



*"Pacific Auditors Working  
Together"*

## REPORT OF THE COORDINATED PACIFIC REGION PERFORMANCE AUDIT:



Climate Change Adaptation and Disaster Risk  
Reduction Strategies and Management  
April 2015



# Foreword

Performance auditing has become a vital tool in ensuring government operations in the Pacific region are transparent and accountable for the use of public resources on behalf of Pacific Island citizens. If one jurisdiction undertaking a performance audit is valuable, then it follows that there must be increased benefits and impacts if more jurisdictions participate in auditing the performance of their governments in the same area of public administration.

The Pacific Association of Supreme Audit Institutions (PASAI) is undertaking a program of Cooperative Performance Audits within the region and is developing a reputation across the international auditing community for the standard and quality of our cooperative performance audits. To date, the focus of the cooperative performance audits has been environmental issues, such as sustainable fisheries management, access to safe drinking water and solidwaste management.

Cooperative audits, involving a number of individual Pacific Island audit offices, are a powerful tool to assess regional environmental impacts. The Cooperative Performance Audit program also has the clear goal of building performance auditing capacity across PASAI member audit offices.

The cooperative performance audit of climate change adaptation and disaster risk reduction strategies and management is the fourth in this series. The countries of the Pacific are among the most vulnerable to the effects of climate change. Rising sea levels, cyclones, tsunamis, food security, and coastal erosion are real and daily threats. Settlements and societies that live in areas prone to climate change and that are dependent on scarce resources are particularly vulnerable to these impacts.

Pacific governments also face challenges in recovering from natural disasters. Pacific Island states have considerable experience in responding to natural disasters such as cyclones and other extreme weather events. Given the expectation that the frequency, intensity or duration of extreme weather events and corresponding natural disasters will increase in the region as a result of the impact of climate change, efforts to build on effective responses to natural disasters make sense.

We are pleased to present the consolidated result of our audit work in this report. Audit findings from the eight published audit reports have been clustered around the key performance themes of governance arrangements, project implementation, and monitoring and reporting.

The audit was a combined effort involving the INTOSAI Development Initiative, the Asian Development Bank, and PASAI. Australia's Victorian Auditor-General's Office provided support to audit teams under the ACAG/PASAI twinning arrangements. The PASAI Regional Working Group on Environmental Auditing also supported this coordinated audit. The Secretariat of the Pacific Regional Environment Program provided specialist technical expertise on climate change adaptation and disaster risk reduction measures in the Pacific. The Secretariat of the Pacific Regional Environment Program also supported audit teams with technical climate change matters over the course of their audits.

I commend this report to Pacific Island governments, regional stakeholders and environmental organisations involved in climate change adaptation and disaster risk reduction.

  
Fuimaono Camillo Afele  
PASAI Governing Board Chair



# Table of Contents

## SECTION 1

Executive Summary.....	1
Overall Audit Conclusion.....	4
Introduction to the coordinated audit	6

## SECTION 2

Climate change in the Pacific.....	10
------------------------------------	----

## SECTION 3

Key Findings.....	18
-------------------	----

## SECTION 4

Individual Pacific SAI Audits	
Cook Islands.....	30
Federated States of Micronesia.....	32
FSM State of Kosrae.....	33
FSM State of Pohnpei.....	34
Fiji.....	35
Palau.....	37
Samoa.....	39
Tuvalu.....	42

## SECTION 5

Overall Audit Conclusions.....	45
--------------------------------	----

## SECTION 6

References.....	47
-----------------	----





# Executive Summary

The countries of the Pacific are among the most vulnerable to the effects of climate change. Rising sea levels, cyclones, tsunamis, food security, and coastal erosion are real and daily threats. Pacific governments also face challenges in recovering from natural disasters and extreme weather events. In response to these threats and challenges, PASAI Auditors-General undertook a Cooperative Performance Audit on climate change adaptation and disaster risk reduction strategies and management.

## Introduction

This report is a regional overview of the Cooperative Performance Audit in the Pacific region. At the aggregate level, it reports findings on how climate change adaptation and disaster risk reduction strategies are managed in eight Pacific Island countries<sup>1</sup> that participated in the audit. It also contains examples of good practice and key messages for where improvements are required for climate change adaptation and disaster risk reduction strategies and management to have a practical impact in moderating the current and future impacts of climate change in the Pacific.

This report should be of interest to other Pacific Island governments, donor agencies, and organisations involved in climate change adaptation and disaster risk reduction strategies and management.

## Pacific Regional Audit Initiative objectives and outcomes

One of the outputs of the Pacific Regional Audit Initiative is to undertake cooperative audits with participating Supreme Audit Institutions (SAIs) in the Pacific region. In 2014, the Initiative was subsumed into the broader *PASAI Long Term Strategy (2014–24)*, which has similar objectives to the Pacific Regional Audit Initiative.

The capacity of SAIs differs across the region, but all face similar human resource capacity challenges. To address this issue, performance-auditing capacity can be developed through a cooperative approach resulting in individual national reports and an overview regional report.

## Why audit climate change adaptation and disaster risk reduction strategies?

Pacific Island states have considerable experience in responding to natural disasters such as cyclones and other extreme weather events. Given the expectations that the frequency, intensity or duration of extreme weather events and corresponding natural disasters will increase in the region as a result of the impact of climate change, efforts to build on effective responses to natural disasters makes sense. Valuable lessons can be learned from responses to disasters to inform the development of climate change adaptation measures. A key stakeholder — the PASAI Regional Working Group on Environmental Auditing (RWGEA) — supported this approach as the most beneficial from a regional perspective.

At the 15th PASAI Congress, Auditors-General decided there was value in examining both climate change adaptation and disaster risk reduction strategies as they apply in their jurisdictions.

---

<sup>1</sup> Two SAIs from the Federated States of Micronesia (FSM) — Kosrae and Pohnpei — also participated in the regional audit in addition to the Office of the National Public Auditor.

## Which SAIs participated?

Ten SAIs from eight Pacific Island states participated in the audit: Cook Islands, Federated States of Micronesia (FSM), the FSM State of Kosrae, the FSM State of Pohnpei, Fiji, Palau, Samoa, Tuvalu and two other Pacific Island Countries and Territories (PICTs). In line with the practice of previous regional overview reports, participating SAIs that have not yet released their audit reports are referred to anonymously — in this instance as PICT 1 and PICT 2.

## The audit approach and overarching objective

The approach agreed to by the Congress was slightly different to previous regional cooperative audits. Because different regions of the Pacific have different vulnerabilities to climate change effects and severe weather events, Congress approved an umbrella audit topic enabling individual SAIs to develop audit objectives and lines of enquiry relevant to their specific jurisdiction. The broad audit topic approved was:

**To assess the effectiveness of climate change adaptation and disaster risk reduction strategies, plans and financing in the ... sector of ... (country).**

This approach resulted in audit topics clustering around three main themes: preparedness for climate change effects (three SAIs); planning for and managing climate change effects, such as coastal erosion (three SAIs); and managing climate change effects on food security (four SAIs).

## Support for the audit

The audit was a combined effort involving the INTOSAI Development Initiative (IDI), the Asian Development Bank (ADB) and PASAI. Australia's Victorian Auditor-General's Office (VAGO) provided support to audit teams under the ACAG/PASAI twinning arrangements. The PASAI Regional Working Group on Environmental Auditing (RWGEA) also supported this coordinated audit. The Secretariat of the Pacific Regional Environment Program (SPREP) provided specialist technical expertise on climate change adaptation and disaster risk reduction measures in the Pacific. SPREP also supported audit teams with technical climate change matters over the course of their audits.

## Key findings

Audit findings from the eight published audit reports clustered around the following key performance themes:

- governance arrangements, including legal and policy frameworks, mainstreaming, vulnerability assessments and strategy development, and coordination between responsible agencies
- project implementation, including project-level governance—coordination and project management, financing and human resource capacity constraints
- monitoring and reporting.



The following tables present these consolidated findings.

Table 1: Governance arrangements

KF1	Legal and policy frameworks are fragmented and insufficient to guide adaptation measures, especially at the sectoral level
KF2	Mainstreaming climate change into national and sectoral plans is yet to occur in the Pacific
KF3	Progress with vulnerability/risk assessments to identify climate change risks is slow
KF4	Strategies responsive to vulnerabilities/risks are, in the main, yet to be developed
KF5	There are weaknesses in coordination across government agencies responsible for climate change adaptation policies and actions

Table 2: Project implementation

KF6	Project-level governance — coordination and project management — is weak
KF7	Project management skills need improvement
KF8	Available climate change adaptation financing is poorly coordinated with little assurance that funded projects are achieving intended results
KF9	Human resource capacity constraints are multiple

Table 3: Monitoring and reporting

KF10	Project monitoring arrangements across the jurisdictions audited are underdeveloped
KF11	Identifying and using lessons learnt from demonstration projects is uneven across the jurisdictions where this was audited
KF12	Capacity to monitor outcomes against national climate change policies or strategies is limited in most jurisdictions
KF13	There are limitations in the capacity of Pacific Island states to report progress against climate change adaptation priorities

“Every dollar spent on preparing for disasters saves around seven dollars in economic losses.” (IPCC, 2013)

# Overall audit conclusion

Overall, the regional audit concluded that the Pacific Island states audited as part of the regional coordinated audit are not well placed to respond effectively to the threats and challenges arising from climate change.

Climate change is the major environmental challenge in the Pacific today. Climate change adaptation falls into a difficult policy area, because it involves multiple players — public and private and many levels of government. It also requires both short-term and long-term activities and political will to maintain focus on the issue. As a result, a response mechanism such as a well-developed and evidence-based adaptation strategy is needed to moderate climate change impacts in individual Pacific Island states. Funding is available under the United Nations Framework Convention on Climate Change (UNFCCC) to conduct vulnerability and risks assessments to gain an understanding of key sectoral risks and vulnerabilities (e.g. impacts on food supply, infrastructure, health, water resources, coastal systems and ecosystems etc.). Understanding key sectoral risks and vulnerabilities provides the platform to develop appropriate and coordinated responses. Although there are some examples of risk-based strategies provided in individual SAI reports, the majority of the audited states have not developed comprehensive adaptation strategies that are integrated with sustainable national development goals and plans, and that address key sectoral vulnerabilities.

While a number of the audited countries are working towards integrating climate change and disaster risk management through Joint National Action Plans (JNAPs), progress is uneven.

The national audits also reveal that the necessary cross-sectoral management of climate changes risks through mainstreaming government responses across vulnerable sectors is not yet taking place.



Effects of coastal erosion due to climate change impacts

Program-level governance arrangements to support adaptation programs and projects funded by development partners, including sound management and project monitoring, have not been developed.

The financing of adaptation measures in the Pacific is still vexed. While international funds are available through various global agencies, the individual Pacific Island states audited generally lack the capacity to access and appropriately manage these funds through their national public financial management systems. In this context, it is worthwhile noting that the ADB, in conjunction with Pacific Island leaders, is developing a program of assistance for member countries to access the ever-increasing pool of climate-related financing. The program will assist a number of Pacific Island states to identify capacity gaps and barriers that impede the flow of climate finance and develop appropriate financing strategies to attract and manage these investments.<sup>2</sup> This program should provide a wealth of knowledge that can be transferred to other Pacific Island states assisting them to access and manage climate change financing.

To maximise this opportunity, it is necessary that this measure is integrated with other capacity building projects, especially those seeking to develop skills in climate change adaptation planning and project implementation. The audits identified technical and administrative skills that need to be developed. These include:

- technical and research skills to carry out high quality climate vulnerability and risk assessments and to develop relevant plans and policy responses
- administrative capabilities such as submission writing to secure available adaptation funding
- capacity to soundly project manage on-the-ground funded adaptation measures, monitor results and acquit grants.

Given the magnitude of the capacity constraints, a regionally crafted coordinated response would provide the best opportunity to ensure individual Pacific Island states have the necessary technical and administrative skills to meet current and future climate change challenges in a timely, economical, and sustainable manner.



Coastal vegetation under threat due to climate change impacts



# 1 Introduction to the coordinated audit

*This section sets out the background to the audit topic, the Pacific region SAIs that participated, and the scope of individual audits under the umbrella context of the audit.*

## 1.1 The Pacific Regional Audit Initiative

The Pacific Regional Audit Initiative (PRAI) is a program of support to a number of Pacific Islands Supreme Audit Institutions (SAIs) to improve their capacity to carry out their audit mandates. It was initially funded by the Asian Development Bank (ADB), the World Bank, the Department of Foreign Affairs and Trade (Australia) and the Ministry for Foreign Affairs and Trade (NZ). The overarching objective of the PRAI is, ‘to raise Pacific public auditing to uniformly high standards’. To achieve this objective, one of the outputs of the PRAI is to undertake cooperative audits with participating Supreme Audit Institutions (SAIs) in the Pacific region. The PRAI has merged into the *PASAI Long-Term Strategy 2014–24*.

The capacity of SAIs differs across the region, but all face similar human resource capacity challenges. To address this issue, performance-auditing capacity can be developed through a cooperative approach with individual national reports and an overview regional report.

## 1.2 Cooperative audits

A cooperative audit is an audit conducted more or less simultaneously by two or more autonomous auditing bodies, but with a separate audit team from each body, usually reporting only to its own governing body and only on matters within its own mandate. With this approach, the methodology and audit approach are shared. An additional feature is that a regional overview report is compiled based on the key findings across the individual SAI reports (INTOSAI 2007).

## 1.3 PASAI’s cooperative performance audit for climate change adaptation and disaster risk management and strategies

In October 2012, Auditors-General from the Pacific Association of Supreme Audit Institutions (PASAI) decided at the 15th PASAI Congress to approve PASAI’s fourth cooperative performance audit. It was decided that the topic would be climate change adaptation and disaster risk reduction strategies and management. Ten SAIs drawn from eight Pacific Island states participated in the audit: Cook Islands, Federated States of Micronesia (FSM), the FSM State of Kosrae, the FSM State of Pohnpei, Fiji, Palau, Samoa, PICT 1, PICT 2 and Tuvalu. In line with the practice of previous regional overview reports, participating SAIs that have not yet released their audit reports are referred to anonymously — in this instance as PICT 1 and PICT 2.

Figure 1 illustrates where the participating SAIs are located in the region.

The approach for this cooperative audit was slightly different to previous cooperative audits undertaken by PASAI. Congress approved an umbrella topic for the audit:

**To assess the effectiveness of climate change adaptation and disaster risk reduction strategies, plans and financing in the ... sector of ...(country).**



Figure 1: Pacific Island states involved in the audit and reports released

However, because different regions of the Pacific have different vulnerabilities to climate change effects and severe weather events such as typhoons and cyclones, the approach to this cooperative audit allowed SAIs to develop audit objectives and lines of enquiry relevant to their specific jurisdictions.

The audit was undertaken between March and October 2013.

#### 1.4 The scope of individual SAI audits

While the cooperative audit allowed SAIs to develop audit objectives and lines of enquiry relevant to their specific jurisdictions, it is interesting to note that the 10 individual audits were clustered around three key themes:

- **preparedness** — Fiji, Palau and Samoa
- **planning for and managing climate change risks**, such as coastal erosion — Cook Islands, the FSM state of Kosrae and Tuvalu
- **managing climate change effects on food security** — the SAIs of Federated States of Micronesia (National Office), the FSM State of Pohnpei, PICT 1 and PICT 2.

Table 4 identifies the specific audit objective and focus of each participating SAI.

Table 4: SAI audit objective and scope

SAI	Audit objective	Audit focus
<b>Cook Islands</b>	Effectiveness of Pacific Adaptation on Climate Change (PACC) in enhancing government's adaptive capacity to climate change.	Integrating climate change measures into coastal management
<b>Fiji</b>	To assess the effectiveness of the actions taken by key agencies in implementing flood risk reduction strategies by examining: <ol style="list-style-type: none"> <li>1. the institutional arrangements for the implementation of flood risk reduction strategies</li> <li>2. implementation of flood risk reduction strategies</li> <li>3. monitoring and progress reporting arrangements.</li> </ol>	Implementation of strategies to prepare for increased incidence of flooding in Fiji and its impact on communities
<b>FSM National</b>	To determine whether the concerned government entities have developed and implemented strategic action plan to address the impacts of climate change on food security in the FSM.	The impact of climate change on food security in FSM.
<b>FSM — Kosrae</b>	To assess Kosrae State's readiness for effects of climate change and disaster.	Whether there is a plan to mitigate climate change impact and disaster threats and the extent to which all parties are in compliance with the plan.
<b>FSM — Pohnpei</b>	To determine whether Pohnpei State is effectively managing and implementing strategies and plans to address the intrusion of salt water and its effect on the crops of the southern outer islands of Sapwuahfik, Nukuoro and Kapingamarangi.	Assessment of Pohnpei State Government's overall effectiveness in managing and responding to the impacts of climate change from Fiscal Years 2008 to 2012.
<b>Palau</b>	To assess whether the Office of the Environmental Response and Coordination is performing its functions regarding climate change adaptation effectively, efficiently, and economically.	Focus on effectiveness of Office of the Environmental Response and Coordination's institutional arrangements and ability to respond to the future impacts of the climate change specifically on coastal erosion in the Republic of Palau.
<b>Samoa</b>	To assess the effectiveness of the management of climate change adaptation and disaster risk reduction programs and activities by the Ministry of Natural Resources and Environment.	Co-ordination, administration and reporting.
<b>PICT 1</b>	To assess the effectiveness of implementing climate change adaptation strategies, plans and financing to address the impact of climate change on the root crops of PICT 1 in the context of food security.	PACC projects are properly implemented. That community awareness was carried out among the three selected pilot sites for PACC demonstration activities.
<b>PICT 2</b>	To assess the effectiveness of climate change adaptation measures taken by the Ministry of Agriculture, Food, Forestry, and Fisheries and the Ministry of Land, Environment, Climate Change and Natural Resources on food security.	To verify existing policies regarding climate change adaptation measures on food security, key agencies responsible, effectiveness of actions implemented, as well as monitoring arrangements.
<b>Tuvalu</b>	To assess the effectiveness, efficiency, and economic of plans, policies and projects to protect Tuvalu's coast from sea-level rise and storm surge.	Coastal protection management.

Individual SAIs carried out analyses of climate change adaptation and disaster risk reduction actions within the scope of their audit mandates and to internationally agreed auditing standards. They investigated whether roles and responsibilities were clearly defined, and whether the coordination of climate change adaptation and disaster risk reduction efforts were managed effectively. These issues were examined in the audits at several levels: in legislation, strategies, plans and programs, as well as implementation and monitoring arrangements by the responsible government agencies.

## 1.5 Scope of this regional report

This regional report is a qualitative synthesis of the findings identified in the individual audits and highlights good practices, weaknesses and challenges. It pulls together a number of issues that cut across all the individual audits, including:

- the robustness of the enabling environment — governance, partnerships and cooperation
- project implementation with a focus on financing arrangements and human resource capacity constraints at the country level
- monitoring and learning lessons from on-the-ground adaptation measures.

As a qualitative study, the results cannot be generalised across the Pacific region. However, the findings should prove useful for other Pacific countries that are not a part of this analysis and for development partners in the field of climate change adaptation and disaster risk reduction.

## 1.6 Support for the cooperative audit

The audit involved the INTOSAI Development Initiative (IDI), the Asian Development Bank (ADB) and PASAI. Australia's Victorian Auditor-General's Office also supported audit teams under the ACAG/PASAI twinning arrangements. The PASAI Regional Working Group on Environmental Auditing (RWGEA) was also involved. The Secretariat of the Pacific Regional Environment Program (SPREP), a key regional stakeholder, provided specialist technical expertise on climate change adaptation and disaster risk reduction measures in the Pacific. SPREP also supported audit teams on technical climate change matters over the course of their audit.



**Mainstreaming climate change considerations into infrastructure design will help to minimise funding costly repairs if damages occur from extreme weather events**

## 2 Climate change in the Pacific

### 2.1 Impact of climate change

Climate change has the potential to adversely affect the environment, including biodiversity and ecosystems, impact societies and citizens, and damage economies. More specifically, the Intergovernmental Panel on Climate Change (IPCC) in its 2013 *Assessment Report* concluded that the warming of the climate system is unequivocal and can be observed from:

- an increase in average air and ocean temperatures
- an increase in the average global sea level
- widespread melting of ice and snow
- changes in weather, such as wind patterns, the amount and type of precipitation, and frequency and intensity of severe weather events.

Extreme or severe weather events, such as storms, floods, droughts and heat waves have a major impact on society and contribute to economic losses. Recent estimates from the IPCC indicate that some of these extreme weather events may occur with a higher frequency or with an increased intensity. “Settlements and societies that live in areas prone to climate change and that are dependent on scarce resources are particularly vulnerable to these impacts.” (IPCC, 2013)

While mitigation strategies to reduce greenhouse gas emissions and limit the associated increase in temperature are appropriately the focus of developed economies, effective adaptation policies are crucial to reduce current and future negative impacts of climate change for developed and, more importantly, developing economies. As the consequences of climate change are expected to vary considerably across different regions, effective adaptation measures need to be tailored to local and regional needs and to specific challenges. They also need to build on the experiences of effective response to natural disasters, such as cyclones and other extreme weather events. It is expected that sectors such as energy, forestry, agriculture and tourism will be highly affected by climate change. Furthermore, climate change will have major impacts on crucial infrastructure such as transport and water supply, as well as having consequences for vulnerable social groups.

### 2.2 The Pacific context

The adverse effects of climate change present significant risks to the sustainable development goals of Pacific Island states and long-term effects may threaten the very existence of some of these states, especially low-lying coral atolls.

The vulnerability of Pacific Island states is primarily influenced by the high sensitivity of the Pacific’s natural, economic and social systems to the anticipated impacts of climate change, and the generally low capacity of all of these systems to adapt (PIFACC, 2006–2015).

A recent IPCC report noted that, “...for countries with a high sensitivity (meaning a small change in climate can have a large impact) or a low capacity to adapt to climate change, the net costs will be significantly larger than the global average” (IPCC, 2013).

Studies have shown that effective adaptation is economically, socially and environmentally sustainable, and is likely to be far less costly than inaction. As the United Nations Development Program noted, “Every dollar spent on preparing for disasters saves around seven dollars in economic losses” (UNDP 2012).



## 2.3 Climate change adaptation

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change adaptation as, "...adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects that moderate harm and exploit beneficial opportunities. This can include: (a) adapting development to gradual changes in average temperature, sea level and precipitation; and (b) reducing and managing the risks associated with more frequent, severe and unpredictable extreme weather events" (UN Office for Disaster Risk Reduction, 2010).

Adaptation activities span five components: observation; assessment of climate impacts and vulnerability; planning; implementation; and monitoring and evaluation of adaptation actions. Adapting to the adverse effects of climate change is essential to reduce the impacts of climate change that are happening now and to increase resilience to future impacts.

## 2.4 Disaster risk reduction

The emergence of more extreme weather events in the Pacific highlights the importance of learning lessons from existing responses to natural disasters. Disaster risk reduction is the concept and practice of reducing disaster risks through analysing and managing causal factors. It reduces exposure to hazards, lessens the vulnerability of people and assets, improves management of the land and environment, and supports preparedness for adverse events (UN Office for Disaster Risk Reduction, 2009). In the Pacific, disaster risk reduction is considered to be one of two components that make up disaster risk management, the other being disaster management and recovery.

## 2.5 Integrating climate change adaptation and disaster risk reduction into a single approach

While historically there has been a two-track approach at the global level to the issues of climate change and disaster risk reduction, policy makers are increasingly promoting the need for an integrated approach. Integration provides opportunities for coherence in policy, funding and institutional arrangements at regional, national and local levels. Integrated planning frameworks support the development of a coordinated and harmonised approach responsive to on-the-ground challenges.

As experience with both climate change adaptation and disaster risk reduction grows, there is increasing recognition that these two fields share a common focus: reducing the vulnerability of communities and contributing to sustainable development. In light of this, many governments of Pacific Island states have started taking action to integrate climate change adaptation and disaster risk reduction into their national policies, plans and activities. This is in recognition of the fact that in the short to medium term, many impacts of climate change may manifest themselves through change in the frequency, intensity or duration of extreme weather events and corresponding natural disasters.

**A recent IPCC report noted that, "for countries with a high sensitivity (meaning a small change in climate can have a large impact) or a low capacity to adapt to climate change, the net costs will be significantly larger than the global average."**

## Joint National Action Plans

Commonalities between climate change adaptation and disaster risk reduction are being exploited through a more considered and comprehensive planning approach. Climate change adaptation (CCA) and disaster risk management (DRM) communities have increasingly started to work together in the Pacific, to produce what are known as Joint National Action Plans. A Joint National Action Plan brings together the CCA and DRM sectors, to address risks to key development sectors in a coordinated fashion.

To avoid duplication of efforts, and ensure a more efficient use of already scarce resources, the climate change and disaster management communities in many Pacific countries have worked together to create coordinated national strategies, which deal with these key issues and sectors jointly.

The Cook Islands has a well developed Joint National Action Plan and the Pacific Island states of FSM, Fiji, Samoa and Tuvalu were in the process of developing a Joint National Action Plan during the course of the audit.

## 2.6 International and regional frameworks

It is important to note that the programs and policies that were assessed as part of the individual audits do not operate in isolation. The programs and policies sit within a larger international and regional framework. Table 5 sets out the various international and regional frameworks and agreements for climate change action and disaster risk reduction activities.

Current regional frameworks are reflective of international arrangements for a separation between climate change adaptation and disaster risk reduction strategies. Separation of the financing and implementation of climate change adaptation and disaster risk reduction has its origins at the international level.



**Where climate change policies are in place at an aggregate level, little attention was given to 'climate proofing' vulnerable sectors, such as food reliability and security.**

Table 5: International and regional frameworks

<b>International frameworks</b>	
<b>Climate change</b>	
United Nations Framework Convention of Climate Change (UNFCCC)	<p>Climate change issues are addressed globally through the United Nations Framework Convention on Climate Change (UNFCCC). This global framework commits countries to implement programs to mitigate greenhouse gas emissions, and to prepare for and facilitate adaptation to climate change. All Pacific Island states are parties to the UNFCCC.</p> <p>Furthermore, the framework also sets obligations related to developing and transferring technologies, scientific research and funding relevant to climate change issues. This is especially important for developing countries (including those participating in this audit) as they require international assistance to support appropriate adaptation measures.</p>
<b>Disaster risk reduction</b>	
The Hyogo Framework for Action (HFA) 2005–2015: the United Nations Office for Disaster Risk Reduction (UN Office for Disaster Risk Reduction)	The Hyogo Framework 2005–15, endorsed by the UN General Assembly, is a ten-year plan to make the world safer from natural hazards. The HFA outlines five priorities for action, and offers guiding principles and practical means for achieving disaster resilience. Its goal is to substantially reduce disaster losses by 2015 by building the resilience of nations and communities to disasters.
<b>Integrating climate change adaptation and disaster risk reduction</b>	
UN Framework Convention on Climate Change in Bali (2007)	The 2007 Bali Action Plan called for enhanced action to consider risk management and risk reduction strategies as a means to address losses and damages from the impacts of climate change.
Cancun Adaptation Framework (2010)	The Cancun Adaptation Framework (2010) invited parties to enhance adaptation by strengthening their disaster risk reduction strategies.
<b>Regional frameworks</b>	
The Pacific Islands Framework for Action on Climate Change 2006–2015 (PIFACC)	Pacific leaders at the 36th Pacific Islands Forum in 2005 endorsed the Pacific Islands Framework for Action on Climate Change with a time frame of action from 2006–2015. In 2005, a Pacific Islands Climate Change Roundtable meeting was convened to review the framework. One outcome of the review was the development of an action plan for the implementation of the framework.
<b>Regional frameworks</b>	
PCCR	In 2008, the Secretariat for Pacific Regional Environment Program was asked to convene regular meetings of the PCCR.
Development Partners for Climate Change	The Development Partners for Climate Change (DPCC), consisting of bilateral and multilateral donor agencies and related agencies located in Suva, also meet regularly to facilitate coordination of activities in the Pacific related to climate change.
Pacific Islands Disaster Risk Reduction and Disaster Management Framework for Action 2005–2015 (Madang Framework)	The Madang Framework reflects the increased national and regional commitment to an ‘all hazards’ approach to disaster risk reduction and disaster management and recovery to support sustainable development. Guided by this framework, the Secretariat for the Pacific Community’s (SPC) Applied Geoscience and Technology Division (SPC/SOPAC) provides technical and policy advice and support to strengthen disaster risk management practices in Pacific Island states. SPC/SOPAC also facilitates the Pacific DRM Partnership Network, which is a partnership of regional and international organisations with an interest in supporting the implementation of the Madang Framework. The Pacific Platform for DRM is the main gathering for the DRM community in the Pacific, comprising representatives from national, regional, international and civil society organisations, the private sector and academia. The platform is co-convened by SPC/SOPAC and the UN Office for Disaster Risk Reduction, in collaboration with members of the Pacific DRM Partnership Network.



The adverse effects of climate change present significant risks to the sustainable development goals of Pacific Island states and long-term effects may threaten the very existence of some of these states, especially low-lying coral atolls.



## 2.7 Climate change adaptation financing in Pacific Island states

Financing climate change adaptation is a vital additional component of traditional development assistance to support developing countries to respond effectively to the impacts of climate change: flooding, coastal erosion, crop damage, increased variability of precipitation and water availability.

The UNFCCC commits developed countries to assist vulnerable developing countries and, in particular, small island states to adapt to climate change. Several international funds and mechanisms are available for this purpose, including the Adaptation Fund under the Kyoto Protocol and the Least Developed Countries Fund and the Special Climate Fund under the Convention. The Global Environment Facility (GEF) manages the latter two funds.

The UNFCCC estimates that additional flows of between \$60–\$182 billion per year is needed globally for adaptation by 2030, and of this around \$28–\$67 billion per annum will be needed in developing countries alone. Estimates for 2011 available funds for adaptation purposes suggest that just under \$1 billion was available globally. The UNFCCC has set itself a goal of raising \$100 billion per year by 2020. The Green Climate Fund is intended to be the centrepiece of this long-term financing strategy.

### 2.7.1 Financing methods

There are a plethora of climate change mitigation and adaptation financing arrangements in place including bilateral arrangements, multi-lateral arrangements and a combination of both (co-financing).

**Bilateral** financing occurs where the money (or support) for projects is provided directly from donor countries to fund specific mutually agreed activities. The traditional ‘donor–recipient’ country model is currently the way that most money for climate change projects is channelled into developing countries. However, a growing proportion of funding is being channelled through **multilateral** funding institutions, especially through the World Bank’s Climate Investment Funds (CIFs) and other mechanisms such as the Global Environment Facility (GEF). Boards, which comprise both developed and developing countries, govern these institutions. The boards have responsibility to sign off and approve all projects under the particular mechanism.

Multilateral and bilateral funders often play a complementary role. An entity such as the GEF will rarely fund 100% of a project itself, but will require a contribution from, for example, a bilateral aid agency towards the project. This is termed **co-financing**.

### 2.7.2 What does financing look like in the Pacific?

In 2009, SPREP commissioned a report *Assessment of Implementation of Pacific Islands Framework for Action on Climate Change (PIFACC)*. The report noted that all Pacific Island states had considerable difficulty providing details of the climate change projects currently being implemented, as well as those undertaken over the last ten years.

Nevertheless, information provided by countries and other sources was merged into a single database for the period 1991 through to 2009. While acknowledging that there are significant gaps in the data, this database was used to assess the implementation of the *Pacific Islands Framework for Action on Climate Change* (PIFACC). Table 6 provides an overview of funded projects (1991–2009) by the jurisdictions involved in this regional coordinated audit. It also identifies multilateral projects and funding for the region as a whole.



Table 6: Climate change adaptation projects (1991–2009) funded in audited jurisdictions

Country	Number of projects	Total value of projects (million USD)	Number of projects not valued
Cook Islands	11	39.2	2
Fiji	46	122.2	7
FSM <sup>1</sup>	8	8.5	5
Palau	12	11.2	5
Samoa	39	109.0	10
Tuvalu	11	6.4	4
Multi-country <sup>2</sup>	66	171.9	23
Region	170	324.5	23

**Source:** Prepared by John Hay for SPREP, October 2009, *Assessment of Implementation of Pacific Islands Framework for Action on Climate Change (PIFACC)*, p. 7.

- Notes:**
1. This figure represents the aggregate number of projects for FSM including the states of Pohnpei and Kosrae whose audit offices participated in this regional audit.
  2. The SPREP report did not provide information on which countries were involved in the multi-country projects. Therefore, there may be an underreporting of project activity in the countries in Table 6.

### 2.7.3 The Pacific Adaptation to Climate Change project

PACC projects, funded by the Global Environment Facility and the Australian Government, are one of the principal sources of climate change adaptation financing in the Pacific. These projects were projected to run from 2009 to 2013; however, some projects are still in final stages of completion.

PACC projects<sup>3</sup> are in place in the eight audited countries and their performance was reviewed in the audit process by the Cook Islands and the FSM State of Kosrae. In other audits, differently funded projects were reviewed, such as the Integrated Water Management Resources Project in Fiji and a coastal management National Adaptation Program of Action project in Tuvalu.

### 2.7.4 Challenges for Pacific Island states access to climate change financing

Pacific Island Forum Economic Ministers Meeting (FEMM) noted in its 2011 draft paper *Improving access to and management of Climate Change Resources* that the global funding structure and architecture is messy, complex and requires specialist knowledge and capacity to access.<sup>4</sup> Furthermore, while funding channels for climate change are proliferating, there are increased signs of fragmentation and evidence that administrative and institutional requirements burden recipient countries unnecessarily. Providing external financing for any development activity is complicated; however, it appears that climate change financing is more complicated than most.

Global Environment Facility (GEF) is one of the largest funds available to least developed countries under the UNFCCC. Pacific Island states access to the notional allocation of funds provided by the GEF indicated that in the mid 2000s, the rate of underutilisation by the audited jurisdictions ranged from 100 per cent (FSM) to 51.6 per cent (Cook Islands and Samoa).<sup>5</sup>

3 PACC projects aim to develop three key areas that build resilience to climate change: Fiji, Palau, Papua New Guinea and the Solomon Islands focus on Food Production and Food Security; developing coastal management capacity on the Cook Islands, Federated States of Micronesia, and Samoa; and strengthening water resource management in Tuvalu.

4 FEMM, 2011, *Managing Climate Change Resources*, (draft), page 9.

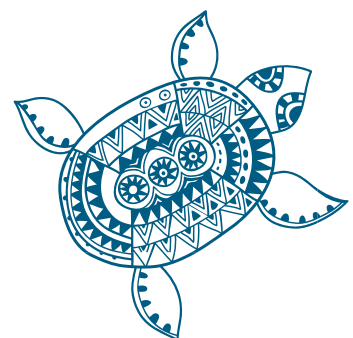
5 [http://www.thegef.org/gef/country\\_profile/](http://www.thegef.org/gef/country_profile/)

### 2.7.5 Pacific Plan Annual Progress Report 2012

The *Pacific Plan Annual Progress Report 2012* noted that considerable effort was going into developing policies and planning processes that support climate change adaptation, as well as implementing adaptation projects on the ground. The report also noted that some of the necessary expansion work required to address identified climate change vulnerabilities and risks could potentially be undertaken with the help of new climate financing emerging from recent UNFCCC negotiations. However, although these financing developments provide a great opportunity, they also create new demands for capacity to fully access and manage funds, and to ensure they translate into tangible results. Complementing work in the area of expanded climate financing, other capacity building initiatives are also being supported, including through direct technical assistance, supplementary staff appointments, workshops, basic technical training, advanced tertiary training (including new courses on offer at the University of the South Pacific), scholarships, and support in data collation and analysis. To maximise this opportunity, it will be important to strengthen links between these capacity building projects and encourage more integrated approaches to building skills across affected sectors.<sup>6</sup>



Food security will remain an issue in some Pacific states unless funding is linked to vulnerability assessments and identified needs.



<sup>6</sup> *Pacific Plan Annual Progress Report, 2012, p.14.*

# 3 Key Findings

*This section presents the key findings across the three thematic areas of: governance, project implementation, and monitoring and reporting.*

The key findings of the regional cooperative audit are presented across the eight coordinated audits and in the clustered areas of mutual interest for the participating SAIs:

- **governance arrangements** including legal and policy frameworks, mainstreaming, vulnerability assessments and strategy development, and coordination between responsible agencies (Key Findings 1–5)
- **project implementation** including project-level governance — coordination and project management, financing and human resource capacity constraints (Key Findings 6-9)
- **monitoring and reporting** (Key Findings 10–13).

The findings are illustrated with case studies from the individual SAI audits. Individual audit conclusions and recommendations are presented in section 4 of this report.

## 3.1 Governance arrangements

A range of legal and policy instruments at the individual jurisdictional level support implementation of climate change adaptation policies and plans. Given the particular nature of adaptation, the main purpose of these instruments is to provide a country framework to guide the effective implementation of adaptation actions and to measure the performance of systems and processes. In most instances, a similar set of legal and policy instruments are in place to guide disaster risk reduction activities.

### 3.1.1 KF1 Legal and policy frameworks are fragmented and insufficient to guide climate change adaptation measures, especially at the sectoral level

The majority of Pacific Island states that were part of this regional audit have not progressed in terms of developing appropriate legal and policy frameworks to take account of existing or future climate change and related adaptation needs.

However, in a number of audited jurisdictions, such as Samoa, legal frameworks are in place to manage disaster risks and recovery. This highlights a more mature approach to managing natural disasters in the Pacific. However, it is imperative that Pacific Island states respond to the challenges of more extreme weather events resulting from the impact of climate change and develop appropriate institutional instruments to guide their adaptation actions.

#### Case Study 1

The audit conducted by the SAI of Samoa noted that climate change adaptation and disaster risk reduction activities are managed separately. However, the policies and plans that are in place share a common focus to reduce the vulnerability of communities and contribute to sustainable development. The audit also suggested there is a need to integrate the two sets of activities.

### *Potential for Joint National Action Plans of Actions*

The development of a Joint National Plan of Action (JNAP) for Pacific Island states is potentially a way forward as it could combine policy and financial frameworks to manage disasters and put appropriate adaptation measures in place to minimise climate change impacts. A number of Pacific Island states were pursuing this integration objective while the audits were in progress.

#### **Case Study 2**

The audit undertaken in Fiji, which assessed the country's approach to managing the risk of severe floods found that a JNAP called the Joint Platform for Climate Change and Disaster Risk Management was in draft stage awaiting endorsement by Cabinet.

### *Vulnerable sectors*

A number of the audits assessed the impact of climate change on sectors that are highly exposed to climate change risks, such as coastal management and food security. In most instances it was found that where climate change policies were in place at an aggregate level, little attention was given to 'climate proofing' vulnerable sectors and that high-level approaches such as JNAPs need to be operationalised at a sectoral level.

#### **Case Study 3**

The audit undertaken in the Cook Islands assessed the country's capacity to manage the impact of climate change on the coastal sector. Although the Cook Islands has a JNAP in place, the audit found that high-level arrangements such as a JNAP did not provide sufficient guidance at a practical or operational level for the agencies involved in managing the coastal sector.

The Tuvalu audit findings were similar. Without the benefit of a designated coastal protection policy, agencies were reliant on high-level legislation as a guide for any coastal protection project that was approved and funded.

### 3.1.2 KF2 Mainstreaming climate change into national and sectoral plans is yet to occur in the Pacific

#### *Mainstreaming*

While the development of a JNAP is a good starting point, further work needs to be done to embed the mainstreaming of climate change adaptation and disaster risk reduction vulnerabilities and risks into national development plans, sector and agency plans, and sub-national plans in an integrated and comprehensive way. Ideally, this mainstreaming should be extended to the community level.

#### **Case Study 4**

The Palau audit that assessed the overall country approach to responding to climate change found that the Climate Change Office had no policies or procedures in place to guide interaction between government agencies about climate change responses and activities. This is, in part, due to the lack of a clear and practical methodology on how to mainstream climate change policies and plans that government agencies in Palau can adopt and utilise.

Mainstreaming climate change adaptation and disaster risk reduction vulnerabilities and risks is currently not taking place across the Pacific Island states audited. To date, the approach to mainstreaming lacks consistency across the various planning levels of government.

### 3.1.3 KF 3 Progress with vulnerability and risk assessments to identify climate change risks is slow

#### *Vulnerability and risk assessments*

Key vulnerabilities or risks are associated with many climate-sensitive sectors including food supply, infrastructure, health, water resources, coastal systems and ecosystems.

A government's ability to develop policies and actions on adapting to climate change depends on a sound understanding of the various effects of climate change on particular sectors and regions. This understanding is provided through vulnerability assessments. A number of the Pacific region audits have focused on identified sectors that are vulnerable to climate change. However, progress on vulnerability assessments and corresponding strategies to support adaptation measures is patchy across the region.

A vulnerability<sup>7</sup> assessment is an analysis of the expected impacts, risks and adaptive capacity of a region or sector to the impact of climate change. A vulnerability assessment is more than a simple measurement of the potential harm caused by events resulting from climate change; a vulnerability assessment includes an assessment of a region's or sector's adaptive capacity, that is, the ability to identify, plan for, and treat climate change vulnerabilities.

#### **Case Study 5**

The focus of the audit by the National Audit Office of the Federated States of Micronesia (FSM) was food security. The audit found that in the absence of a comprehensive, national food security plan based on a vulnerability assessment, projects were being funded that were not linked to an identified need.

At the FSM state level of Pohnpei, the audit conducted by the Audit Office of Pohnpei found that no vulnerability assessment had been conducted to inform a statewide approach to managing climate change impacts on food security.



Crops are likely to be affected by climate change impacts

<sup>7</sup> Within the context of climate change, the IPCC defines vulnerability to climate change as the degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes.



### 3.1.4 KF 4 Strategies responsive to vulnerabilities and risks are, in the main, yet to be developed

#### *Potential of adaptation strategies*

Climate change adaptation falls into a difficult policy area, because it involves multiple players — public and private and many levels of government. It also requires both short-term and long-term activities and requires political will to maintain focus on the issue. An adaptation strategy is considered a good starting point for adaptation actions (INTOSAI WGEA, 2010).

INTOSAI WGEA cites the following characteristics of an effective adaptation strategy:

- identifies objectives for adaptation measures
- is a political commitment by the government
- has a long-term perspective
- prioritises among the vulnerabilities and risks identified
- assigns responsibilities.

Adaptation strategies are developed and adopted by governments. Typically, an adaptation strategy results in an adaptation plan that provides for implementation, identifies timeframes and allocates resources. However, a plan to implement an adaptation strategy is often developed and adopted by the government agency assigned the management responsibility. It is good practice for the plan to indicate which agencies are involved in implementing the strategy, to detail shared responsibilities, and to include performance measures to monitor implementation effectiveness.

A number of the individual audits commented on the negative effects of the absence of a strategy on approved climate change projects and programs.

#### **Case Study 6**

The focus of the Tuvalu audit was on coastal protection management. The audit found there was no coastal protection strategy in place and, as a result, the agency responsible for the National Adaptation Program of Action projects relied on a range of high-level guidance measures, including environmental legislation and the Tuvalu National Strategic Action Plan to manage the coastal protection projects approved and funded under the National Adaptation Program of Action. The lack of an overarching strategy has contributed to delays in implementation.

The Tuvalu audit also noted that coastal erosion was listed as the top priority in the National Adaptation Program of Action. The audit was unable to confirm whether a cost–benefit analysis has been carried out to prioritise adaptation measures under National Adaptation Program of Action guidelines. As a result, the audit concluded adaptation measures may have been incorrectly prioritised.

### 3.1.5 KF5 There are weaknesses in coordination across government agencies responsible for climate change adaptation policies and actions

#### *Coordination mechanisms*

An efficient and effective governance system is essential for complex and cross-sectoral policy areas, such as climate change adaptation. Climate change adaptation, its policies, and the numerous stakeholders involved at various governmental levels must be coordinated to obtain maximum benefit from available funds. Governmental leadership, coordination and clear roles and responsibilities are essential to successfully implement adaptation policies.

Lack of coordination increases the risk of inefficient policy implementation and a lack of synergy between on-the-ground actions, as well as increasing the risk of unexpected or contradictory results of adaptation actions and measures.

There are a number of ways to coordinate adaptation policies effectively within or across sectors. One effective mechanism is the creation of a national body or team comprising representatives of key agency stakeholders that is responsible for coordinating planned actions across sectors.

In most countries, the coordination of adaptation policies and plans is undertaken formally through high-level coordinating bodies appointed nationally, and through communication systems for government bodies. However, the extent and quality of coordination varied significantly among the audited countries. Most SAIs reported that the coordination of adaptation policies and plans has weaknesses, and that there is clear room for improvement.

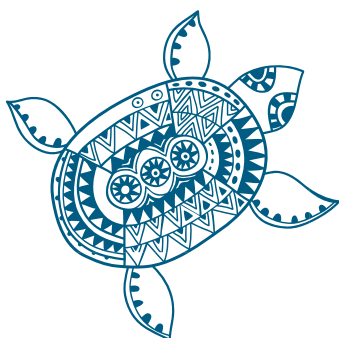
#### **Case Study 7**

The SAI of Samoa reported that while a National Climate Change coordination mechanism was in place, it was inactive.

The SAI of Palau reported that there was no high-level climate change committee to coordinate responses across government.

The SAI of FSM reported a lack of coordination between federal and state governments, which resulted in duplication of effort to address food security-related climate change risks.

The FSM SAI of the State of Pohnpei reported that coordination to manage risks associated with climate change was not well developed at the state level. It was not clear which agency was responsible for coordinating responses across government.



## 3.2 Project implementation — project-level governance, coordination and project management

It is usual for Pacific Island states to assign the responsibility for adaptation measures for climate change to key national ministries or departments. At an operational level, adaptation plans and actions are generally linked to the sector with responsibility at various governmental levels. This can result in the involvement of many stakeholders at the operational level, potentially blurring the accountability chain. Therefore, it is important that accountability and transparency arrangements are embedded into local-level project management. This means sound project-level governance and dedicated, qualified human resources for project management are essential.

A further complicating factor in the Pacific is the number of funding agencies involved in implementing climate change adaptation projects. This increases the need for robust systems and processes to be in place at all levels of government, including at the level of individual project implementation.

### 3.2.1 The Pacific Adaptation to Climate Change project

PACC projects, funded by the Global Environment Facility and the Australian Government, are one of the principal sources of climate change adaptation financing in the Pacific. These projects were projected to run from 2009 to 2013; however, some projects are still in final stages of completion.

PACC projects<sup>8</sup> are in place in the eight audited countries and in some instances their performance was reviewed in the audit process by the Cook Islands and the FSM state of Kosrae. In other audits, differently funded projects were reviewed, such as the Integrated Water Management Resources Project in Fiji and a coastal management National Adaptation Program of Action project in Tuvalu.

### 3.2.2 KF 6 Project-level governance — coordination and project management — is weak

Project-level governance, particularly project implementation, was of major concern in the audits. The absence of governance arrangements resulted in a lack of synergy between the operational level and the policy and strategy level and constrained the ability to track project progress. Coordination issues at the operational level were also highlighted in a number of audits.

**A further complicating factor in the Pacific is the number of funding agencies involved in implementing climate change adaptation projects. This increases the need for robust systems and processes to be in place at all levels of government, including at the level of individual project implementation.**

8 PACC projects aim to develop three key areas that build resilience to climate change impacts: Fiji, Palau, Papua New Guinea and the Solomon Islands focus on Food Production and Food Security; Cook Islands, Federated States of Micronesia, Samoa, are developing Coastal Management capacity; and Tuvalu is looking to strengthen its water resource management.

### Case Study 8

The Fiji audit found that relevant oversight committees for climate change adaptation initiatives under the Ministry for Provincial Development needed to be re-activated to support funded projects.

In the FSM state of Kosrae the audit found that it was necessary for Pacific Adaptation to Climate Change (PACC) project managers to take on coordination roles as no government agency or office was assigned this function.

A positive finding from the audit in Samoa was that individual project steering committees were in place and active, despite the fact that the higher level National Coordination Team was inactive (see case study 7).

### 3.2.3 KF 7 Project management skills need improvement

Project management involves planning, organising (including managing the inputs of contractors), and controlling resources. Project management is typically undertaken by developing and documenting a set of specific procedures and protocols to achieve project goals. This resulting documentation, including agreements or memorandums of understanding between project partners, is filed and reported against by an oversight committee with coordination responsibility. Poor project management impacted on project implementation in a number of audits.

### Case Study 9

The audit conducted in the FSM state of Kosrae found that the failure to have proper project documentation in place for the PACC project meant the reliability or accuracy of project reports against targets could not be assured.

The Tuvalu audit reported that project management procedures and practices needed review to ensure that project targets were achieved on time and within budget.

### 3.2.4 KF 8 Available climate change adaptation financing is poorly coordinated with little assurance that funded projects are achieving intended results

#### *Project financing*

Climate change adaptation funds are flowing to the Pacific region under internationally agreed protocols. However, the ADB, a key Pacific stakeholder notes that little positive change can be identified.<sup>9</sup> In addition, the Pacific Islands Forum Secretariat (PIFS) highlights the complexity of collating information and outcomes from the various multilateral and bilateral funding sources, estimating that there may be over 40 funds operating in the Pacific, each with its own different funding criteria and reporting requirements.<sup>10</sup> Not all of these funds are channeled through central line ministries, e.g. finance and planning, and, as a result there is little opportunity for these central agencies to be fully engaged in managing these additional resources.

9 Asian Development Bank, Pacific Economic Monitor, December 2013, p. 30.

10 Email correspondence, 14 April 2013.

Typically, climate change adaptation has been the responsibility of Environment Ministries or departments. However, as discussed under the Mainstreaming section (see KF 2), climate change responses necessarily cut across most areas of government activity, including coastal management, infrastructure, energy, health and water resource management. This cross-sectoral responsibility suggests that proper financial controls and centralised, coordinated management needs to be in place to ensure:

- all donor funds are accounted for
- timely financial reports are produced
- project monitoring against planned targets occurs.

An assessment of the management of project financing was a high priority in the audits. The results provide valuable insight into the paucity of financial management arrangements.

#### **Case Study 10**

The Cook Islands audit reported that their JNAP funding was not reflected in the government's budget framework, resulting in reduced transparency around the allocation of government funding to the plan.

The Fiji audit found that the Government of Fiji was unable to track all funds received for climate change purposes as some funding is directed from donor organisations to implementing agencies or directly to communities. As a result, information on funds received for climate change-related activities is not fully captured in Fiji's national financial systems.

This finding was echoed in the FSM report with the added insight that the lack of coordination between the federal and state governments meant that states could be directly negotiating and implementing climate change adaptation measures with no reference to the federal financial management framework. This increases the potential risk of duplication of climate change actions.

Coordinating climate change adaptation funding within Pacific Island states own national systems is essential to build sustainable resilience to the impacts of climate change. Work to achieve this is being progressed through the Pacific Plan and in conjunction with regional partners such as the Asian Development Bank.



**Climate change adaptation measures must be properly integrated into the designs of future coastal infrastructure projects**



### 3.2.5 KF 9 Human resource capacity constraints are multiple

Project management skills, submission writing and project reporting are capacities that are lacking in a number of Pacific Island agencies that have responsibility for climate change adaptation programs and projects. The application process to access global funds is complex and time consuming. Equitable access to funding pools is reduced by the lack of skilled resources to write funding submissions of the required quality. Project implementation is also impacted by lack of skilled resources.

The absence of research and scientific skills within responsible line agencies was also identified as a key constraint to effective project management. It also reduces the capacity of Pacific Island states to develop and use relevant climate information to inform the development of climate vulnerability and risk assessments required to underpin sound policy responses and plans. (See KF2)

#### **Case Study 11**

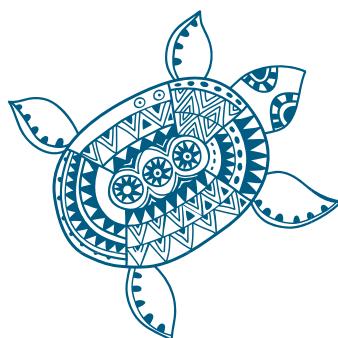
The Palau audit reported that key positions such as the climate change coordinator; the chief financial officer and administrative positions critical to carrying out climate change functions were located in the Office of the President. While this placement promoted the visibility of climate change challenges, it also meant that with each in-coming President these official positions were vacated and knowledge lost as positions often remained vacant for long periods of time or were filled with less experienced staff. The audit report recommended a more efficient administrative arrangement.

The Samoa audit identified a dedicated Global Environment Facility Unit within the responsible ministry, which could be an administrative practice that may be useful to other Pacific Island administrations. However, the Samoa audit reported that the unit was understaffed with an excessive workload.

#### **Case Study 12**

The Tuvalu audit on coastal management found that all Global Environment Facility coastal protection projects, approved, budgeted and planned for, had stalled as project managers were waiting on external experts to carry out studies and research on Tuvalu's coast. To build sustainability and reduce reliance on external agencies, the audit suggested that it would be valuable for the relevant department to provide opportunities for its staff to enhance their own research and scientific capability.

The SAI of the FSM State of Kosrae reported that a sectorwide strategic plan was being developed while the audit was in progress. To support and underpin the development of the strategy, the audit suggested areas for improvement including building capacity in scientific and research fields.



### 3.3 Monitoring, lessons learnt and reporting

Monitoring provides an opportunity to ‘learn lessons’ from projects and apply them to future projects with similar adaptation objectives. It is important that monitoring takes place at several levels — at a project level, at a country level and at a regional level. Having a sound, integrated monitoring process in place at these three levels is important in the Pacific to provide assurance that risks and vulnerabilities identified and treated through a national adaptation strategy are managed effectively. At the project level, monitoring against key indicators provides a simple, useable framework to evaluate the progress of project implementation and make adjustments where required. Dedicated project steering committees are also useful in managing and monitoring progress at the project level. See Case Study 7 for the approach adopted by the responsible agency in Samoa. However, it is important that a central monitoring and coordinating authority has responsibility for assessing overall country progress against a national adaptation strategy and report results to their legislatures and key stakeholders.

The audits found that a number of donor-funded projects included monitoring and reporting requirements.

#### 3.3.1 KF 10 Project monitoring arrangements across the jurisdictions audited are underdeveloped

##### **Case Study 13**

The Tuvalu audit found that the majority of projects funded by development partners did not have the necessary monitoring arrangements in place to measure and report on project performance. The audit also found that the position of an independent monitoring officer had been vacant for a considerable period, further constraining project monitoring efforts.

The audit conducted by the FSM state of Pohnpei found that no data was collected on the results of a crop-replanting project resulting from a risk assessment on the intrusion of salt water and impacts on food security. As a result, no project monitoring was possible.

#### 3.3.2 Learning lessons from demonstration projects

Pilot or demonstration projects provide the opportunity to identify what works and what does not. The identification of good practices can then inform future projects with similar objectives.

#### 3.3.3 KF 11 Identifying and using lessons learnt from demonstration projects is uneven across the jurisdictions audited

##### **Case Study 14**

The importance of a proper governance structure to oversee and coordinate project implementation was one of the lessons learnt from the Integrated Water Resource Management Nadi demonstration project in Fiji. Good governance was provided through the Nadi Basin Catchment Committee. It is anticipated that future water management projects will learn from and adopt this practice.

The Cook Islands audit found that no guidelines based on positive experiences or lessons learnt were developed from the PACC demonstration project on coastal resource management. The audit concluded that many of the good practices implemented during the PACC project could not be readily transferred and applied to support the integration of climate change adaptation into planning for coastal infrastructure — an opportunity lost.

### 3.3.4 Monitoring outcomes against a national climate change policy or strategy

At the national level, a coordinated approach to monitoring climate change adaptation actions against the key vulnerabilities identified in a national strategy is crucial. Oversight of overall monitoring is generally the responsibility of a high-level inter-ministerial coordinating committee.

Under KF 5, it was reported that, in most countries, the coordination of adaptation policies and plans is ensured formally through high-level coordinating bodies. However, the extent and quality of coordination varied significantly among the audited countries. This is particularly evident when it comes to monitoring outcomes against national climate change adaptation goals and strategies.

### 3.3.5 KF 12 Capacity to monitor outcomes against national climate change policies or strategies is limited in most jurisdictions

#### Case Study 15

The Fiji audit found that its Climate Change Unit had no holistic monitoring on the progress of implementation of adaptation projects undertaken by the various national and provincial agencies. The Climate Change Unit did not have the information necessary to assess whether or not the strategies identified in the Nation Climate Change Policy had been implemented and whether the implementation was effective. However, the audit found that the National Disaster Management Office had developed a tracking matrix enabling them to monitor the progress of project implementation against performance indicators and targets and for a complete picture of progress against the national disaster risk management objective.



Settlements that are dependent on scarce resources are particularly vulnerable to the impacts of climate change

### 3.3.6 KF 13 There are limitations in the capacity of Pacific Island states to report progress against climate change adaptation priorities

#### Case Study 16

The audit undertaken in the FSM state of Pohnpei found that neither the Environmental Protection Agency nor the Emergency Assistance Office collected any data to measure success against planned actions and report accordingly.

A key finding of the audit undertaken in Palau was that the Office of Environmental Response and Coordination did not issue annual reports to the President or the legislature on the progress of climate change adaptation projects. This is a requirement under Palau law — Executive Order 189.

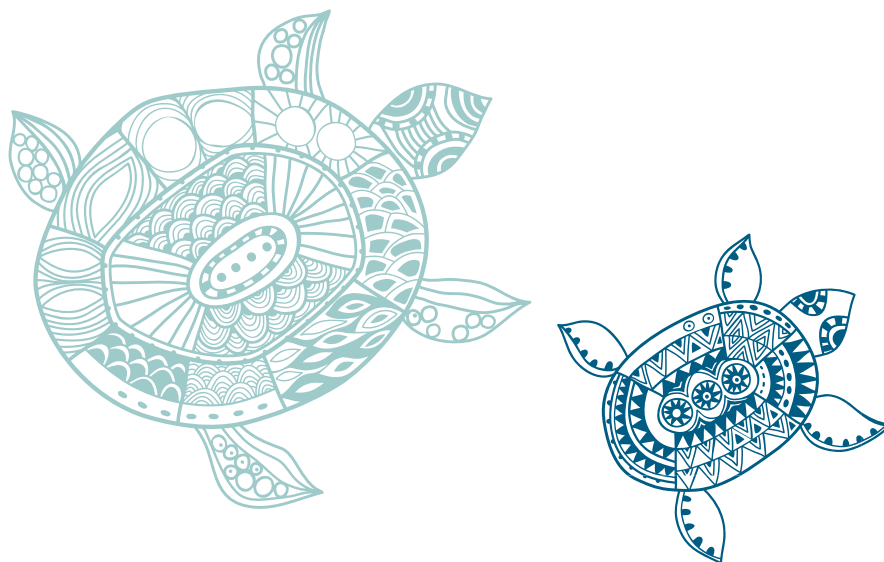
### 3.3.7 Regional monitoring and reporting

The Pacific Islands Framework for Action on Climate Change (PIFACC) 2006–2015<sup>11</sup> focuses on advances in understanding climate change issues, developments in the global and regional climate change architecture, and the experiences of Pacific Island states, Pacific Regional Organisations, donors and other development partners in implementing climate change programs. As a basis for reviews of progress, PIFACC incorporates well-developed monitoring and evaluation processes to measure progress against its key themes:

- implementing tangible on-the-ground adaptation measures
- governance and decision-making
- improving understanding of climate change (technical)
- education, training and awareness
- mitigation of global greenhouse emissions
- partnerships and cooperation.

The Pacific Climate Change Roundtable (PCCR) is the primary monitoring, evaluation and coordination mechanism for PIFACC. Through the monitoring and evaluation framework, the PCCR publishes documents on best practice strategies and example adaptation measures to assist Pacific Island states adapt to the adverse effects of climate change.

The first review of implementation of PIFACC was undertaken and released in 2013 with a subsequent review planned for 2015.



## 4 Individual Pacific SAI audits

*This section presents the audit objectives, scope, conclusions and recommendations for each of the eight published audit reports.*

COOK ISLANDS  
COOK ISLANDS AUDIT OFFICE

Name of audit: *A review of the Pacific Adaptation against Climate Change (PACC) project*



### NATIONAL AUDIT OBJECTIVE

To assess the effectiveness of the PACC initiative in enhancing the government's adaptive capacity to the adverse effects of climate change in the coastal management sector.

### AUDIT SCOPE

The main scope of the audit focused largely on the PACC project implemented from 2006 to December 2012, specifically:

- Outcome 1 — Policy mainstreaming
- Outcome 2 — Demonstration project on coastal management
- Outcome 3 — Capacity support and knowledge management.

### AUDIT CONCLUSION

Although the PACC project has achieved a lot, especially through the completion of the Joint National Action Plan (JNAP) as well as implementing its Communication Plan, its success is limited due to the fact that several key project objects such as the development of a Coastal Management Policy to address climate change are still yet to be achieved. The completion of the JNAP is a major achievement for PACC. However, unless its activities are included in Ministries annual business plans, it will be difficult for climate change adaptation measures to be incorporated into national policies and development plans.





## AUDIT RECOMMENDATIONS

### Outcome 1 — Policy mainstreaming

1. We recommend that the Ministry of Infrastructure and Planning (MOIP) co-ordinate with the Climate Change Cook Islands Division of Prime Minister's office (CCCI) to complete the development and implementation of the Integrated Coastal Management Framework (ICMF).
2. MOIP ensure that all the JNAP activities they are responsible for implementing are incorporated into their annual business plans so that they are provided government funding.
3. We recommend that Cabinet approve the provision of the necessary funds and in-kind support to all agencies involved with the implementation of activities identified in the JNAP for DRM and CCA. If we are to expect our development partners to contribute to the implementation of the JNAP, it is imperative that Government demonstrates commitment to the plan in the form of financial support through its Medium-Term Budgeting Framework (MTBF).

### Outcome 2 — The demonstration project on coastal management

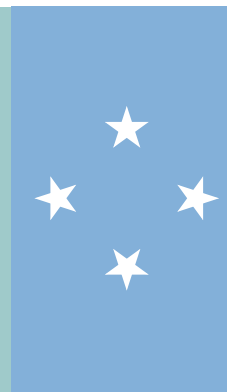
1. We recommend that the Ministry of Infrastructure and Planning complete the guideline on how to integrate climate risks adaptation measures into a selected coastal area or site in the Cook Islands. Once completed, the Ministry of Infrastructure and Planning should implement the guidelines as part of future assessments to identify other coastal areas in the Cook Islands vulnerable to the effects of climate change.
2. We recommend that the Ministry of Infrastructure and Planning mainstream climate change considerations into all its future coastal infrastructure projects by ensuring that climate change adaptation measures are properly integrated into the designs of future coastal infrastructure projects. For example, the measures will ensure that the harbours will be able to withstand the impact of high sea surges and extreme weather conditions such as cyclones, and, therefore, last longer. The government therefore will not have to fund costly repairs if the harbour were to sustain damages from extreme weather events.

### Outcome 3 — Capacity support and knowledge management

1. We recommend that the PACC PMU ensures that a copy of its quarterly progress report prepared for SPREP is submitted to NES and the NCCCT for comment. It is important that both government agencies maintain regular communication so that they are aware of each other's activities in regards to the PACC project. This ensures that any information provided by either agency to the development partner (SPREP) is not contradictory.

FEDERATED STATES OF MICRONESIA (FSM)  
OFFICE OF THE NATIONAL PUBLIC AUDITOR

Name of audit: *Audit on the Management of the Impacts of Climate Change on Food Security in the FSM (fiscal year 2010–2012)*



FEDERATED  
STATES OF  
MICRONESIA

## NATIONAL AUDIT OBJECTIVE

To assess the effectiveness of the actions taken by key agency/agencies in developing and implementing strategic plans to address the impacts of climate change on food security in the FSM.

## AUDIT SCOPE

The audit focused on the Office of Environmental and Emergency Management (OEEM) and the FSM Department of R&D and their development and implementation of action plans related to the impact of climate change on food security. Our audit covered the period from fiscal year 2010–2012.

## AUDIT CONCLUSION

There is no assurance that FSM could successfully respond to the impact of climate change on food security.

## AUDIT RECOMMENDATIONS

1. The Department of R&D, in consultation with OEEM, and other related agencies at the state level should develop and implement a comprehensive Food Security Plan.
2. The Department of R&D, in consultation with OEEM collaborate to conduct a comprehensive food security and vulnerability assessment to integrate the climate change impacts on food security, covering not only the low-lying atolls, but the high atolls (ridge to ridge) and all the food components such as agricultural products, fish, and imported foods.
3. The Department of R&D should develop and implement a Food Security Policy to address the impact of climate change on food security.
4. The National Department of R&D should coordinate planning with the State level and with NGOs to avoid any overlapping activities and should record all projects and programs related to the climate change impacts on food security to readily identify and avoid repetitive and overlapping activities.

# THE FSM STATE OF KOSRAE OFFICE OF THE PUBLIC AUDITOR

Name of audit: *Performance Audit on Climate Change Adaptation and Disaster Risk Reduction Strategies*



FSM STATE OF  
KOSRAE

## AUDIT OBJECTIVE

The purpose of this audit was to assess Kosrae State's readiness to the effects of climate change and disaster. Specific objectives includes: whether there is a plan to mitigate climate change impacts and disaster threats and the extent to which all parties are in compliance with the plan.

## AUDIT SCOPE

The scope of our audit covered national plans, state plans, state policies and activities focused on improving Kosrae State's readiness to address climate change adaptation and disaster risk reduction in the years 2008–2012.

## AUDIT CONCLUSION

There is a need for an effective institutional framework for climate change in the State of Kosrae. Such a framework should be revised and expanded to include both climate change adaptation and disaster risks reduction. Kosrae State Government should put more efforts and close coordination to improve the State's readiness toward climate change and disaster risk reduction.

## AUDIT RECOMMENDATIONS

1. We recommend legislation to further amend the Kosrae State Code on climate change to include a provision for a specific institutional framework with a clear mandate and responsibilities to create and implement a national strategy on climate change adaptation.
2. As per requirements stated in the FSM policy, we strongly recommend that Kosrae State develop its own plan for climate change adaptation. Furthermore, to develop this plan, Kosrae State must first and foremost focus on capacity improvement for science and research related to climate change adaptation and disaster risk reduction. This focus should be on long-term and short-term measures for climate change adaptation for Kosrae State with an evolving and aggressive plan on raising awareness of climate change and its effect on people's daily lives.
3. Kosrae State should have a plan of its own that will address climate change impacts so that such plan could be implemented and monitored. We recommend that the existing plan be revised and expanded to include disaster risk reduction and then incorporate such plan into joint DRR/CCA.

## THE FSM STATE OF POHNPEI OFFICE OF THE PUBLIC AUDITOR

Name of audit: *Performance audit on climate change adaptation and disaster risk reduction (fiscal years 2008–2012)*



FSM STATE OF POHNPEI

### AUDIT OBJECTIVE

To determine whether the Pohnpei State Environmental Protection Agency (EPA) and Emergency Assistance Office (EAO) are effectively managing and implementing strategies and plans to address the intrusion of salt water and its effects on the crops of Pohnpei's southern islands.

### AUDIT SCOPE

The audit focused on food security, especially for communities on Pohnpei's outer islands. It also examined the level of integration between climate change adaptation and disaster risk reduction measures.

### AUDIT CONCLUSION

The Pohnpei State Government is not providing effective management and oversight of strategies and plans to address the intrusion of salt water and its effects on the crops of Pohnpei's southern islands.

### AUDIT RECOMMENDATIONS

1. The Emergency Assistance Office (EAO) and the Pohnpei State Environmental Protection Agency (EPA) should follow through with actions needed to comply with national requirements for disaster risk management and CC adaptation.
2. EPA should recommend legislation on CC and link with the Disaster Management Plan and provide appropriate authority, mandate and guidance to state government agencies.
3. EAO should update its Management Plan to incorporate CC risks. EPA should use its dedicated budget to educate the public on CC.
4. EPA and EAO should identify plans and priorities and data and information necessary to measure success and report accordingly.
5. EPA and EAO should improve data collection and record keeping to make sure all information is at hand for decision-making purposes.

FIJI ISLANDS  
OFFICE OF THE AUDITOR-GENERAL

Name of audit: *Climate Change Adaptation and Disaster Risk Reduction Strategies*



FIJI

## AUDIT OBJECTIVE

To assess the effectiveness of the actions taken by key agency/agencies in implementing flood risk reduction strategies by examining:

- the institutional arrangements for the implementation of flood risk reduction strategies
- the implementation of flood risk reduction strategies
- accountability and reporting on progress of implementation of strategies process.

## AUDIT SCOPE

The audit focused mainly on the following entities that play a major role in the implementation of flood risk reduction strategies:

- Climate Change Unit (CCU)
- National Disaster Management Office (NDMO) under the Ministry of Provincial Development
- Land Water Resource Management Unit (LWRM) under the Ministry of Agriculture (MoA)
- Fiji Meteorological Services (FMS)
- Fiji Roads Authority (FRA).

## AUDIT CONCLUSION

Flood risk reduction is considered by Government in post-disaster recovery and rehabilitation activities. Implementing agencies have taken into consideration approaches that will reduce risk to flooding and have linked this when planning for the activities to be undertaken. For example, building new bridges above flood levels, carrying out irrigation and drainage support in agriculture and upper catchment flood mitigation activities under an integrated management of watersheds approach, etc. Despite the lack of an all-encompassing coordination arrangement, implementing agencies are reducing the vulnerability and enhancing the resilience of Fiji's communities to the impacts of climate change and disasters, thus achieving objective 5 of the Fiji National Climate Change Policy (NCCP). The implementing agencies are effectively implementing flood reduction strategies as required under their various mandates and within the resources available. Strategies implemented have taken into consideration lessons learned from previous flooding incidences such as the climate proofing of road infrastructures damaged in the 2012 floods; construction of bridges at a higher altitude as in Ba Province; installation of early flood warning systems, dredging of rivers, construction of retention dams in the upper river catchment; and creating awareness in the communities regarding climate change issues.



There is no holistic monitoring by the Climate Change Unit [CCU] over the progress of implementation of projects undertaken by the various agencies. There is a lack of coordination through information sharing and the implementation of the NCCP. Implementing agencies however are conducting sufficient monitoring over the Projects they are implementing and reporting to their respective superiors accordingly.

## GENERAL AUDIT RECOMMENDATION

To ensure that key agencies implement flood risk reduction strategies effectively, audit recommends that respective agencies lobby for the endorsement of all their relevant plans, strategies, Acts, guidelines, etc. that are currently in draft form or reviewed. The Climate Change Unit [CCU] should conduct overall monitoring of the progress of implementation of strategies undertaken by the key agencies at timely intervals to establish the achievements of the implementation of strategies and to make informed decisions.



REPUBLIC OF PALAU  
OFFICE OF THE AUDITOR GENERAL

Name of audit: *Climate Change Adaptation and Disaster Risk Reduction Strategies*



PALAU

## AUDIT OBJECTIVE

To assess whether the Office of Environmental Response and Coordination (OERC) is performing its functions regarding climate change adaptation and disaster risk reduction strategies effectively, efficiently and economically.

## AUDIT SCOPE

The audit focused on vulnerability assessment and proposed adaptation measures to respond to the future impacts of climate change, specifically on coastal erosion in Palau. During course of the audit, Palau was subject to the Super Typhoon Bopha.

## AUDIT CONCLUSION

The Office of Environmental Response and Coordination (OERC) did not perform its functions regarding climate change adaptation and disaster risk reduction strategies effectively, efficiently and economically.

## AUDIT RECOMMENDATIONS

1. The OERC and the Office of the President work with the Olbiil Era Kelalau (OEK) to develop a national policy framework for CC in the Republic of Palau (RoP). The framework should set policies for the Republic to develop and implement programs and strategies for confronting threats and mitigate risks caused by CC.
2. We recommend that positions such as the CC Coordinator, Chief Financial Officer and administrative staff, as well as other positions critical to carrying out the functions of the OERC be filled with people with the appropriate knowledge and skills as intended by Executive Order (EO) 189. Furthermore, the employees should be full-time employees and fully dedicated to performing the functions of OERC rather than being shared with other agencies or activities. Finally, OERC should be set up as an independent agency, or equivalent, and provided adequate funding to carry out its mandate, ensure continuity of operations and preserve institutional knowledge.
3. We recommend that OERC be provided seed funding to fund its operations. The seed funding

should be used to fund the salaries of the employees to enable the employees to devote the time to formulate office rules and regulations, operating policies and procedures, and such other ground work essential to get the office started.

4. We recommend that the Office of the President of the Republic of Palau (RoP) appoint a Climate Change Coordinator for the OERC to promptly complete and submit the second national communication as required by the grant agreement and EO 189 in addition to his/her other responsibilities.
5. We recommend that OERC establish and maintain a management information system that captures, stores and safeguards records and information in support of its operations. The management information system is critical and will enable OERC to prepare and provide periodic reports required by donors and partnership agencies, which is essential to successfully sustain and complete projects and programs. The system should also facilitate proper monitoring of program expenditures for decision making.
6. We recommend that the Office of the President fill the vacant positions within the OERC to enable the Office to carry out its mandate in accordance with EO 189. Only when the Office is fully funded and properly staffed will the agency be able to fulfil its mandate, including preparing and submitting the required annual reports to the President and the OEK.
7. We recommend the OERC conduct a vulnerability assessment of the Republic's coastal areas, which are more vulnerable to the impact of CC, and propose adaptation and mitigation measures such as:
  - Prevention — relocation of people from high risk areas
  - Mitigation — development and enforcement of building codes and standards
  - Adaptation — development and implementation of coastal zone protection plans to help address issues in relation to coastal degradation.

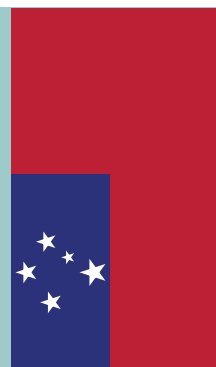
This would ensure that local people, food production sources, public infrastructure, and other related assets are protected and diminish the risk of climate change-related disasters in the Republic.



**Development and implementation of coastal zone protection plans can help to address coastal degradation issues**

SAMOA  
GOVERNMENT OF SAMOA AUDIT OFFICE

Name of audit: *Management of climate change adaptation and disaster risk reduction strategies*



SAMOA

## AUDIT OBJECTIVE

To assess the effectiveness of the management (co-ordination/administration/reporting) of CCA and DRR activities by the Ministry of Natural Resources and Environment (MNRE) with particular emphasis on the following aspects:

- Existence of a comprehensive legal policy regulatory framework to ensure adequate and effective management of CCA/DRR activities
- Sufficient human and financial resources for implementing the framework
- Participation in negotiations on CCA/DRR matters at International & Regional Forums.

## AUDIT SCOPE

The scope determined for the audit is:

- Focus on assessing the legal and institutional framework used by the Ministry of Natural Resources and Environment alone for managing Climate Change Adaptation and Disaster Risk Reduction Activities and how it can be improved.
- Focus on assessing the current level of resources (human and finance) in carrying out the activities within the framework relating to Climate Change Adaptation and Disaster Risk Reduction. The activities are mainly focused to the priority projects mentioned within the National Adaptation Program of Action (NAPA) document and related Climate Change policy.
- Review and assess the reporting process for activities related to Climate Change Adaptation and Disaster Risk Reduction both within the framework and to National, Regional and International Conventions.

## AUDIT CONCLUSION

The management i.e. co-ordination, administration and reporting, of CCA and DRR activities will be strengthened and improved with the establishment of a legislation for CCA to empower and clearly guide the Ministry of Environment and Natural Resources on their functions and responsibilities. Overall, the Ministry has performed its responsibilities adequately despite the limited resources available for both CCA and DRR.

## AUDIT RECOMMENDATIONS

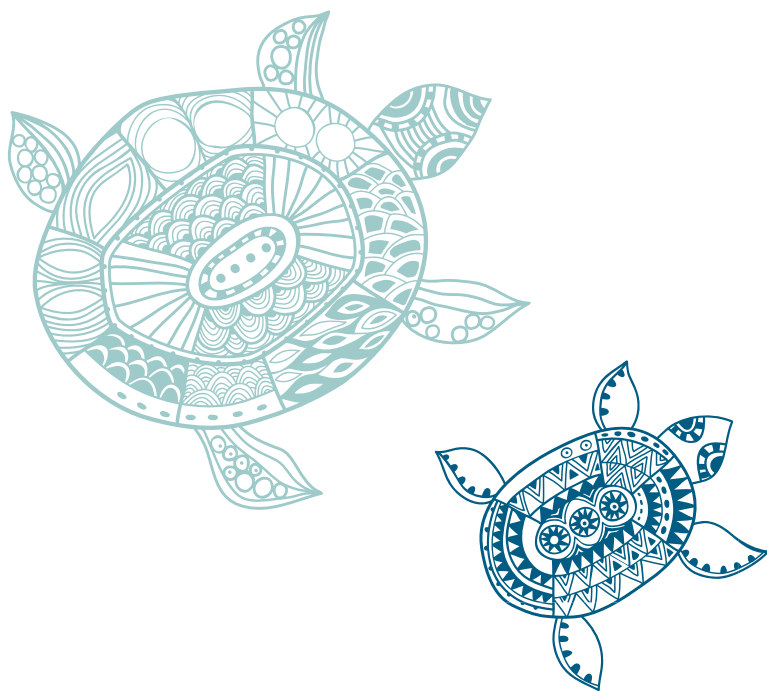
### ***Legal and institutional framework***

1. The Ministry should finalise legislation on Climate Change , the legislation will further strengthen the role of the Ministry in its efforts to address the importance of the adverse impacts of climate change to Samoa.
2. Audit Office recommends the establishment of Progressive Targets or Indicators as a mechanism to measure progress and performance against stated objectives.
3. Integration of the CCA/DRR plans can strengthen the Ministry's commitment through allocation of resources to address the impacts of CCA/DRR in vulnerable sectors and communities. However, assessment of the integration of financing mechanisms needs to be carried out to ensure that the synergies from an integrated CCA/DRR approach achieve their full potential. Since both Divisions responsible for CCA/DRR reside in the same Ministry, the Audit office recommends a Joint National Action Plan (JNAP) that can integrate both CCA and DRR. The Samoa National Action Plan and NAPA document can be used as the basis or starting point for integration.
4. The MNRE being the chair of the National Climate Change Country Team (NCCCT) should ensure that the teams coordinating function be revitalised and be more active. The NCCCT function is important for ensuring that the project's funds are implemented not only assist to the purpose of climate change adaptation, but also contribute to our daily lives activities.
5. The NCCCT status and establishment will be strengthened by its inclusion in legislation or regulations pertaining to climate change. The legislation should also spell out the required role of NCCCT.
6. The NCCCT should also review the implementation of the NAPA since it has not been conducted and produce a report to Cabinet on the progress and achievements so far.
7. Audit office recommends that all monitoring and evaluation reports prepared for the respective projects be forwarded to the coordinating unit (NCCCT). The NCCCT would analyse these reports and then disseminate results to other related agencies for sharing lessons learned and effective management. Also, these reports should also be forwarded to Cabinet for their information.
8. MNRE efforts for mainstreaming climate sensitivity are commended; the legislation is one of the main tool to assist the mainstreaming efforts. The review of the current National Development Strategy for Samoa provides an opportunity to address and reflect within all sectors the importance of CCA and DRR.



### ***Sufficient human and financial resources for implementing the framework***

1. Audit understands the current extensive process for approval and funding when seeking additional positions to organisational structures. However, Audit office recommends including the need for additional resources towards CC activities as one of its priority. Considering the level of funds available for utilisation and implementation, the total benefits from these under-utilised funds has not been fully realised.





## AUDIT OBJECTIVES

The objective of the audit was to assess the effectiveness, efficiency and economy of plans and projects to protect Tuvalu's coast from sea-level rise and storm surge by examining the following:

1. Is there an effective framework to manage coastal protection?
2. Have coastal protection projects and programs been implemented effectively, efficiently and economically?

## AUDIT SCOPE

The scope of the audit was on the management by the two responsible departments — the Department of Environment (DoE) and the Tuvalu National Fishery Department (TNFD) — of coastal protection plans and projects. It also examined the implementation of projects funded through Global Environment Facility (GEF), Australian Aid, and the Japan International Cooperation Agency (JICA).

## CONCLUSION

In relation to whether coastal protection project and programs have been implemented effectively, efficiently and economically, the Audit found that only some of the coastal protection projects had been completed and there has been a significant underutilisation of budget funds. The Audit concluded that program governance arrangements, including sound management and project monitoring need to be developed, to support coastal protection programs and projects funded by the development partners.

There was relevant legislation that addressed environmental issues; however, there is a lack of alignment between legislation, policies and plans. This potentially jeopardises current and future coastal erosion management measures.



## RECOMMENDATIONS

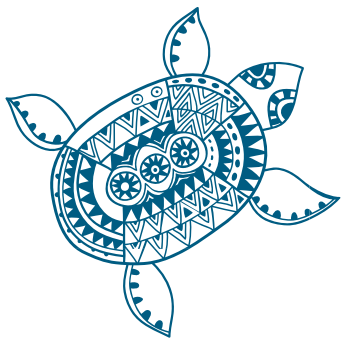
### **Is there an effective framework to manage coastal protection?**

1. Clear targets and objectives on coastal protection strategies should be included within the National Strategy for Sustainable Development (NSSD) so that timing of adaptation measures and goals for coastal protection initiatives are identified and prioritised.
2. The DoE in consultation with National Adaptation Program of Action (NAPA) staff, develops the Coastal Zone Management Policy and have it endorsed to ensure the full implementation of coastal protection strategies to protect Tuvalu's coasts.
3. The DoE include time limits in the Tuvalu Climate Change Policy (TCCP) to ensure thematic goals with related strategies are achieved at a targeted time/date.
4. The DoE and NAPA office carry out a Cost Benefit Analysis to confirm the Program Priorities, or if the Cost Benefit Analysis has been completed, locate and review it.
5. The DoE and NAPA office review project management procedures and practice to ensure target projects and programs are achieved on time and within budget.
6. When drafted, the Coastal Zone Management Policy should:
  - reflect the key risks that climate change poses for the Tuvalu coastline
  - include key risks that are based on risk assessments and reliable studies and research;
  - support the Environment goals identified in the NSSD "Te Kakega II" 2005–2015 and
  - align with *Environment Protection Act* and also regional and international frameworks that Tuvalu is signatory to.
7. The Tuvalu National Strategic Action Plan (TNSAP) includes timelines, budget details and progress monitoring arrangements for the successful implementation of planned activities.
8. NAPA develops a system for the monitoring, reviewing and reporting on the progress of the NAPA AWP targeted activities to ensure targeted activities set out within their AWP are achieved.
9. DoE performs an assessment of the achievability of the planned activities to ensure that the AWPs are realistically able to be complied with in the future.

### **Have coastal protection projects and programs been implemented effectively, efficiently and economically?**

1. Proper consultation between project team and the Government occurs before commencing a new project, to ensure that the project's goals are satisfactory to the Government of Tuvalu.
2. There should be a signed agreement between the project team, island leaders and the Government on any project they wish to carry out.
3. Project documents are filed correctly for ease of future referencing.
4. DoE improves its project recordkeeping to assist with the management of its projects.

5. The audit recommends that DoE improves its project management so that funds allocated to Tuvalu from development partner agencies for climate change adaptation programs and projects are being utilised in accordance with milestones in the project plan.
6. DoE ensures regular monitoring of JICA projects and programs is conducted to keep track of performance and to address under performance.
7. The NAPA should take immediate action to formalise a monitoring framework to set out clear monitoring activities.
8. The NAPA should take immediate action to appoint an independent evaluating officer.



## 5 Overall audit conclusion

Overall, the regional audit concluded that the Pacific Island states audited as part of the regional coordinated audit are not well placed to respond effectively to the threats and challenges arising from climate change.

Climate change is the major environmental challenge in the Pacific today. Climate change adaptation falls into a difficult policy area, because it involves multiple players — public and private and many levels of government. It also requires both short-term and long-term activities and political will to maintain focus on the issue. As a result, a response mechanism such as a well-developed and evidence-based adaptation strategy is needed to moderate climate change impacts in individual Pacific Island states. Funding is available under the United Nations Framework Convention on Climate Change (UNFCCC) to conduct vulnerability and risks assessments to gain an understanding of key sectoral risks and vulnerabilities (e.g. impacts on food supply, infrastructure, health, water resources, coastal systems and ecosystems etc.). Understanding key sectoral risks and vulnerabilities provides the platform to develop appropriate and coordinated responses. Although there are some examples of risk-based strategies among the audited SAIs, the majority of the audited states have not developed comprehensive adaptation strategies that are integrated with sustainable national development goals and plans, and that address key sectoral vulnerabilities.

While a number of the audited countries are working towards integrating climate change and disaster risk management through Joint National Action Plans (JNAPs), progress is uneven. The national audits also reveal that the necessary cross-sectoral management of climate change risks through mainstreaming government responses across vulnerable sectors is not yet taking place.

Program governance arrangements to support adaptation programs and projects funded by development partners, including sound management and project monitoring, have not been developed.

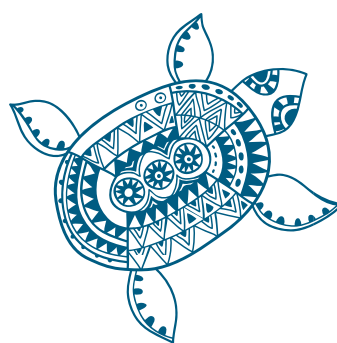
The financing of adaptation measures in the Pacific is still vexed. While international funds are available through various global agencies, the individual Pacific Island states audited generally lack the capacity to access and appropriately manage these funds through their national public financial management systems. In this context, it is worthwhile noting that the ADB, in conjunction with Pacific Island leaders, is developing a program of assistance for member countries to access the ever-increasing pool of climate-related financing. The program will assist a number of Pacific Island states to identify capacity gaps and barriers that impede the flow of climate finance and develop appropriate financing strategies to attract and manage these investments.<sup>12</sup> This program should provide a wealth of knowledge that can be transferred to other Pacific Island states assisting them to access and manage climate change financing.



To maximise this opportunity, it is necessary that this measure is integrated with other capacity building projects, especially those seeking to develop skills in climate change adaptation planning and project implementation. The audits identified technical and administrative skills that need to be developed. These include:

- administrative capabilities such as submission writing to secure available adaptation funding
- technical and research skills to carry out high quality climate vulnerability and risk assessments and to develop relevant plans and policy responses
- capacity to soundly project manage on-the-ground funded adaptation measures, monitor results and acquit grants.

Given the magnitude of the capacity constraints, a regionally crafted coordinated response would provide the best opportunity to ensure individual Pacific Island states have the necessary technical and administrative skills to meet current and future climate change challenges in a timely, economical, and sustainable manner.



## 6 References

Asian Development Bank (2014a) Enhancing Readiness of ADB Developing Member Countries for Scaled Up Climate Finance.

Asian Development Bank (2014b) Enhancing Readiness of ADB Developing Member Countries for Scaled Up Climate Finance.

Asian Development Bank (2013) Pacific Economic Monitor, 2013.

Forum Economic Ministers Meeting — FEMM (2011) Managing Climate Change Resources, (draft).

Hay, J. (2009) Assessment of Implementation of Pacific Islands Framework for Action on Climate Change (PIFACC), prepared for Secretariat of the Pacific Region Environmental Programme (SPREP), October.

INTOSAI Capacity Building Committee, (2007), Guide for Cooperative Audit Programs between Supreme Audit Institutions.

INTOSAI WGEA, (2010) Auditing the Government Response to Climate Change: Guidance for Supreme Audit Institutions.

Intergovernmental Panel on Climate Change — IPCC (2013), Assessment Report 2013.

Pacific Islands Framework for Action on Climate Change (PIFACC) 2006–2015  
Secretariat of the Pacific Region Environmental Programme (SPREP), 2006, Pacific Islands Framework for Action on Climate Change 2006–2015, second edition.

United Nations Development Programme (UNDP), 2011 Assessment Report on Disaster Risk Reduction, 2012. [http://www.thegef.org/gef/country\\_profile/](http://www.thegef.org/gef/country_profile/)

Pacific Islands Forum Secretariat, Pacific Plan Annual Progress Report (2012).

United Nations Office for Disaster Risk Reduction (2009), Institutional and policy analysis of disaster risk reduction and climate change adaptation in Pacific Island Countries: final report, 2009.

United Nations Office for Disaster Risk Reduction (2010), Climate change adaptation and disaster risk reduction institutional and policy landscape in Asia and Pacific.

