy
Unlikely	Could occur at some time during the life of the policy
Rare	May occur only in exceptional circumstances

9 That is, re-run the risk assessment undertaken as part of step 2 for the modified policy design to provide a revised rating of the risk level.

10 This can be done by including a footnote in the relevant sections of the Risk Table outlined in Table 1.

11 This information can be sourced from the Tuvalu Meteorology Office and also other climate forecasting resources such as Pacific Climate Futures – see http://www.pacificclimatefutures.net/en/.

TABLE 3. CONSEQUENCES RUBRIC

CONSEQUENCES	DESCRIPTION (INDICATIVE EXAMPLES)
Severe	Causes serious harm to policy-related assets and beneficiaries (individual; community; organisational; or country) Would stop achievement of policy objectives
Major	Some harm to policy-related assets and beneficiaries (individual; community; organisational; or country) Achievement of policy objectives significantly compromised
Moderate	Would affect policy-related assets and beneficiaries to a moderate degree(individual; community; organisational; or country) Achievement of policy objectives moderately compromised
Minor	Would affect policy-related assets and beneficiaries to a small degree(individual; community; organisational; or country) Achievement of policy objectives slightly compromised
Insignificant	Negligible affect to policy-related assets and beneficiaries (individual; community; organisational; or country) Achievement of policy objectives not materially affected

Source: Adapted from Australian Government (2003) and Ministry of Foreign Affairs and Trade (2009)

After determining the likelihood and consequence of a particular risk event using Table 2 and Table 3, the risk matrix is then used to make a rating of the risk level (either low, medium, high, or extreme).

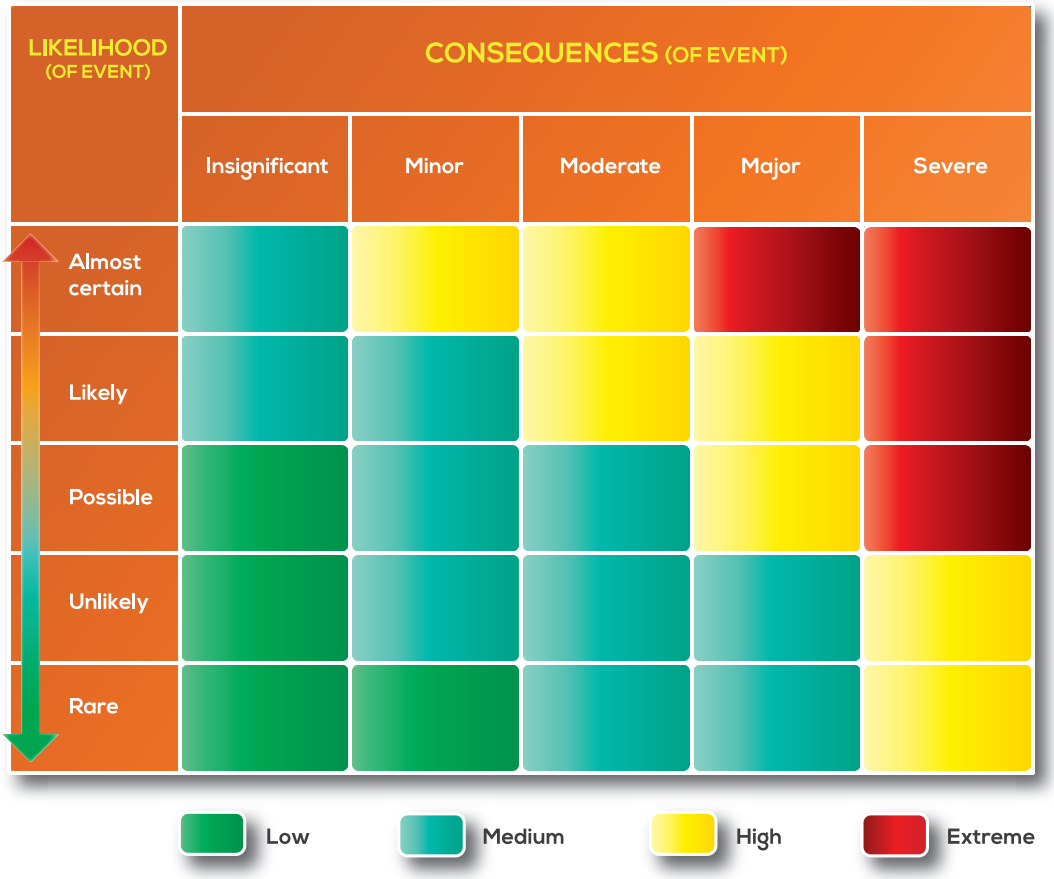
As can be seen in Table 4, the risk matrix sets out the likelihood of a given risk event occurring along the rows of the matrix (categorised as almost certain, likely, possible, unlikely, and rare); and sets out the consequences for the policy from the event across the columns of the matrix (categorised as insignificant, minor, moderate, major, and severe).

The rating of the risk level is ascertained by finding the cell of the matrix where the relevant category of likelihood intersects with the relevant category of consequence for a given policy risk.

For example, suppose a policy faces a drought event that is expected to occur with a likelihood of 'possible' and which would have 'major' consequence for the policy if it were in fact to occur. Using the matrix, the practitioner moves across the 'possible' likelihood row until it intersects with the 'major' consequence column. The resultant cell is an orange cell designated H (high). The rating of the risk level for drought risk is thus assessed as high.

Taking another example, suppose a policy faces an extreme tide event that is expected to occur with a likelihood of 'almost certain', but which would have only 'minor' consequences for the policy each time it occurs. Moving across the 'almost certain' likelihood row of the matrix until it intersects with the 'minor' consequence column, the applicable cell is a (different) orange cell designated H (high). The rating of the risk level for coastal flooding risk is also high.

TABLE 4. RISK MATRIX



The rating of risk level establishes the relative importance of a given policy risk and thus indicates how much policy effort should be allocated to treating it. Table 5 provides further guidance in this respect.

TABLE 5. RISK TREATMENT STRATEGY

COLOUR	RISK LEVEL	RISK TREATMENT MEASURES NEEDED AND LEVEL OF ONGOING MANAGEMENT ATTENTION
	Extreme	Do not proceed with policy or relevant activity.
	High	Requires robust risk treatment measures to be incorporated into policy design and high level of ongoing management attention to handle.
	Medium	Requires some risk treatment measures to be incorporated into policy design and moderate level of ongoing management attention to handle.
	Low	Can simply be documented and accepted given normal monitoring and control measures.

Source: Adapted from Australian Government (2003) and Ministry of Foreign Affairs and Trade (2009)

UNCERTAINTY AND THE RISK MATRIX TOOL

For some risks, there may be a high degree of uncertainty regarding the assessment of likelihood and/or consequence. This may occur where data has not been collected, where certain 'cause-effect relationships' are not well understood, or because it is difficult to predict how parameters that affect various aspects of risk will change in the future. As mentioned in Part A, this is especially important for climate change and disaster types of risk.

To account for key uncertainties, it is important to repeat step 2 of the risk assessment procedure and see if rating of risk level changes. An uncertainty that should be tested for most climate change and disaster risks is the likelihood of the climate event. Typically this is done by determining a "worst case" and "best case" scenario – in addition to the "most likely" future climate scenario – and should further account for how likelihoods are expected to change over time. These scenarios should be based on information provided by the Tuvalu Meteorology Office and also other climate forecasting resources such as Pacific Climate Futures.[12]

There may not always 'one right' analysis of risk. The important thing to recognise in these instances is that uncertainty is present. Selection of risk treatment measures must then take this into account. Part A provides some high-level guidance for designing risk treatment measures under conditions of climate change uncertainty.

Where beneficial, the Risk Table in Table 1 can be extended to also include columns for 'responsibility [for implementing risk treatment measure]' and 'timing [for implementing risk treatment measure]. This extended Risk Matrix is a basic form of a Risk Management Plan and can be included in the ODA policy design documentation as appropriate.

Checklist questions to guide appraisal of policy risk

As mentioned in Part A, central agency officials are responsible for checking risk assessment work is done properly and risk treatment measures included in ODA policy design are cost-effective and supported by sound evidence. Analysis on these aspects are documented as part of broader appraisal advice to help inform decisions about:

- how to improve the quality of a ODA proposal; and
- whether the proposal is a worthwhile use of resources and should be submitted to Donor Partners for their consideration.

Where an appraisal finds risk assessment work has not been adequately done, advice will be provided back to officials responsible for preparing the new policy proposal to assist them to change and improve these aspects. In practice, ODA proposals may go through several revisions and iterations before they are progressed further along the ODA procedure. Iteration is an important part of developing good quality proposals and making informed decisions.

Guidance for undertaking appraisal of risk elements is provided in the form of a (check)list of key questions. The intention is for the (check)list to guide appraisal of these aspects of the proposal in a structured and systematic manner. The intention is also for the (check)list questions to be flexibly applied to different ODA proposal such that the rigour of appraisal against each (check)list question can be moderated according to the size of the project and resource consequences in view.

The GoT currently utilise the 'GoT Development Criteria for Policy Eligibility Matrix' tool to document appraisal advise. One of the feasibility criteria included in this tool is 'policy risks assessed and, if needed, managed (including climate and disaster risks)'.[13]

This checklist can directly assist with preparing appraisal advice against this criteria.

The suggested checklist questions and sub-questions to guide appraisal of risk elements of ODA policy proposals are:

12 see http://www.pacificclimatefutures.net/en/ for more information on this.

13 Risk assessments expected for small projects would – in general – be relatively basic, while risk assessments for ODA proposals with major resource use implications should be rigorous. Expectations should be commensurate with the importance of the project objectives and resource consequences in view. It is not desirable, to allocate a significant effort to undertaking detailed and costly risk assessments for proposals that are themselves only a small investment.

CHECKLIST QUESTIONS AND SUB-QUESTIONS TO GUIDE APPRAISAL OF RISK ELEMENTS OF ODA POLICY PROPOSALS

1. does the policy documentation clearly identify and describe the nature of key risks faced by the policy?

1.1 does the documentation identify all key events or sources of risk that may affect the policy?

1.2 does the documentation clearly describe what elements of the policy design would be affected, if this event was to occur?

1.3 are all key climate change and disaster risks adequately described?

2. does the policy documentation clearly establish the magnitude of each of the key risk categories?

2.1 does it detail the likelihood of each risk event occurring?

2.2 does it establish how significant the consequences would be, if the event were to occur?

2.3 based on this understanding of likelihood and consequence and associated uncertainty, is it clear what the overall risk level is for each key risk?

2.4 is the analysis of the each risk underpinned by studies, reports, expert opinion or other such 'evidence'?

2.5 are all key climate change and disaster risks adequately analysed?

3. does the policy design include measures to treat key risks?

3.1 are these measures commensurate with the level of assessed risk?

3.2 were a number of alternative risk treatment options considered? did it include a review of evaluation reports of similar measures previously implemented in Tuvalu or the wider Pacific region?

3.3 is the treatment measure(s) included in the policy design clearly the best treatment option? do the benefits of the treatment measure(s) justify the costs?

3.4 for climate change and disaster risk treatment measures, do treatment measures account for uncertainties associated with climate change?

3.4.1 do they incorporate flexibility to allow for the possibility of adjustment in the future to cope with effects that are more or less severe than anticipated, or to adapt incrementally (for example, building a flood barrier that can be extended in the future)?

3.4.2 or is the design 'climate-resilient' such that it can tolerate a wider range of climate conditions, while retaining the same basic structure and functioning (for example, by building a bridge higher than otherwise would be done)?

3.4.3 what are the additional costs of these climate and disaster risk treatment measures/ modifications?

4. Does the Monitoring and Evaluation (M&E) framework (included in the policy proposal documentation) adequately account for key policy risks?

4.1 Does the M&E framework include evaluation questions or sub-questions relating to key risks, including climate and disaster risk where this is important?

4.2 Is the data that is to be collected as part of Monitoring adequate to help answer risk-related evaluation questions?

4.3 does the M&E framework adequately provide for adaptive management[14] of the policy as it is being implemented?

14 i.e. improving the design and performance of a program during its implementation

Concluding Remarks

Risk assessment is an important mechanism to help Tuvalu improve the resilience and hence effectiveness of its ODA.

This Guidance Note aims to provide a straightforward guide to conduct risk assessments for ODA policies in Tuvalu and to appraise this aspect of new policy proposals. The guide draws from international better-practice and is presented in a way that:

- is workable for the Tuvalu context; and
- emphasises consideration of climate change and disaster risks, recognising these risks present a major challenge for development efforts in Tuvalu.

The Guidance Note should not be thought of as being "cut in stone". It is envisaged the Guidance Note and associated checklist questions will be periodically updated and improved as more experience is gathered.

References

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APPENDIX 1. Defining the policy design and context

A preparatory step before embarking on a risk assessment is to define the logic and evidence of the policy design. The main purpose for doing this is to help ensure there is a sound and shared understanding of the policy design and context on which to base the risk assessment. This forms the foundation of the risk assessment work.

The 'Definition of the Policy Design' should draw from studies and documentation prepared as part or earlier stages of policy planning and design. This information can then be represented using a combination of narrative and graphics.

Information that should typically be covered in the narrative include:

- a brief explanation of how the policy aligns with priority GoT strategies as outlined in the Te Kakeega III National Strategy for Sustainable Development: 2016-2020;
- a description of the nature, extent and underpinning causes of the problem(s)[15] the policy is trying to address, including information on who[16]
- is effected and factors that influence (relevant) behaviours of these stakeholders [problem statement];
- a definition of the policy objective(s)[17] – or key changes the policy is seeking to generate or contribute to [objectives statement];
- a description of the policy strategies, including *how and why these strategies are believed to generate or contribute to the intended change*[18] [strategy description]; and
- references for all sources of information (peer-reviewed publications, grey literature, expert judgement, workshop reports, evaluation reports etc) mentioned in the above.

Graphic representation of the policy design can be undertaken using a 'logic model'. A logic model is simply a visual display of the pathways from actions to results – illustrating the cause-effect linkages between key elements of the policy design.

There are many forms of logic models that can be used for this purpose including chains of boxes, circular formats, as well as connected columns known as the "pipeline logic model". Practitioners are encouraged to utilise whatever form is most meaningful to them.

In the Pacific Region, the most common form of logic model used is the LogFrame or LogFrame Matrix. Select elements of a LogFrame Matrix are illustrated in Outputs: What we deliver below.

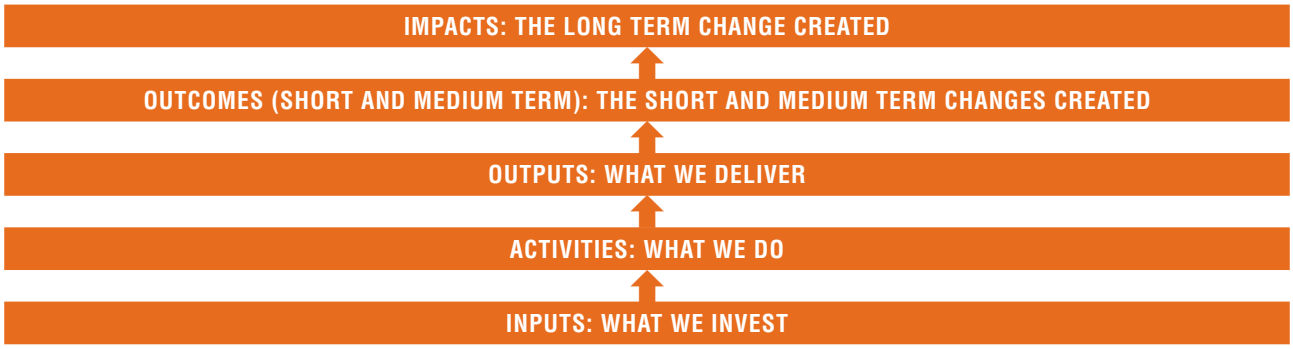

FIGURE 2. CORE ELEMENTS OF A LOGFRAME MATRIX

15 For some policys, climate change and disaster risk (e.g. coastal flooding risk to community areas) will be the main 'problem' that the policy is trying to address.

16 Particular attention should be given to gender and vulnerable stakeholder groups.

17 this should align with one or more of the underlying causes of the policy problem identified in the problem statement.

18 this would essentially include a description of what the 'strategies' are that have been selected to achieve the policy objectives. it should also outline the reasons and supporting evidence as to how and why the strategies employed by a policy will work to achieve the intended objective. this is essentially a description of the 'program theory'.

APPENDIX 2. Worked example of the Risk Matrix method – the 'Tuvalu Community Biogas Project'

The below risk matrix was prepared for the 'Tuvalu Community Biogas Project' – a project which is being implemented with support from the Pacific Community (SPC) and German International Co-operation Agency (GIZ), and is part of a regional program funded by the European Union (EU) entitled the 'Adapting to Climate Change and Sustainable Energy' (ACSE) program.

The primary objective of the project is to increase the supply of energy to Tuvalu communities from biogas technologies. The key strategies comprise:

- demonstration of biogas system installation and operation at the household scale;
- a biogas "how to toolkit" which will cover all relevant technical information needed by households (and Falekaupule and Kaupule) to source, install, operate and maintain the biogas system;
- formal technical vocational trainings on the installation, operation and maintenance of the technology; and
- scientific technical report on methane production from the technology.

The expected useful life of a biogas system is 20–30 years.

TABLE 6. CLIMATE CHANGE AND DISASTER RISK MATRIX FOR THE TUVALU COMMUNITY BIOGAS PROJECT

1. NATURE OF RISK		2. MAGNITUDE OF RISK			3. RISK TREATMENT STRATEGY	
External factor	Component of project design/ logic affected by external factor	Likelihood of external factor occurring (almost certain, likely, possible, unlikely, rare)	Consequence of external factor, if it occurs (insignificant, minor, moderate, major, severe)	Overall risk rating (low, medium, high, extreme)	Risk treatment measure	Overall risk rating, with risk treatment (low, medium, high, extreme)
Drought (defined as rainfall less than 30% of the monthly mean for more than two consecutive months)	Freshwater is an input to the digester. If freshwater is not available, then production of methane will be reduced in that period (i.e. short-term loss of production).	Possible under "most likely" climate future scenario[19] Likely under "worst case" climate future scenario[20]	Moderate[21]	Medium/ High	Prudent to develop contingency plan. This could include actions such as use of greenwaste as temporary substitute for water.[22] Also need to make sure that existing rainwater tank infrastructure is properly maintained and that contingency storage is available when droughts occur. These practices will be incorporated into the 'toolkit' and TVET modules.	Low
Cyclone	Cyclonic winds and associated debris can damage the biogas system infrastructure, requiring repair or replacement. Damage, in turn, will also cause subsequent losses in methane production. If cyclones also bring wave action and saltwater inundation, this may also spoil the digestate in the system as well as pig dung in pens. More info on nature of inundation impacts is outlined in row below.	Likely under "most likely" climate future scenario[23] Likely under "worst case" climate future scenario[24]	Major[25]	High	Fixing digesters into positions where they are partially sunk into the ground Potentially expel gas from the digester prior to the cyclone to reduce the chances the lid will be blown off. Avoiding the use of pig dung that may have been contaminated by salt water from a cyclone's storm surge. These practices will be incorporated into the 'toolkit' and TVET modules.	Low/ Medium
Sea level rise and storm surge	Salt water inundation into the actual digester will spoil the digestate in the system -requiring cleaning of the system and also loss of production for about 6 weeks.[26] Also, salt water inundation into pig pens will spoil pig dung (key input to production) which in turn will cause loss of production.	Almost certain[27], increasing over time	Moderate[28]	High	Locate the digesters and pig pens outside the storm surge zone When a pig pen is flooded, avoid using the dung until the pig pen has been cleaned out. These practices will be incorporated into the 'toolkit' and TVET modules.	Low

19 this is 1 in every 50 years and is based on a simple analysis of historical rainfall data provided by the Tuvalu Met Office. note also that the project life is maximum 30 years over which time the incidence and duration of drought is not forecasted to worsen under "most-likely" climate scenarios (Pacific Climate Futures Version 2).

20 this is crude adjustment to the "most likely" scenario taking into account statements in the Tuvalu Country Report for the report Climate Change in the Pacific: Scientific Assessment and New Research (2014) that (i) there is only moderate confidence in abovementioned Pacific Climate Futures (version 2) forecast that drought will not worsen under "most-likely" climate scenario; (ii) historical rainfall data – used as primary basis for drought incidence above – is statistically insignificant; and (ii) severe droughts (though not defined) are expected to occur once every 20 years.

21 based on experience from previous biogas pilot project – the USP EU GCCA project. Pers comms Sarah Hemstock, SPC.

22 this was found to be an effective adaptation measure implemented for the previous biogas pilot project – the USP EU GCCA project. Pers comms Sarah Hemstock, SPC.

23 This is based on a return period of 1 every 25 years. According to the Australian Bureau of Meteorology and Commonwealth Scientific and Industrial Research Organisation (CSIRO, 2014) Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports 2014, 31 tropical cyclones passed within 400km of Funafuti during the period 1969 to 2010, However, it would appear that major damage has only occurred on land twice during that period (Cyclone Bebe in 1972 and Cyclone Pam in 2015). This same report further states that in the medium term future the frequency of cyclones in the Funafuti area is expected to decrease, though the intensity is expected to increase.

24 this is approximated at 1 in every 20 years and is crudely based on Tuvalu Country Report for the report *Climate Change in the Pacific: Scientific Assessment and New Research* (2014) that there is only moderate confidence in forecasts for cyclone frequency and intensity.

25 expert judgement of Jim Binney (Mainstream Economics and Policy).

26 based on experience from previous biogas pilot project – the USP EU GCCA project. Pers comms Sarah Hemstock, SPC.

27 Storm surges are currently a problem in some low-lying areas of Tuvalu and this hazard will incrementally increase over time under climate change.

28 based on experience from previous biogas pilot project – theUSP EU GCCA project. Pers comms Sarah Hemstock, SPC.

The **Pilot Program for Climate Resilience: Pacific Regional Track (PPCR-PR)** is a regional program which aims to strengthen integration of climate change and disaster risk considerations into 'mainstream' policy making and related budgetary and decision-making processes (i.e. 'climate change and disaster risk mainstreaming').

The PPCR-PR is implemented by the Secretariat of the Pacific Regional Environment Program (SPREP) and Asian Development Bank (ADB) and is funded through the Climate Investment Funds (CIF).

SPREP
Secretariat of the Pacific Regional Environment Programme