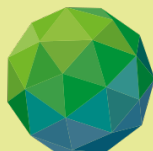




Vanuatu Rapid Climate Risk Assessment Framework

Stakeholders Consultation report

2023



GREEN
CLIMATE
FUND



SPREP
Secretariat of the Pacific Regional
Environment Programme



Vanuatu Stakeholder Consultation Report

FINAL

Prepared for Secretariat of the Pacific Regional Environment Programme (SPREP)

Prepared by Beca International Consultants Ltd

23 November 2023



Contents

Executive Summary	1
1 Engagement Scope.....	1
2 Stakeholder Engagement Process	2
2.1 Session attendees.....	2
2.2 Stakeholder survey	3
3 Engagement Outcomes	4
3.1 Session one	4
3.2 Session Two.....	4
4 Recommendations	6
4.1 Training and guidance.....	6
4.2 End users	6
4.3 Case study	6

Appendices

Appendix A – Stakeholder consultation materials

Appendix B – Minutes from stakeholder consultation sessions

Appendix C – Identified Stakeholders

Revision History

Revision N°	Prepared By	Description	Date
1	Sophie Andrews		31/10/2023
2	Kristin Renoux		1/11/2023

Document Acceptance

Action	Name	Signed	Date
Prepared by	Kristin Renoux and Sophie Andrews		23/11/2023
Reviewed by	Mike Allis		23/11/2023
Approved by	Cushla LOMB		23/11/2023
on behalf of	Beca International Consultants Ltd (BICL)		

© Beca 2023 (unless Beca has expressly agreed otherwise with the Client in writing).

This report has been prepared by Beca on the specific instructions of our Client. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. Any use or reliance by any person contrary to the above, to which Beca has not given its prior written consent, is at that person's own risk.

Executive Summary

Beca International Consultants Limited (Beca) has been commissioned by *the Secretariat of the Pacific Regional Environment Programme (SPREP)* to prepare a rapid climate risk screening and test on tourism sector (the 'Project'). For this stage of the project, Beca has undertaken consultation with key stakeholders identified by SPREP and the *Vanuatu Department of Tourism (DOT)* to understand their climate risk assessment needs, and the roles and contributions they can make to this project. The engagement with these stakeholders and information gathered is being used to inform the development of a rapid climate risk assessment framework and methodology, the application of the framework to a tourism case study and the development of a financial projection mechanism for tourism.

This report explains the stakeholder consultation process undertaken and the scope, needs and roles of stakeholders identified during the consultation sessions.

The impact of Tropical Cyclone *Lola* during the final week of consultation from the 24 October 2023 impacted planned engagement, and the third stakeholder session was not able to proceed, however valuable information and themes came through from the two consultation sessions held.

During consultation stakeholders highlighted the need for an accessible climate risk assessment framework that can be used by stakeholders across the five key sectors (Infrastructure, Fisheries, Water, Agriculture and Tourism) as well as future in country guidance and training to support the end users to successfully use and implement the framework.

Tourism stakeholders provided information about the impact of climate change on different tourism activities. In particular, stakeholders referenced the impact on the Vanuatu Dive Industry as being of particular concern. For this reason, the tourism case study selected the Dive Industry for testing the Rapid Climate Risk framework.

1 Engagement Scope

It was agreed with SPREP at the Inception Meeting that due to the compressed timeframe to deliver the project, stakeholder consultation would be undertaken over a two-week period and utilising set 'sessions' that stakeholders could choose from. To facilitate greater attendance by a broad range of stakeholders a mixture of days and times were provided.

Three sessions of 2 hours each were scheduled and invites sent to key stakeholders identified by SPREP and the Department of Tourism. Stakeholders were advised that they were only required to attend one session. The sessions were coordinated by the Department of Tourism, who invited the stakeholders to select a session and maintained the register of attendance for each session.

SPREP and DoT identified 18 target stakeholders to undertake consultation with. These stakeholders are as detailed in Appendix C.

The purpose of the consultation has been to understand the roles and needs of the stakeholders, and to identify the end users of the framework and the format that will be the most appropriate for these end users.

The purpose of this report is to analyse the information gathered from the consultation sessions to appropriately inform the direction and format of the framework and methodology, case study and financial projections mechanism for the project.

Guidance and training were included within the original scope of this project but were deferred due to funding timeframes.

2 Stakeholder Engagement Process

Stakeholders were provided with a 2-page project summary document prior to the consultation sessions. This provided a brief description of the project and the objectives of the engagement sessions. In each session, the Beca team utilised a presentation to describe the background to the project, the scope of the rapid climate risk assessment and pose particular questions of attendees around user needs for the framework. The project summary document and presentation are attached as Appendix A of this report.

Beca facilitated three virtual stakeholder consultation sessions on the 18th, 19th and 24th of October 2023. The minutes from the first two meetings can be found in Appendix B. Unfortunately, all Vanuatu-based stakeholders were unable to attend the third session due to Tropical Cyclone *Lola* impacting the country.

To supplement the absence of the third consultation session, all stakeholders were provided with an opportunity to respond to the key engagement questions through a short online survey questionnaire.

The questions asked to the stakeholders at these consultation sessions were as follows:

- What is your organisation?
- Where do you operate within Vanuatu?
- What climate issues are you already seeing in your sector?
- How is climate change already affecting your organisation?
- What would help you to consider climate risks into your future planning?
- What role does your organisation play in identifying climate change risks in Vanuatu?
- Who do you think the end users of this framework will be?

2.1 Session attendees

All sessions were attended by internal stakeholders of SPREP, with Session 1 and 2 attended by the Vanuatu Meteorology and Geo-Hazards Department (VMGD).

Session 1

The external stakeholders who attended Session 1 were three representatives of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) involved in the VanKIRAP project previously and the Country Manager for Tropical Agencies Limited who is also the Domestic Shipping National Representative for the Chamber of Commerce.

Session 2

The external stakeholders who attended Session 2 was the Acting director of the Department of Tourism and a representative from the Vanuatu Environmental Science Society (VESS). This representative is also the president of the Vanuatu Scuba Operators Association, she co-owns the Big Blue Dive Company which operates around Vanuatu, and her partner operates a metals recycling business.

Session 3

No external stakeholders were able to attend due to Tropical Cyclone *Lola*.

2.2 Stakeholder survey

To support the stakeholder consultation and increase the opportunity to provide comment, a survey with key questions was sent to all stakeholders provided by SPREP and the Department of Tourism.

The questions asked in this survey were:

1. What is the name of your organization and its core activities?
2. Where do you operate within Vanuatu? E.g. Regions, critical locations and infrastructure, key activities, and communities.
3. How do you currently consider climate risks to your infrastructure and activities? E.g. risk assessments, planning tools, national hazard information
4. What format of a rapid climate risk assessment tool would be most practical for your decision making? E.g. excel workbook, flow chart, app
5. What would prevent you from using a climate risk framework and methodology? E.g. capability, capacity, equipment

No responses to the survey were received by the deadline required to meet the tight project timeline (end of day on the 31st October 2023).

3 Engagement Outcomes

This section outlines the key messages and findings from the Engagement Sessions. A full record of meeting minutes of the sessions is included in Appendix B.

3.1 Session one

3.1.1 Stakeholders' organisation

The representatives from SPREP and VMGD offered stakeholder perspectives from the client and project manager point of view.

The Vanuatu country manager for Tropical Agencies Limited (TAL) also has a role as the domestic representative for the chamber of commerce as well as a role in commercial shipping. His role at TAL is to coordinate with cruise ships and their associated port, berthing and some shore excursion activities. There are two TAL offices in the country (Santo and Port Vila) and these support cruise activities during the cruising season (November to March).

The three CSIRO representatives attended the consultation session on behalf of CSIRO. They offered perspectives from multiple in-country missions and over 5 years working on the VanKIRAP project.

3.1.2 Climate change observations

The TAL representative relayed that the perspective of shipping agencies and cruise lines in Vanuatu is that their biggest concerns is the number of weather-related incidents which affect their operations and schedules. In the past these events caused impacts such as ships being diverted to other islands, bypassing Vanuatu for other ports, as well as flooding and landslips on roads which limit access to the Port and shore activities and truncates the time which tourists have for activities.

3.1.3 End user discussion

They provided ideas from previous community engagement in Vanuatu, expressing that the framework is more likely to get traction with end users if it is in a format that is accessible and caters to a range of capabilities. This should recognise both the time pressures and level of understanding of users, especially if it were the tourism operators. There was also a recommendation to use infographics to display information for the framework.

3.2 Session Two

3.2.1 Stakeholders' organisation

Our second stakeholder engagement session included the representatives from SPREP and VMGD with two additional stakeholders- the Acting Director for the Department of Tourism and a representative from the Vanuatu Environmental Science Society (VESS).

The representative from VESS is also the president of the Vanuatu Scuba Operators Association and the co-owner of Big Blue Dive company. From a scuba and diving perspective, the representative made many references to environmental degradation, bleaching of the coral reefs, particularly after a cyclone and marine heat waves.

The indirect risks to the tourism industry were also discussed, with mention of a reduction in local food production which is often used by a large number of the operators to provide to tourists on diving trips.

3.2.2 Climate change observations

From a scuba and diving perspective, the representative of VESS made many references to environmental degradation, bleaching of the coral reefs, particularly after a cyclone and marine heat waves. It was noted that as the temperature of the water cools again after the cyclone, the reefs start to return, however, recently, the temperature of the water hasn't returned to a cold enough temperature to provide relief to the reef.

The indirect risks to the tourism industry were also discussed, with mention of a reduction in local food production which is often used by a large number of the operators to provide to tourists on diving trips.

3.2.3 End user discussion

The President of the Vanuatu Scuba Operators Association notes the tourism industry operators are more focussed on the immediate day-to-day or season-to-season risks of the activity/operations, and that the medium to long-term risks such as increasing climate impacts are rarely looked at by tourism operators.

The majority of investment for operators goes into equipment and asset management, with a reduced focus on preparing for future risks. SPREP expressed that the framework would be useful to be targeted towards end users who need support and training, so they have the opportunity to build their capability in identifying potential future risks.

Training and support were also discussed with the intention of enhancing the skills of all operators to use the framework. The potential of incentives in the form of grants or business enhancements were suggested to help develop the buy in of a number of the operators, particularly as some operators are small and struggle with the day-to-day operation of their business. To appropriately provide for this support, the Acting Director of Tourism discussed the potential of involving the Product Development Officers (PDOs) to assist in the training or to offer support in the use of the framework. The PDOs are located in each of the 6 provinces across Vanuatu and are well connected to the operators and National Government Organisations (NGOs) in their respective province.

The need for simplicity in the framework was also emphasised, echoing the conversations from session one about the needs of the end users.

The needs of stakeholders were noted to vary, typically because of size and location of the operations and activities. This led to the suggestion of the end users being address in two levels- the smaller operators in more remote locations being provided with additional support and training to use the framework effectively, and the medium/large operators from islands such as Port Vila and Santo who can use the framework more independently.

It was proposed by the representative of VESS that in order to reach the attention of many operators it would be useful to produce a summary workbook with findings and suggestions for mitigation that are practical and can be used to plan for the future of their operations. This is likely to produce a higher rate of engagement as it reduces the overwhelming feeling of applying the framework or tool themselves.

4 Recommendations

4.1 Training and guidance

Providing for training and guidance to end users for this framework is a key message that has come across in the consultation sessions. Our recommendation is to continue with the proposed Stage 2 of this project which includes preparation of training and guidance materials and facilitation of in-country training sessions. This additional training would enhance uptake and implementation of the framework into the tourism sector of Vanuatu.

4.2 End users

There was varied discussed about the appropriate end users for this framework.

CSIRO and tourism stakeholders indicated that widespread individual operators are very likely to be focussed on their immediate day-to-day operational activities and are unlikely to have capacity to learn about or develop their understanding of the framework or its implementation. As discussed in Section 3.2.3 of this report, it is likely operators would be more receptive towards the framework if the assessment has already been undertaken and they are presented with relevant findings and recommendations.

The consultation identified tourism associations and some government agencies that may be more appropriate entry points to build climate resilience through using the rapid risk assessment framework and methodology.

Our recommendation is the end users for this framework are those within the tourism industry associations and government department officials who can support, as required, individual operators to undertake a climate risk assessment of their operations and activities.

This level of end user is understood to have a working knowledge of the industry such that they could complete the rapid risk assessment. They are also anticipated to be connected to the key operators on the ground and stakeholders in government licencing and regulation. These agencies can provide central points at which training, and guidance can be delivered and the risk information gathered from across sectors and consolidated to inform decision-making at different levels about the short, medium and long term climate risk being faced in Vanuatu.

4.3 Case study

Various tourism related industries were discussed in the consultation sessions; the large accommodation providers, smaller bungalow accommodation, cruise ships, agricultural 'eco-tourism' and tourism to experience the pristine reefs, wildlife and beaches. The dive industry was mentioned and discussed in both consultation sessions. This industry was noted as a large contributor to the economy, employed many people around the country, and was an activity that visitors to the island frequently take part in whether they arrive by cruise ship or airport.

During the consultation follow up session we have confirmed with SPREP and DoT that the dive industry is appropriate to take forward as a case study to apply the framework and develop the financial projection mechanisms around.

Relative to the purpose of the project and the information gathered through the stakeholder consultation sessions, focusing the case study on the dive industry appears to be appropriate to demonstrate the rapid climate risk framework.

A

Appendix A – Stakeholder consultation materials

Project: Rapid Climate Risk Assessment Framework, Methodology and Case Study for Tourism Sector and Associated Infrastructure and Fisheries in Vanuatu

Project Outline

This work continues from the VanKIRAP project with VMGD, SPREP and CSIRO.

To create: A high-level framework and methodology to achieve a rapid understanding of the climate change risks that will inform strategic decision making.

Goals: The framework and methodology are accessible and can be understood by stakeholders for future use.

It can be picked up by different sectors and applied in a consistent way that will allow for a sector-wide understanding of the climate risks and assist in building resilience.

It will include a case study of the tourism sector.

Key project outputs:

- Rapid Climate Risk framework and methodology report.
- A rapid assessment of the tourism sector as a case study.
- Financial mechanism for possible adaptation measures for the tourism sector.

Stakeholder Consultation Sessions (3 options)

- 18th October 11am – 1pm (Vanuatu local time)
- 19th October 1-3pm (Vanuatu local time)
- 24th October 11am – 1pm (Vanuatu local time)

Please select a session (**you only need to attend one!**) and join for the full 2 hours. We will start with an overview presentation before seeking your input.

What we want from you...

During the session we will discuss:

- Your specific climate risk related needs
- Who the end users of the framework will be
- The role your organisation has and how climate change may be affecting you
- What format of a risk framework is appropriate for you.
- How you currently consider climate risks
- What is already happening in response to climate risks

Beca Project Facilitators:



Mike Allis

Climate Science Expert



Sophie Andrews

Project Support



Kristin Renoux

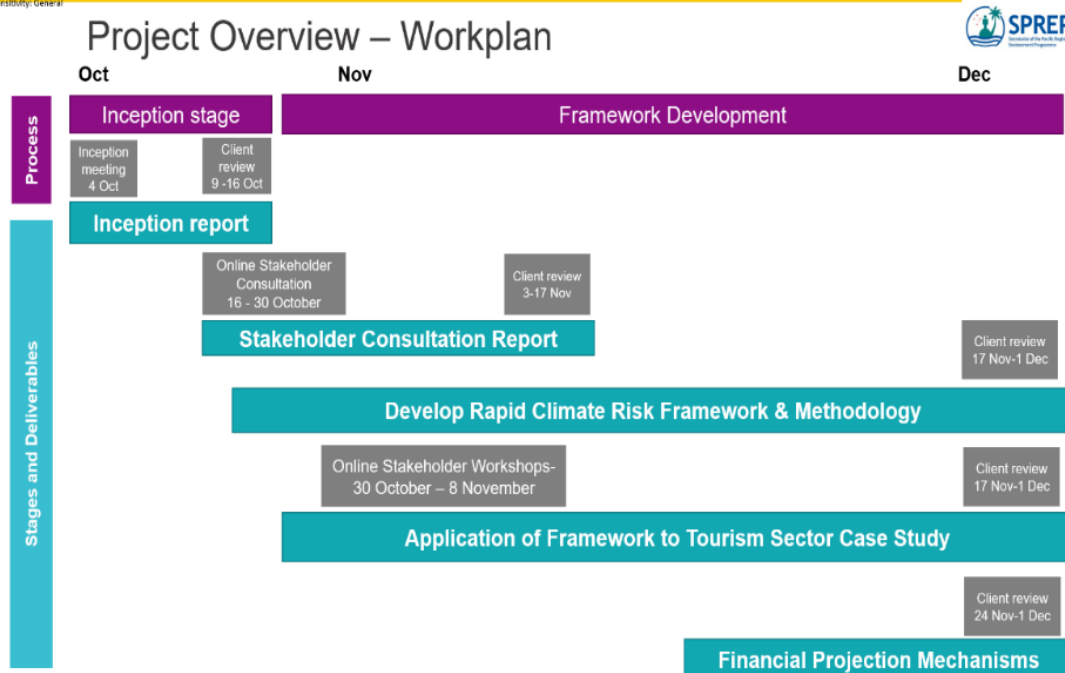
Project Lead



Hannington Alatoa

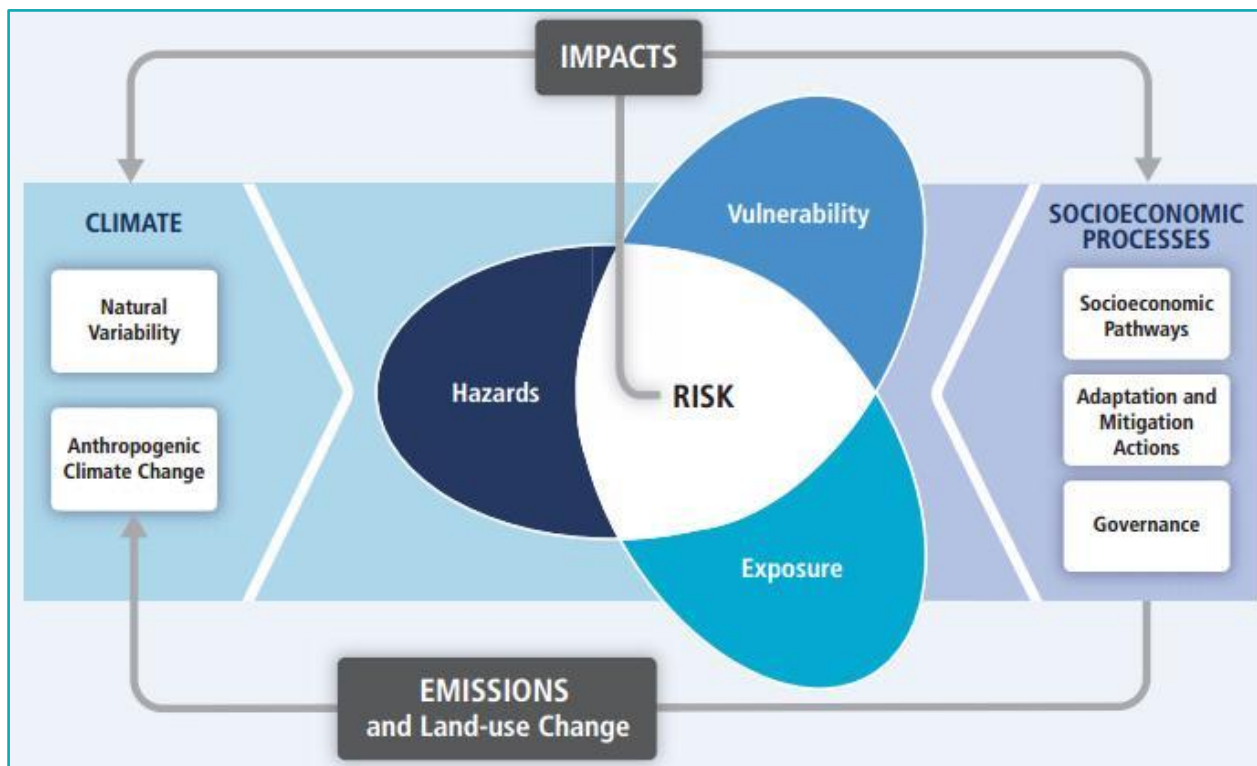
On-island Support

Sensitivity: General



Climate Risks

There are three factors that determine a risk (the physical impact), **Hazards**, **Vulnerability** and **Exposure**.



Hazards are a natural or climate change induced physical event that have the potential to cause damage. For example, cyclones, sea level rise, and droughts are hazards. We are not considering non-climate hazards (such as volcanic eruption and tsunami) as part of this project.



Vulnerability is the degree to which an asset or a community can be harmed by a hazard and the ability to adapt to reduce this harm. For example, coral reef areas are more vulnerable than fish to ocean acidification as coral reef species cannot 'move to other areas' as a result of their changing environment.



Exposure refers to the extent to which a system is exposed to a given hazard. For example, a coastal community in a low-lying area can be exposed to a certain level of inundation risk during a storm event.



Vanuatu Rapid Climate Risk Framework Consultation Meeting

18 October 2023

**make
everyday
better.**

Meeting Agenda

1. “House Keeping”
2. Introductions from Beca
3. Project, outline and scope
4. Introductions from Stakeholders
5. Project Goals and Discussion
6. Questions and answers



House Keeping

Free and open conversation

- Connectivity
 - Video on when talking if possible
- We want to hear from everyone, please be mindful of time
- Short online survey at the end, to capture your thoughts if we run out of time today
- Sessions will be recorded



Beca Project Facilitators



Kristin Renoux
Project Lead



Mike Allis
Climate Science Expert



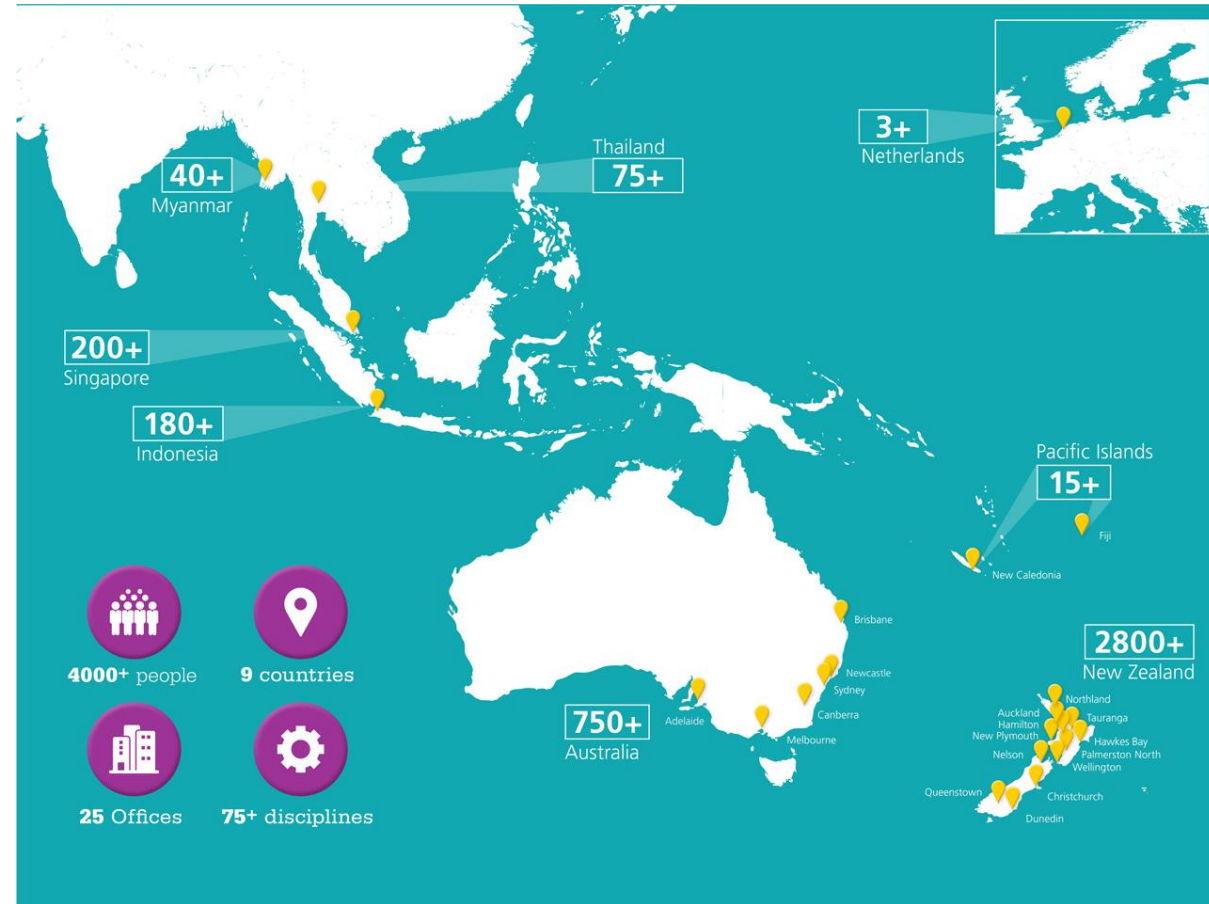
Carlos Carvajal
Climate Scientist



Hannington Alatoa
In Country Support



Sophie Andrews
Project Support





Project Outline and Scope

Project Overview – Bigger Picture

Van-KIRAP Project
Climate variable mapping, Case studies, Factsheets



Consultation Sessions

- Today!
- Understand stakeholder needs to ensure the framework is accessible.

High Level Rapid Climate Risk Assessment Framework

- Case study on Tourism – Fisheries/ Infrastructure

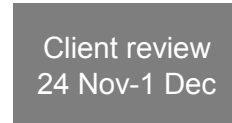
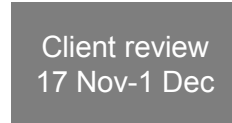
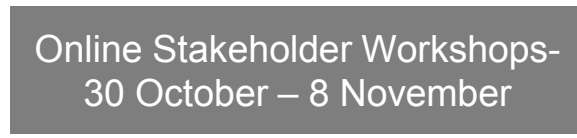
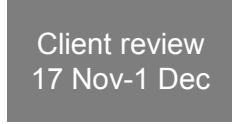
Project Overview – Workplan

October

November

December

Process



Stages and Deliverables



Stakeholder Introductions

Introductions

1. What is your organisation?
2. Where do you operate within Vanuatu?
3. What climate issues are you already seeing in your sector?





Project Goal & Discussion

CSIRO Climate hazard impact framework:

STEPS FOR CONDUCTING CLIMATE HAZARD-BASED IMPACT ASSESSMENTS

STEP 1	Understand the context and scope
STEP 2	Organise meeting of potential stakeholders to discuss project
STEP 3	Explore relevant background information and historic climate data
STEP 4	Collect information about future climate scenarios
STEP 5	Analyse climate-related impacts under 'best-case' and 'worse-case' scenarios
STEP 6	Evaluate all other climate and relevant non-climate factors
STEP 7	Plan future adaptation measures and treatments
STEP 8	Communicate findings



Rapid Climate Risk framework

- Determine the exposure to each climate hazard for each asset/ operation/ activity
- Collect asset/ operation / activity information to inform vulnerability to each climate hazard
- Analyse the vulnerability of asset / operation/ activity to each climate hazard

Existing knowledge:
Van-KIRAP portal and
information from
CSIRO, SPREP and
others

Consultation:
Gather an
understanding of the
end users of the
framework

Project Goal

Develop an accessible climate risk
framework to provide a consistent way
to assess climate risks across the
different sectors.



Discussion

1. How is climate change already affecting your organisation?
2. What would help you to consider climate risks into your future planning?
3. What role does your organisation play in identifying climate change risks in Vanuatu?
4. Who do you think the end users of this framework will be?



Format Examples

1. Matrix

Determines the risk based on hazard exposure and vulnerability.

Pro: Could be incorporated into existing risk frameworks.

		Impact				
		Negligible	Minor	Moderate	Significant	Severe
Likelihood	Very Likely	Low Med	Medium	Med Hi	High	High
	Likely	Low	Low Med	Medium	Med Hi	High
	Possible	Low	Low Med	Medium	Med Hi	Med Hi
	Unlikely	Low	Low Med	Low Med	Medium	Med Hi
	Very Unlikely	Low	Low	Low Med	Medium	Medium

2. Excel Workbook

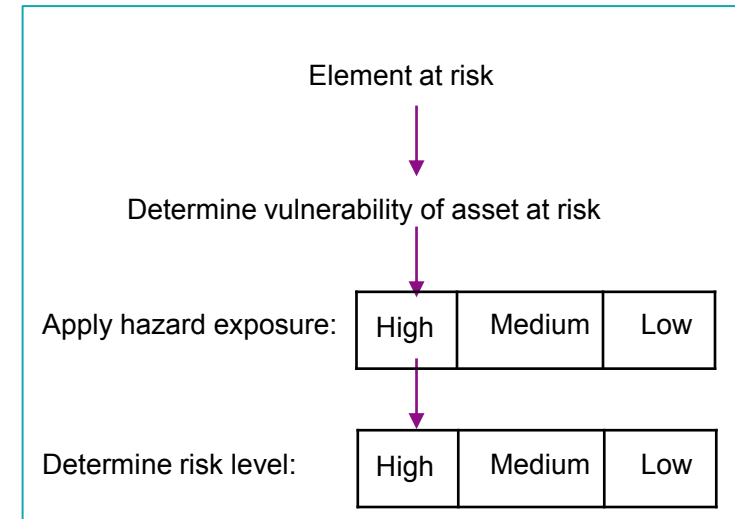
Uses a risk matrix to auto-populate the risk, based on the hazard exposure and vulnerability.

Pro: Would be a stand-alone tool

Climate hazard	Element at risk	Risk statement	Risk description	Exposure			Vulnerability	Risk		
				Present	Mid Century RCP8.5	End of Century RCP8.5		Present	Mid Century RCP8.5	End of Century RCP8.5
Sea level rise, coastal flooding	Roading network	Risk to the roading network due to sea level rise & coastal flooding	Roading network follows the coast and is at risk from sea level rise which, combined with severe weather and high tides, causing damage and outages.	Low	High	Extreme	High	Low	High	Extreme

3. Flow-chart

E.g. Step-by-step for each climate variable, accounting for hazard exposure and vulnerability. Could be worked into an excel format too.



Discussion

- Are you familiar with using risk frameworks (E.g, Financial, Health and Safety, Environmental)?
- What is the most useful format to you for making risk assessment decisions?



		Impact →				
		Negligible	Minor	Moderate	Significant	Severe
Likelihood ↑	Very Likely	Low Med	Medium	Med Hi	High	High
	Likely	Low	Low Med	Medium	Med Hi	High
	Possible	Low	Low Med	Medium	Med Hi	Med Hi
	Unlikely	Low	Low Med	Low Med	Medium	Med Hi
	Very Unlikely	Low	Low	Low Med	Medium	Medium



Q + A

Post Consultation Survey

- Questions discussed today, plus some additional ones
- Survey will be distributed by Sunny (SPREP) via email
- Responses required by **end of day 31st October**





**make
everyday
better.**

B

Appendix B – Minutes from stakeholder consultation sessions

Minutes of Meeting

Stakeholder Consultation Session One Minutes

Held 18 October 2023 at 11.00am-1.00pm (Vanuatu time)

Via Zoom

Present:

Sunny Seuseu (SPREP)	Leanne Webb (CSIRO)
Moirah Matou (VanKIRAP)	Kevin Hennessy (CSIRO)
Mike Allis (Beca)	Rebecca Gregory (CSIRO)
Kristin Renoux (Beca)	Mark Pardoe (Country Manager for Tropical Agencies limited (TAL) and Domestic National Representative for the Chamber of Commerce)
Carlos Carvajal (Beca)	
Sophie Andrews (Beca)	
Hannington Aatoa (Beca)	

Apologies:

Distribution:

Item	Notes
1 House Keeping and Introductions	
2 Stakeholder introductions 1. What climate issues are you already seeing in your sector	<p>1. <i>What is organisation/background? Where do you operate within Vanuatu?</i></p> <p>Mark- Cruise ship lines, two offices (Port Vila and Santo) Peak season for cruising is November to March- Cyclones, bad weather etc. effect port calls because of safety. From climate sector shipping agency perspective, biggest concern. Have number of this weather-related thing- Mark to send to Mike</p> <p>One road that leads to port villa is the one road for cruise tours- only road so if something happens, like erosion of road due to weather would have big impact. Wharf road (CSIRO- Vicky Tai might be able to help with detours of the road but not CSIROs wheelhouse yet. They will do some mapping of the road and see the level of risk).</p> <p>Kristin - Would you choose to not to go there because of the impacts?</p> <p>Mark- Yes, and cargo issues, won't sell or give these in tours- passenger experience dramatically affected.</p> <p>What's the number of people involved in providing experience? Summary to be projected of specific activities.</p>

Minutes of Meeting

Item	Notes
	<p>Moirah – rivers that run through roads that didn't happen before. Happening more and more often. Some resorts in Santo – Bungalows already washed out because of erosion and rain fall</p> <p>Mark- wearing commercial rep hat: roads washed away- people identifying and working with people to fix this</p> <p>CSIRO – Leanne – not mentioned, fisheries issues (to see sea turtles) and they are affected by climate in gender ratio. Roads bumpy already (construction quality). Tropical cyclones limit access to electricity.</p> <p>Kevin- Two of the info bites not yet accessible (will be by 12 Nov) NIWA will be doing modelling, to see the increasing issues of flooding (getting bad)</p> <p>Leanne - Tourists like to try local produce (plantations might get to expand because it's warmer but coffee really struggling)</p> <p>Mark – Infestation of rhinoceros beetle, eating copra plants (Port Vila, Efate) – is there a climate driver behind the infestation?</p>
<p>3 Project outline and scope</p>	<p>Mike</p> <ul style="list-style-type: none"> • Excellent work done already for Vanuatu on project, Beca building on it • Timeline constraints • Financial projections
<p>4 Project Goals and Discussion</p>	<p>Mike and Kevin- Beca fits into step 3 and 5 of the CSIRO framework.</p> <p>Kevin- It needs to be generic enough to be applied across different sectors (consistent so can be used in a consistent way)</p> <p>Mark - unaware of this project itself and haven't has too much to do with the VanKIRAP as private sector (aware but haven't dived into it)</p> <p>Mike- Compressed time wise so we can be testing along to see if it's usable</p> <p><i>How is CC already affecting your organisation and roles?</i></p> <p>Sunny- observations- have had discussion with tourism operators in Santo and Efate Tourism operator in Santo concerned in SRL- have a number of beach huts they use for tourists but effecting community and losing land through this. Providing adaptation options, provide for growth next door. One of the most popular places for cruise lines but SLR impacting this.</p> <p>Airport effected by flooding, flights couldn't come in and out- this impacts the ability for people to come to the islands</p> <p>Infrastructure heavily impacted so tourist can't get around</p>

Item	Notes
	<p>2020 cyclone impacted tourism heavily (also because of covid 19) Small scale tourism operators- do not have access to pool water, have to access from ground, but can't do that during a drought</p> <p>Mark- Telecommunication cut off during cyclone, no connection to outside world- can't tell family we're okay. In July in 2015, power off for two weeks- comms you can't do business without it. Mark brought back up generator for the office because you can't have that complacency.</p> <p>Leanne- took photos of cyclone resistant structure- then took photos afterwards to show that it was resilient (things that you can use to be resilient).</p> <p>What did they do differently?</p> <p>This one has big concrete anchor at the back, made of materials that are locally accessible.</p> <p>Has Vanuatu sustainable tourism strategy been implemented on a community level?</p> <p>Tourism strategy 2021, has been implemented – get information from Geraldine on how this is going at the moment.</p> <p>What about the people who are on the ground – drought obviously effect workers- has the impact of heat impacting airport workers unloading bags etc, or people unloading cargo. Talk to airport and DoT for this info. Electricity demand (increasing aircon use etc.) because of heat.</p> <p>Mike- what is the increase electricity sources? Mark- mainly uses diesel at the moment but looking at coconut oil etc. Impacts on Hospitals – dengue fever?</p> <p><i>What would help you consider climate risks into your future planning?</i></p> <p>Mark- only getting bigger in people wanting to come to islands, ports need to get bigger, looking at some of the climate impacts but as boots on the ground, couldn't tell you where they are looking at.</p> <p>Sunny – from his discussion from department of tourism, department is looking at strengthening their tourism mat. Strengthening between the two departments, the tourism sector will be more resilient working with DoT and Tourism Vanuatu. Methodology scheme to facilitate methodology where they encourage tourism operators to identify risks. Tool developing will help them with their journey providing for all stakeholders (wide range). Using data from the last 13 years, need to update data to help with process.</p> <p>Ministry looking at relocating communities and villages because of SLR but need a methodology like DRR's relocation policy to help inform the future planning decisions.</p>

Item	Notes
	<p>Moirah – Project started in 2018 so most of the planning for risk has been updated from then until now- people starting to include climate change thinking in their business plans.</p> <p><i>What role does your organisation play in identifying climate change risks in Vanuatu?</i></p> <p>Mark- we work in real time- start working with captains or marine managers if issues start to arise- if not booked It can be diverted from mystery island to Port Vila for example.</p> <p><i>Are you getting any requests for assurance of operation – how far out?</i></p> <p>Mark – After cyclone Judy, report asked to be done by minister and they said road is not to be used- public doc so cruise lines diverted from port villa. Against cliff face placed temporary protection/ fixes- report changes, cruise line back but said it's not a long-term solution so have concerns. Cruise line paid for some of works- Min tourism reduced fees by half to accommodate.</p> <p><i>Are there any particular services involved in supporting the resilience projects?</i></p> <p>Sunny- nothing comes to mind but will have a think.</p> <p>Moirah- indirect or direct? Both. 5 priority sectors already, will have to think of anyone outside of the these. Department of CC, department of Environment, department of health. <i>Can get details for VTO and DoT (Geraldine might have some names and ideas)</i></p> <p><i>Who do you think the end users of this framework will be?</i></p> <p>Sunny- Tourism sector through VTO and Dot will have to provide guidance of who to use it. DOT and VTO responsible for distributing and providing to relevant users. Have to be flexible enough to be used by wide range- need to accommodate all areas ie. waterfalls, beaches, all sites.</p> <p><i>Are the developers of tourism seen as using this?</i></p> <p>Sunny- vision to be used as a multi sectorial approach but consultation and implementation needs to be done by a multilevel agency, lead by DoT. Need to decide if it will be used for big and small organisations etc.</p> <p>Kristin- Are we assuming that there are end users with different understanding of risk management or analyse it for others? Flowchart to outline all steps? Safe to assume that risk management is not everyone's background as should apply/design as such.</p> <p>Sunny- needs to be a categorisation of different activities- ie. small scale use this and work with department for CC and large scale use this one to independently access.</p>

Minutes of Meeting

Item	Notes
	<p>Leanne – in Santo- graphics used to display technical info in project for end user (info graphics simple and preferable)</p> <p>Kevin- very simple step by step guide very helpful. Important to provide for an infographic that give a high-level overview of the risks now, and the risks in the future. Targeted approach very important as sunny said.</p> <p>Leanne- Big language barrier- getting stakeholders to drive the consultation as some afraid to ask the questions in English so conversation in Bislama was so much more interactive.</p> <p>Carlos- Does the climate relate from Bislama to English the same? Is that understanding there?</p> <p><i>Format of tool: Examples shown- are they too detailed based on infographics convo? Does anyone have ideas on how to display/pitch framework for the end users?</i></p> <p>High level pitch but risk of losing detail and value with high-level structure.</p> <p>Sunny- there will be use of this (examples format) but is something we need to discuss with DOT. Sunny supports- it's a good start but should be refined.</p> <p>Leanne- target always the understanding of reasonable capacity. Most of it, as long as you can explain it.</p> <p>Kevin- People have in the past found it difficult to discuss or grip likelihood. Think laid out well. Finding balance is challenging.</p> <p>Skipping likelihood all good- exposure more important to discuss.</p> <p>Kevin- emissions targets at high level</p>
5 Questions and answers	<p><i>We want feedback on how we're done the session- has this been useful to understand our direction of travel?</i></p> <p>Yes, all found useful</p> <p>Kevin- good discussion- rapid assessment can only do so much</p> <p>Moirah- Good questions that really triggered responses etc.</p> <p>Note additional stakeholder came late- <i>their question is to be discussed with Sunny and Moirah after meeting.</i></p>

Minuted by: Sophie Andrews

Minutes of Meeting

Stakeholder Consultation Session Two Minutes

Held 19 October 2023 at 1.00pm – 3.00pm (Vanuatu time)

Via Zoom

Present:

Sunny Seuseu (SPREP)	Dr Christina Shaw (CEO Vanuatu Environmental Science Society (VESS), President Vanuatu Scuba association, Co-owner of Big Blue Dive Company)
Moirah Matou (VanKIRAP)	
Mike Allis (Beca)	
Kristin Renoux (Beca)	Geraldine Tari (Acting Director for Department of Tourism)
Carlos Carvajal (Beca)	
Sophie Andrews (Beca)	
Hannington Aatoa (Beca)	

Apologies:

Distribution:

Item	Notes
1 Project Overview	<p>Moirah- This is a Green Climate funded project</p> <p>Main objective of project to provide and enhance services provided by CSIRO so more stakeholders can use it for their planning and have better decision making so they have more resilience in the face of Climate Change.</p> <p>Geraldine- Don't have all the answers, hard to find someone to lead the project/ climate resilience charge.</p>
2 Project outline and scope	<p>Purpose of today- meet and gauge incites from stakeholders in Vanuatu</p> <ul style="list-style-type: none">• Excellent work done already for Vanuatu on project, Beca building on it• Timeline constraints• Financial projections
3 Stakeholder introductions	<p>1. <i>What is your organisation/ Background?</i></p> <p>Geraldine – Acting Director for the Department of Tourism (DOT)</p> <p>Christina- CEO of the Vanuatu Environmental Science Society (VESS) and owns Big Blue Dive company with husband. She is the new president of scuba association, and her husband owns recycling company.</p> <p>2. <i>Where do you operate within Vanuatu? What climate issues are you already seeing in your sector?</i></p>

Item	Notes
	<p>Geraldine- Operate under the Ministry of Trade and Commerce, responsible for the policy and implementation of tourism, offices based in all the 6 provinces. Main activities work around product development office. Currently over a 1000 tourism operation listed (database needs to be updated)</p> <p>Most operators in outer islands (rural) and are often the most impacted through climate issues. We don't have level of impacts and how impacted. There is a programme to help record data and help them in phasing out the development of their operation.</p> <p>Is there a way of feeding people information or gathering information from them? Mostly the ones based in Santo Tana and Port Vila easily contacted, but otherwise, only contacted over social media. Opportunity in improving online accreditation certification. Will take a while – format existing platform, being built on. Can we see a copy of that? Yes, Geraldine will send this through.</p> <p>Christina – Environmental scientist role- Projects mostly of threatened species and conservation but also work on ecosystem threats. Depends on what project doing but all throughout Vanuatu. Deliberately not working on Climate change projects, sticking to biodiversity conservation niche. Effects seeing tropical cyclones, tree canopies effected (bats come close to villages, people hunting them after cyclones).</p> <p>High rainfall events that will impact the environment. Trying to make the environment more sustainable. Tourism generally have impacts on environment. Experience in staying in local tourist operations. Tours- very little connectivity on island. Radio used for information a lot in remote islands.</p> <p>Lots of NGOs working on CC but little NGOs working on biodiversity work. Making sure it's not all human focused, raise the voice of the voiceless (animals and plants).</p> <p>If there's a specific climate event, would you expect there would be no contact with them for a while? Probably yes. Planes in one a week, boats in one a month- tricky for repairs, particularly if there's high demand.</p> <p>Are you already seeing specific triggers in the effects on the ground (coral reef bleaching- biggest bleaching event -never seen it so long in....) Temperature changes, 29 degrees started in November, about 2 months early. Also, a crown of thorns outbreak at the moment- if cyclone, knocked over more coral (tipped over). Saw after cyclone pam- lots of canopies fell out and trees fell down, and they El Nino drought caused a lot of them to die because they couldn't recover.</p> <p>Mike - Frequency is a driver of that change as well.</p> <p>Christina - Usually when cyclone comes through, the water temp drops and the coral stops bleaching but didn't this time. Didn't provide relief.</p>

Item	Notes
	<p>Christina- Wearing scuba association hat. Operators in Santo, Port Vila, a couple up the east coast. Biggest climate effect is on the corals. Most of info of what is happening in terms of cyclones isn't from in Vanuatu. Juggle of when the best time to anchor things down etc. based on losing business is you do too early.</p> <p>Has there been more cancellations due to cyclones (before and after changes)? Biggest impact of concern is post covid recovery and issues with airline function. Climate hasn't come up as much but haven't seen too much change because of the cyclone possibility.</p> <p>People (Charity sector) over enhancing issues on how the recent cyclone impacted/ damage caused. NGOs said it wasn't that bad so although bringing money to charities, tourism sector impacted.</p> <p>Fruit impacted and tour groups do local biscuits and fruit but couldn't for around 3 months. Not much in the market available.</p> <p>Coconut rhinoceros beetle infestation mentioned.</p> <p>Mike- does your husband have anything from recycling business?</p> <p>Christina- lots of extra material after the cyclones such as metals. VESS have done a plastic survey- People had 18 more bottles in their homes in areas that they didn't think they could get water or relief services.</p> <p>Moirah- Been a while since we have had cases/examples of the sea temperatures and coral bleaching. Deployed buoys in Vanuatu to measure temperatures- higher than usual.</p>
<p>4 Project Goals and Discussion</p>	<p>What would help you to consider climate risks in your future planning?</p> <p>Geraldine- Said that each operator would have a risk management plan in place, but they haven't had the tools to do one. Varying abilities based on location. Project help in giving operator services to help them develop framework that provides them with sustainability and climate information.</p> <p>Kristin- Thinking that the end user goes beyond government organisations and be used by the operators themselves?</p> <p>Geraldine- Yes</p> <p>Kristin- sometimes developing framework with wide range of end users quite tricky. Need to note that framework can be used with smaller tourism opportunities however they will need to be provided with training and tools to achieve a risk management plan</p> <p>Christina-Diving risks common- but looking at short term and not really long term. Concerns going into cyclone seasons but usually not long-term thinking. Usually a lot of investment in equipment and asset management. Not sure there would be much update from medium type businesses unless there is a future risk assessment value to it.</p>

Item	Notes
	<p>Think there are a lot of other threats that get overlooked because of the many Climate change projects.</p> <p>Geraldine- do you have comments on who the framework should be targeted at, will it be particularly useful for the end users that don't look into the long term. Thinking who else will have these thoughts, need to look into this as to how these impacts on operators.</p> <p>Kristin- journey for a lot of people to get understanding- need to get the buy in from people as to why this is going to support the long term of people's business (case study will be a good example of how this can be implemented).</p> <p>Christina- Some operators struggle with the day to day- need to buy in, perhaps from the government with funding/grants if it's undertaken, enhancement to business in some way, or applications to awards etc. The value incentive.</p> <p>Format of examples – Thoughts? What might be useful as an end user?</p> <p>Geraldine- If officers on the ground- the Product development officers in 6 provinces (or provincial managers), excel works to help with the understanding. But if it is a tool for people to take away, needs to be an infographic etc (simple). Provide with both hard copy and electronic version on website.</p> <p>Product development officers well connected to all operators and NGOs in their province.</p> <p>Provincial tourism officers (PTO).</p> <p>What would be key takeaways to pick up and use it?</p> <p>Christina- 2 levels of stakeholders- you have the small individual operators on outer islands and medium Vanuatu wide organisation. Tourism association members- required to be a member of one association so good way of attacking it. Not having too much on show at the beginning so it's not overwhelming. Perhaps a workbook with actual suggestions and mitigations that are actual practical so it's useful for next steps (but not too overwhelming so people don't want to start)</p> <p>Have to be a member of a tourism association to get tourism permit.</p> <p>Christina is unfamiliar with VanKIRAP portal. She mentioned she doesn't know what we're going to do differently.</p>
<p>5 Questions and answers</p>	<p><i>Feedback on session?</i></p> <p>Geraldine- DoT doesn't have Questions now but will have questions that pop up as we more through the process and as the feedback comes in.</p>

Minutes of Meeting

Item	Notes
	<p>Christina- VanKIRAP project inception meeting a few years ago- don't see how it's going to make a difference. Don't see how it will be used or can be used on the ground- Private sector don't really get help from the government (ie. coral reefs- not much the operators can do themselves, need help). What ability do the small operators have to make a difference using this framework?</p> <p>Kristin- Would tourism associations be good entry points to relive the pressure and difficulty of using the framework on small operators?</p> <p>Christina- Yes</p>

Minuted by: Sophie Andrews

C

Appendix C- Identified Stakeholders

Stakeholders Identified for Consultation

SPREP and DoT identified 18 key stakeholders to undertake consultation with. These stakeholders are as follows:

- SPREP
- Vanuatu Meteorology and Geo-Hazards Department (VMGD)
- Department of Tourism (DoT)
- Vanuatu Tourism Office (VTO)
- Public Works Department (PWD)
- Department of Geology and Mines
- Department of Ports and Harbor
- Vanuatu Chamber of Commerce and Industry
- Reserve Bank of Vanuatu
- Department of Finance and Treasury
- Commonwealth Scientific Industrial Research Organization (CSIRO)
- Department of Climate Change (DoCC)
- National Disaster Management Office (NDMO)
- Department of Environment Protection and Conservation (DEPC)
- Ministry of Tourism, Trade, Commerce and Ni-Vanuatu Business
- Vanuatu National Statistics Office (VNSO)
- Vanuatu Fisheries Department (VFD)
- Tropical Agency Limited (TAL)