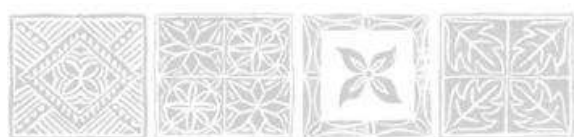


Tourism Development Area 5 North West Savaii Management Plan



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EXECUTIVE SUMMARY

This Management Plan identifies and prioritises adaptive measures for tourism management planning for North West Savaii, building on the community's vision and integrating climate change adaptation and disaster risk management measures.

Community Vision for Falealupo and Tufutafoe

A sustainable and practical tourism development area which recognises, protects and promotes the environmental and cultural assets of the area to benefit tourists, based on a partnership approach between the community; the tourism operators; and the government, and accordingly enhances the quality of life of the Falealupo and Tufutafoe communities.

We can achieve this through:

- 1. Improved protection to the coastline to safeguard coastal environment and people;*
- 2. Improved protection of the forest assets;*
- 3. Improved promotion of the assets and strengths of the area to travellers;*
- 4. Including non-beach assets such as the forest and cultural attractions;*
- 5. Working together as a community and tourism destination area;*
- 6. Improved road access as well as supply of utilities;*
- 7. Improved employment opportunities associated with tourism industry integrating the supply and value chain.*

Community Vision for Satuiatua

A sustainable and practical tourism development area which recognises, protects and promotes the environmental and cultural assets of the area to benefit tourists, which is based on a partnership approach between the community; the tourism operators; and the government, and accordingly enhances the quality of life of the Satuiatua community.

We can achieve this through:

- 1. Improved protection to the coastline;*
- 2. Improved protection of the forest assets;*
- 3. Improved water supply;*
- 4. Working together as a community and tourism destination area;*
- 5. Improved access to attractions for tourists.*

Based on the previous investigations, the community visioning process, further investigations undertaken as part of this project and the timeframes and budget associated with this project a

prioritised series of projects has been developed for TDA 5. The recommended adaptation measures have been presented according to the following intervention categories:

- shoreline protection (including enhanced design and siting of tourism facilities and surrounding landscape);
- water resources management;
- Ecosystem responses (including development of climate conscious tourism products, alternative tourism sites and recreational activities); and
- disaster preparedness and emergency facilities in case of disaster events.

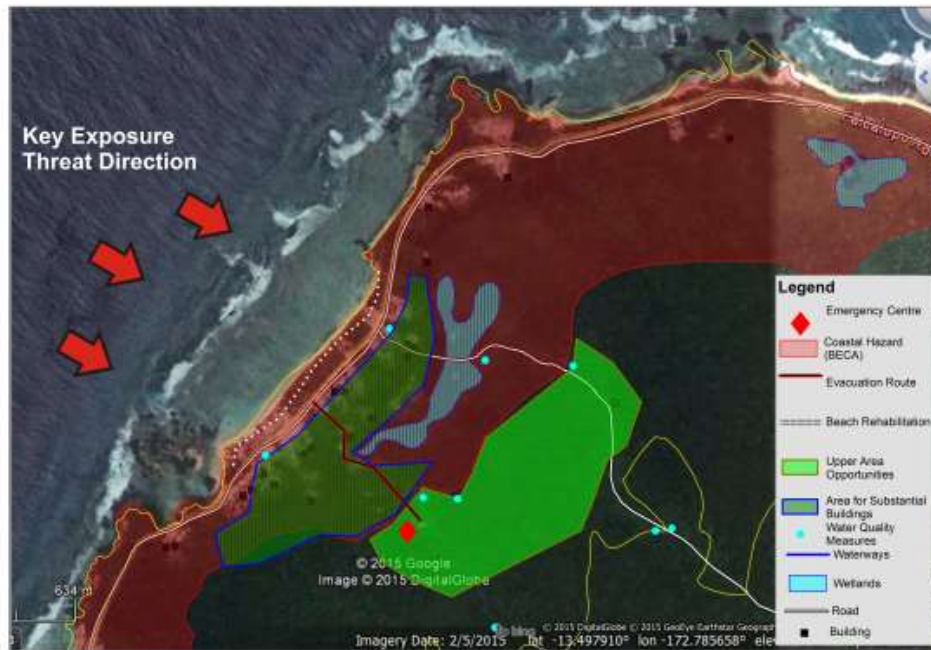


Figure 1 Overview of Structural Management Plan Options for Falealupo



Figure 2 Overview of Structural Management Plan Options for Satuiatua

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ACRONYMS

CEHZ	Coastal Erosion Hazard Zone
CFHZ	Coastal Flooding Hazard Zone
CIM	Coastal Infrastructure Management
DMO	Disaster Management Office
GDP	Gross Domestic Product
GEF	Global Environment Facility
LDCF	Least Developing Countries Fund
MNRE	Ministry of Natural Resources and Environment
M&E	Monitoring and Evaluation
P3D	Participatory 3 Dimensional
STA	Samoa Tourism Authority
SWA	Samoa Water Authority
TDA5	Tourism Development Area 5 North West Savaii
TDA	Tourism Development Area
UNDP	United Nations Development Program

1. INTRODUCTION

This document is a Management Plan prepared for Tourism Development Area 5 North West Savaii (TDA 5). This Management Plan should be read in conjunction with the Enhancing the Resilience of Tourism Reliant Communities to Climate Change Risks TDA Management Plan Report (“the Report”), which describes the overall background and methodology for the preparation of Management Plans for six nominated Tourism Development Areas in Samoa. The Management Plan is also supported by the Samoa Tourism Authority’s Technical Guidelines for Tourism Operators.

The preparation of this Management Plan is one aspect of the *Enhancing the Resilience of Tourism-Reliant Communities to Climate Change Risks Project* (“the Project”). The objective of the overall Project is to enhance the resilience of tourism-reliant communities to climate change risks by integrating climate change into development policy and instruments and investing in adaptation actions supporting tourism reliant communities. The Project recognises that Samoa’s tourism sector, which is a mainstay of Samoa’s economy and a core contributor to Gross Domestic Product (GDP), is highly vulnerable to the slow onset impacts of climate change.

The Project is being implemented by the Government of Samoa with financial assistance from the Global Environment Facility (“GEF”)/Least Developing Countries Fund (“LDCF”) through United Nations Development Program (UNDP). The national executing partners are the Samoa Tourism Authority (“the Authority”) and the Ministry of Natural Resources and Environment (“MNRE”).

This Management Plan identifies and prioritises adaptive measures for tourism management planning for North West Savaii, building on the community’s vision and integrating climate change adaptation and disaster risk management measures. The Plan focuses on small to medium tourism operators and the communities in which they operate. Some of these measures can be implemented with funding connected to this component of the Project. Other strategies fall outside the scope of this funding. However information and Technical Guidelines have been developed and made available to tourism operators, prospective operators and communities so that they can plan for the implementation of adaptive measures. In some cases tourism operators or groups of tourism operators may use this information to seek funding through other mechanisms including the Tourism Climate Change Small Grants Program.

2. DESCRIPTION OF TDA 5:NORTH WEST SAVAII

2.1 Overview

Tourism Development Area 5 covers an area from the village of Satuiatua on the central western coast of Savaii to Falealupo on the western end of the north coast of Savaii (see Figure 2.1).



Figure 2.1 TDA 5 North West Savaii

2.2 Community Vision

A community visioning exercise for TDA 5 was undertaken with active participation by tourism operators and community representatives during a four day workshop in March 2015. The workshop utilised a combined approach in which community visioning was conducted by the Samoa Tourism Authority team and Participatory 3 Dimensional (P3D) modelling was facilitated by the P3D team from Ministry of Natural Resources and Environment – Forestry Division. Participants were asked to consider the ‘past, present and future’ of their Tourism Development Area (TDA) in order to identify common goals and a realistic practical path forward within the constraints of changing climatic conditions. The P3D process enable participants to contextualise adaptation options according to geographic and physical variables. Figure 2.3 shows the workshop attendees with the model they developed during the workshop.

The community and tourism operators from TDA 5 came together with a consensual ‘Vision’ for the management of climate change variables in TDA 5: North West Savaii. The communities’ visions are set out in

Community Vision for Falealupo and Tufutafoe

A sustainable and practical tourism development area which recognises, protects and promotes the environmental and cultural assets of the area to benefit tourists, based on a partnership approach between the community; the tourism operators; and the government, and accordingly enhances the quality of life of the Falealupo and Tufutafoe communities.

We can achieve this through:

- 8. Improved protection to the coastline to safeguard coastal environment and people;*
- 9. Improved protection of the forest assets;*
- 10. Improved promotion of the assets and strengths of the area to travellers;*
- 11. Including non-beach assets such as the forest and cultural attractions;*
- 12. Working together as a community and tourism destination area;*
- 13. Improved road access as well as supply of utilities;*
- 14. Improved employment opportunities associated with tourism industry integrating the supply and value chain.*

Community Vision for Satuiatua

A sustainable and practical tourism development area which recognises, protects and promotes the environmental and cultural assets of the area to benefit tourists, which is based on a partnership approach between the community; the tourism operators; and the government, and accordingly enhances the quality of life of the Satuiatua community.

We can achieve this through:

- 6. Improved protection to the coastline;*
- 7. Improved protection of the forest assets;*
- 8. Improved water supply;*
- 9. Working together as a community and tourism destination area;*
- 10. Improved access to attractions for tourists.*

Figure 2.2 Community Vision



Figure 2.3 Workshop attendees with P3D model

2.3 Geographic location & characteristics

Satuiatua on the western coast of Savaii is in an area characterized by steep coastal cliffs overlooking white sandy beaches and shallow lagoons. Much of the development in the area is set back from the coast on elevated land. The reef system is 100m-300m from the shoreline giving some protection from wave surge. There are channels in the reef in front of each village. The main road is in the CEHZ and the CFHZ and is protected by occasional sections of seawall. The main road floods during periods of heavy rain due to poor drainage. At Satuiatua the sand on the beach has eroded significantly, possibly as a result of the positioning of the seawall that ends at the beach. Economic activity includes plantation work and fishing, with some local shops and employment at the local hospital. Villages in this area are very aware of the management of fisheries and the need to conserve the delicate ecosystem. Satuiatua has sought the establishment of a marine conservation park for greater protection of these natural assets. Water supply, although reliable is highly saline. Tourism activity is quite limited in this area.

Falealupo is located on the western-most tip of Savaii. The district is predominantly volcanic rock and poor soil forming gentle coastal plains sloping down to the sea from upland areas. To the south the land near the coast is low lying, largely sand, planted in trees and backed by wetlands. Further north the sand gives way to volcanic outcrops often containing small lava tubes. There is a reef system 100-200 m off shore for much of the coast although in some areas the reef is showing cyclone damage. Only a few beach fale are on the seaside of the main access road in the village. At Avata the main access road is subject to flooding during high seas. All residents rely solely on rainwater for drinking. Plantation and agricultural activities dominate the area. Ecotourism activities have been attempted with paid eco-tours of the forest and visits to historical and legendary sites.

Figure 2.4 and Figure 2.5 illustrate the CEHZ and CFHZ and the positions of the access roads in relation to the Falealupo and Satuiatua communities.



Figure 2.4 Geographic features of Falealupo in TDA 5 North West Savaii



Figure 2.5 Geographic features of Satuiatua in TDA 5 North West Savaii




2.4 Visitor trends

The study team has been unable to access records of visitor numbers for TDA5. At the time the study team visited Savaii there were a small number of tourists at Satuiatua and Falealupo.

On-line review sites such as Trip Advisor (2015) were very positive about Satuiatua Beach Fales highlighting the setting, the food, the hospitality and the value for money.

2.5 Operators' profiles

Within the North West Savaii TDA, small to medium tourism operators within the scope of this Management Plan include 2 Beach Fale accommodation operators, although one appeared not to be in operation, and the Falealupo Attraction Sites. Table 2.1 lists Tourism Operators targeted in this project based on information provided by Samoa Tourism Authority (STA).

Accommodation Providers	
<p>Falealupo Beach Fales</p>  <p>Source: www.samoa.travel</p>	<p>Location: Falealupo</p> <p>Number and Type of Fales: 11 beach front fale with pull down blinds providing 26 beds</p> <p>Facilities and Services: dining area shared facilities water tanks</p> <p>Tourist Experience Offered isolation beach</p>
<p>Satuiatua Beach Fales</p>  <p>Source: www.samoahotels.ws</p>	<p>Location: Satuiatua</p> <p>Number and Type of Fales: 13 traditional style beach front fale providing 26 beds</p> <p>Facilities and Services: restaurant and bar shared facilities</p> <p>Tourist Experience Offered surfing beach snorkelling viewing platform from banyan tree</p>
Attractions	
<p>Moso's Footprint</p>	<p>Location: Falealupo</p> <p>Description: Unusually shaped crack in the lava and is held to be the footprint of a famous giant, Moso</p> <p>Facilities and Services: Open to the public for a small fee</p>
<p>Falealupo Canopy Walk</p>  <p>Source: www.samoa.travel</p>	<p>Location: Falealupo</p> <p>Description: Treetop canopy walk in the Falealupo Rainforest Preserve</p> <p>Facilities and Services: Open to the public for a small fee Information Centre</p>


Attractions	
<p>House of Rock</p>  <p>Source: www.samoa.travel</p>	<p>Location: Falealupo</p> <p>Description: Rock house which is the site of an important Samoan legend</p> <p>Facilities and Services: Open to the public for a small fee Information Centre</p>

Table 2.1 TDA 5 Tourism Operators targeted in this Management Plan

2.6 Potential for Diversification of Tourism Offerings

Tourism within TDA 5 has capitalised on a diverse range of natural assets, including fabulous views of the sunset, sandy beaches, the reef, rain forests and caves and other sites associated Samoan history and culture. However there are opportunities to build on these assets as well as other opportunities including wetland experiences, lava tube and cave exploration as well as capitalising on the TDA's position as a stop for cyclists who are riding around Savaii. In addition to the natural attractions of this area, other opportunities may include cultural and archaeological attractions, provision of food (both raw and cooked) and traditional activities such as explaining and or demonstrating traditional massage, handicrafts and tattoo.

3. CLIMATE CHANGE VULNERABILITY AND ADAPTATION MEASURES

3.1 Overview

This Management Plan builds on work previously undertaken as part of the *Enhancing the Resilience of Tourism-Reliance Communities to Climate Change Risks Project* (the Project) which described hazards, risks and vulnerabilities for existing tourism assets within TDA5 and identified existing climate adaptation mechanisms as well as further adaptation options (IPA 2015a and IPA 2015b). The Project's Implementation Plan (IPA 2015b) describes the key focus for North-West Savaii as **water security and ecotourism activities**.

Key climate change related concerns in this TDA include:

- very high vulnerability to high seas and storm wave surge leading to coastal erosion and flooding;
- buildings, structures and some infrastructure including the access road at Avata are within the CEHZ and CFHZ and are highly vulnerable to complete destruction during cyclones and storm surge;
- increased land clearing impacts on surface run-off during periods of heavy rain and cyclones leading to coastal erosion and flooding;
- water is sourced from boreholes, rainfall collections or trucked in, leaving communities vulnerable to extreme weather events as all the springs fall within the CEHZ and CFHZ and to water shortages during drought;
- wetlands, which provided beneficial biodiversity to the area, are at moderate risk from salt water intrusion during high seas;
- natural forest resources will be vulnerable to the predicted increase in tropical cyclones;
- increased risk of forest fires as a result of predicted increases in drought frequencies.

The recommended adaptive measures in this Management Plan take into account initiatives which impact on climate change resilience in North West Savaii identified through a range of international, national and local projects. Information provided during the recent community visioning exercise has been reviewed in conjunction with previous initiatives and analysis of this information is grouped into categories in line with the following intervention areas:

- shoreline protection (including enhanced design and siting of tourism facilities and surrounding landscape);
- water resources management;
- Ecosystem responses (including development of climate conscious tourism products, alternative tourism sites and recreational activities); and
- disaster preparedness and emergency facilities in case of disaster events.

3.2 Shoreline protection

During the visioning process the communities identified improved protection to the coastline and protection of forest assets as a strategy to achieve the communities' visions for sustainable and practical tourism.

The Menu of Adaptation Options (IPA 2015b) previously developed for The Project assesses and prioritises the following adaptation options out of a possible score of 25:

- awareness raising program on the importance of coral system – 21/25.
- enforce village rules to prohibit the damaging of corals – 21/25.
- improve coral reef system protection by educating villages; coral gardening and coordination between Fisheries and the village community - 20/25.
- Sandwatch programme training for tourism operators and communities - 19/25.

CIM Implementation Guidelines(MNRE IAMP-1 & MNRE SIAM-2) recommended a range of measures including upgrading the existing seawall at Falelima to protect the coast road and integrated management of tourist resorts and adjacent areas to avoid erosion resulting from disruption to the coastal sediment flow. The Guidelines also recommended villages and families undertake replanting programmes and where possible local land based sand deposits be used to supplement local beaches. Restrictions on sand mining and on relocation and other major coastal works were also recommended.

Adaptive measures that have been implemented include:

- The CIM Status Review Report (Williams &Faasau 2014) notes that sand mining has been banned nationally although the Review had not confirmed whether this ban was being enforced.
- The CIM Status Review Report (Williams &Faasau 2014) reports that, in association with a recommendation to provide a marine conservation area, village-owned fish reserves have been marked.

3.3 Enhanced design and siting of tourism facilities and surrounding landscape

CIM Implementation Guidelines (MNRE IAMP-1 & MNRE SIAM-2)recommended that when tourist resorts are replaced they be placed outside the CEHZ and CHFZ and that investment inside the hazard zones take into account the potential for damage, ensuring building foundations are at a level that takes into account the CFHZ.

Adaptive measures that have been implemented include:

- The *Minimum Accommodation Standards for Beach Fales*were strengthened as part of the *Tourism Tsunami Rebuilding Program* which adopted a build back better approach. The revised Standards also specify the minimum distance from the high water mark for septic tanks;
- Falealupo Village re-established 6km inland, along the main road at Falealupo-Uta.

3.4 Water resource management

During the visioning process representatives from the Satuiatua community identified improved water supply as a strategy to achieve the community’s vision of a sustainable tourism industry. The Faealupo and Tuftafoe community identified improved supply of utilities as part of the strategy to achieve their vision.

The Menu of Adaptation Options (IPA 2015b) previously developed for The Project assessed the priority of a range of adaptation options and assigned a total possible score out of 25 to each option (ie the higher the score the greater the priority). The Menu identifies the following options in TDA 5:

- restore and protect coastal spring – 20/25; and
- investigate and develop rainwater harvesting from roofs and provide adequate water storage tanks, micro-catchment, small reservoir – 19/25.

CIM Implementation Guidelines (MNRE IAMP-1 & MNRE SIAM-2) recommended provision of a secure water supply for the District through continued water exploration, reactivating the Tufutafoe Bore and providing additional rainwater tanks. The Guidelines also suggested that communities be provided with training in water conservation.

Relevant to management of water resources, the Menu of Adaptation Options also identified the following options:

- encourage and promote drought-tolerant species – 20/25;
- develop integrated watershed management programme with communities – 16/25.

Adaptive measures that have been implemented include:

- Samoa Water Authority (SWA) is currently implementing a water supply project sourcing a borehole further inland.

3.5 EcoSystem based responses including Development of climate conscious tourism products, alternative tourism sites and recreational activities

During the visioning process the Falealupo and Tuftafoe community identified improved employment opportunities by integrating the supply and value chain for the tourism industry as a strategy to achieve the community's vision of a sustainable tourism industry. Both communities sought to work together as a community and as a tourism destination. Improved access to attractions including road access was a strategy for both communities. The Falealupo and Tuftafoe community particularly identified a strategy to improve promotion of the assets and strengths of the area to travellers, including non-beach assets such as the forest and cultural attractions. Participants in the consultations reported that tourist numbers were down.

While the Menu of Adaptation Options (IPA 2015b) previously developed for The Project did not specifically identify adaptation options related to development of climate conscious tourism products or alternative tourism sites or recreational activities, it did identify and assign priority to options aimed at protecting the forest assets which are a key opportunity for future tourism activities:

- encourage and promote drought-tolerant plant species – 20/25

CIM Implementation Guidelines (MNRE IAMP-1 & MNRE SIAM-2) recommended identifying vulnerable historic sites and artefacts and investigating procedures for protecting those assets. The guidelines also recommend providing a road link between Tufutafoe and Falealupo for tourist access to the western coast of Savaii.

Adaptive measures that have been implemented include:

- a loop road was constructed although some segments of the road are unsealed

3.6 Disaster preparedness and emergency facilities in case of disaster events

CIM Implementation Guidelines (MNRE IAMP-1 & MNRE SIAM-2) recommended villages identify safe havens, develop procedures for maintenance and opening of the safe haven and ensure there are procedures in place for vulnerable people, including tourists during emergencies. The Guidelines also recommended disaster signage in both Samoan and English be prepared.

4. RECOMMENDED ADAPTATION MEASURES FOR IMPLEMENTATION

4.1 General

Based on the previous investigations, the community visioning process, further investigations undertaken as part of this project and the timeframes and budget associated with this project a prioritised series of projects has been developed for TDA 5. The recommended adaptation measures have been presented according to the following intervention categories:

- Enhanced design and siting of tourism facilities and surrounding landscape;
- Water resource management;
- Shoreline protection;
- Development of climate conscious tourism products, alternative tourism sites and recreational activities; and
- Disaster preparedness and emergency facilities in case of disaster events.

4.2 Discussion

The recommendations in this section take into account the current focus of tourism products in TDA 5. The beach, the sunset and access to the rainforest have underpinned the development of tourism in this TDA. However, the TDA's resilience to climate change could be enhanced through further diversification of tourism products. As such this Management Plan contains recommendations relevant to diversifying tourism products and supporting business development for tourism operators, potential operators and those who carry out business within the supply and value chain.

Previous work identified the focus for this TDA as water security and ecotourism activities. In addition to recommendations related to these areas, previous CIM Implementation Guidelines (MNRE IAMP-1 & MNRE SIAM-2) emphasised the need for emergency procedures that took into account the vulnerability of tourists.

4.3 Recommendations

Table 4.1 provides a summary list of the actions that have been prioritised for implementation as part of this project and also those that may be suitable for the Tourism Climate Change Small Grants Program.

Table 4.2 presents a proposed timeline for implementation of the prioritised actions.

Table 4.3 provides a summary list of adaptive actions that emerged from the preparation of the Management Plans. It is recommended that where possible, STA support tourism operators to make approaches to the relevant project or government organisation to facilitate inclusion of those actions in other projects or programs.



Figure 4.1 Overview of Structural Management Plan Options for Falealupo



Figure 4.2 Overview of Structural Management Plan Options for Satuiatua



Table 4.1 Priority Activities to take place under the Enhancing the Resilience of Tourism Reliant Communities to Climate Change Risk Project

Activity	Outputs	Targeted (Operator/Prospective Operator/Community)	Priority	Commence	Duration	Budget Allocation (USD)	Relevant Technical Guideline
Shoreline Protection							
Knowledge sharing and transfer for tourism operators and community members in strategies and techniques to protect the shoreline and improve coastal defences including sea-wall construction and wave protection measures to reduce vulnerability.	Workshops developed and delivered to tourism operators and tourism reliant communities to share knowledge about shoreline protection.	Tourism operators and communities	Medium	January 2016	12 months		
Utilising <i>Revegetation and Landscaping Technical Guidelines for Tourism Operators</i> , establish demonstration sites for landscaping initiatives along the shoreline including planting of vegetation and bio-shields to assist with increasing the resilience of the foreshore:	Revegetated foreshore demonstration site established in conjunction with each tourism operator	Tourist operators	Medium	January 2016	18 months		
Utilising <i>Monitoring the Beach Technical Guidelines for Tourism Operators</i> , implementation of a Sandwatch (or equivalent) program for ongoing beach monitoring and knowledge transfer about beach conditions	Ongoing monitoring program, including use of education tools, established in each village	Community	High	September 2015	18 months		

Activity	Outputs	Targeted (Operator/Prospective Operator/Community)	Priority	Commence	Duration	Budget Allocation (USD)	Relevant Technical Guideline
Enhanced Design and Siting of Tourism Facilities and Surrounding Landscape							
<p>Improved climate resilience of tourism related buildings, such as beach fale, sanitation facilities and associated structures by implementation of prioritised elements of Climate Conscious Sustainability Plans by individual tourism operators or groups of tourism operators.</p>	<ol style="list-style-type: none"> 1. Training developed and delivered for tourism operators about climate smart design, siting and standards and the application of the <i>Climate Smart Design and Siting Technical Guidelines for Tourism Operators</i>. 2. Tourism operators assisted to develop long term Climate Conscious Sustainability Plans utilising <i>Planned Retreat Technical Guidelines for Tourism Operators</i>. 3. Prioritised elements of Climate Conscious Sustainability Plans implemented. 	Tourist operators	High	September 2015	2-3 years		3
Develop plans for construction of toilet facilities at Tufutafoe.	Toilet facility plans, which provide design, costings and provide the details necessary to support funding applications	Tourist Operators and Community	Medium	January 2016	18 months		3

Activity	Outputs	Targeted (Operator/Prospective Operator/Community)	Priority	Commence	Duration	Budget Allocation (USD)	Relevant Technical Guideline
Water Resources Management							
Improved Water Security development of an Integrated Rainwater Use and Capture Plan for each tourism facility.	<ol style="list-style-type: none"> 1. Training developed and delivered for tourism operators in integrated water resource management techniques including the application of the <i>Water Resources Security Technical Guidelines for Tourism Operators</i>. 2. Tourism operators assisted to develop Integrated Rainwater Use and Capture Plan utilising <i>Water Resources Security Technical Guidelines for Tourism Operators</i>. 	Tourist operators	High	September 2015	6 months	\$81,429	4
Implementation of Integrated Rainwater Use and Capture Plans through installation of water tanks, guttering, pumps, filters etc by individual accommodation providers or groups of accommodation providers.	Individual tourism operators or groups of tourism operators make application through the Tourism Climate Change Small Grants Scheme.	Tourist operators	High	September 2015	12 months	Tourism Climate Change Small Grants Scheme	4
Utilising <i>Revegetation and Landscaping Technical Guidelines for Tourism Operators</i> , establish demonstration sites for landscaping initiatives around waterways and estuaries including	Revegetated foreshore demonstration sites established in conjunction with each village	Community	Medium	January 2015	18 months	\$40,000	4

Activity	Outputs	Targeted (Operator/Prospective Operator/Community)	Priority	Commence	Duration	Budget Allocation (USD)	Relevant Technical Guideline
planting of vegetation and bio-shields to assist with increasing the resilience of waterways and improved water quality.							
<i>EcoSystem based responses including Development of Climate Conscious Tourism Products, alternative Tourism Sites and Recreational Activities</i>							
Develop and deliver climate change resilience training for tourism operators and prospective tourism operators	Training in climate change resilience developed and delivered to tourism operators and prospective tourism operators.	Tourism operators and prospective tourism operators	High	September 2015	12 months	\$10,000	6
Building on the outcomes of the Participatory 3D Mapping and previous work by STA and with ongoing consultation with the community, develop implementation plan for tourism opportunities based on cultural, archaeological and natural attraction identification development study	<ol style="list-style-type: none"> Cultural, archaeological and natural attraction development study undertaken in consultation with the community Implementation plan developed 	Community	Medium	January 2016	18 months	\$61,429	6
Assist tourism operators, prospective tourism operators and villages to increase climate change resilience of local tourism by diversifying tourism offerings through: <ul style="list-style-type: none"> development of climate conscious tourism products based on cultural, archaeological and natural 	Useful resources and support available to tourism operators and prospective tourism operators who are considering diversifying tourism offerings or developing services within the tourism supply and value chain	Tourism operators, prospective tourism operators and community	Medium	January 2016	2 -3 years	\$50,000	6

Activity	Outputs	Targeted (Operator/Prospective Operator/Community)	Priority	Commence	Duration	Budget Allocation (USD)	Relevant Technical Guideline
<p>resources identification.</p> <ul style="list-style-type: none"> • identifying and planning for infrastructure requirements to support diversified tourism activities • identifying pathways for funding the design and construction of those requirements. • building sustainability of diversified tourism offerings through facilitating access to “Business Incubator” support for businesses or prospective businesses within the tourism supply and value chain, addressing <ul style="list-style-type: none"> ○ Business management and marketing ○ Mentoring/support • Regulatory framework 							
<i>Disaster Preparedness and Emergency Facilities in Case of Disaster Events</i>							
Improve warning/escape route signage in tourist accommodation, particularly at Satiatua	Adequate written information about escape routes and procedures displayed for guests in tourist accommodation	Tourist operators	High	September 2015	6 months		-

Table 4.2 Timeline for implementation of prioritised activities

Item	Description	2015						2016												2017											
		7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1	Integrated Rainwater Use and Capture Plan																														
2	Training Program - Water Resource Management																														
3	Training Program - Climate Resilience																														
4	Training Program - Climate Smart Design																														
5	Ongoing Monitoring (Sandwatch) Program																														
6	Water Security Planning Tool																														
7	Foreshore Revegetation Site																														
16	Toilet facilities																														
8	Business Incubator																														
9	Climate Conscious Sustainability Plans																														
10	Cultural and Natural Asset Identification																														
11	Climate Conscious Tourism Products																														
12	Marketing Plan																														
13	Pathways for infrastructure funding																														

Table 4.3 Activities identified during the Enhancing the Resilience of Tourism Reliant Communities to Climate Change Risk Project to be referred to other Projects or Organisations

Activity	Action Targeted (Operator/Prospective Operator/Community)	Priority	Commence
<i>Shoreline Protection</i>			
Review existing coastal defences and access structures and plan for development and implementation of appropriate new access structures and coastal defences	Refer to responsible body under CIM Plan	Medium	2-5 years
Coral seeding and crown of thorn removal to improve the resilience and barrier role of reefs	Support an approach to MNRE Forestry Division	Low	1-3 years
Improved enforcement of environmental protection legislation and agreements eg sand mining, land clearing, wetland management and protection, marine conservation areas	Recommend consideration as part of the Village Sustainability Plans	High	1-3 years
<i>Water Resources Management</i>			
Establish emergency water supplies within villages through development of agreed processes and installation of the necessary infrastructure (tanks, guttering) to capture run off from identified large roof area (eg school, church)	Recommend consideration as part of Village Sustainability Plan and support approaches to: <ul style="list-style-type: none"> • Red Cross • Civil Society Support Program 	High	18 months
<i>Ecosystem Based Responses including Development of Climate Conscious Tourism Products, alternative Tourism Sites and Recreational Activities</i>			
Identify and develop market niche for the TDA reflecting diversified tourism offerings and	Recommend consideration by STA	Medium	1-3 years

developing marketing plan for TDA within broader Samoan tourism brand.			
<i>Disaster Preparedness and Emergency Facilities in Case of Disaster Events</i>			
Build/complete/maintain escape routes	Recommend consideration as part of the Village Sustainability Plans and support an approach to DMO	High	6 months
Improve warning/escape route signage within villages and along access and escape routes.	Recommend consideration as part of the Village Sustainability Plans and support an approach to DMO	High	6 months
Appropriate siren and location of siren in each village	Support an approach to DMO	High	6 months
Appoint and train 1 to 2 community disaster wardens per village	Recommend consideration as part of the Village Sustainability Plans and support an approach to DMO	Medium	12 months
Construct disaster/safe houses for each village including first aid centre.	Recommend consideration as part of the Village Sustainability Plans and support an approach to DMO	Low	1-3 years

5. MONITORING AND EVALUATION

Specific Monitoring and Evaluation (M&E) recommendations do not form part of this current project. However, it is understood that M&E will be undertaken consistent with the overall M&E measures as detailed within Table 4 of IPA 2015b.

6. REFERENCES

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