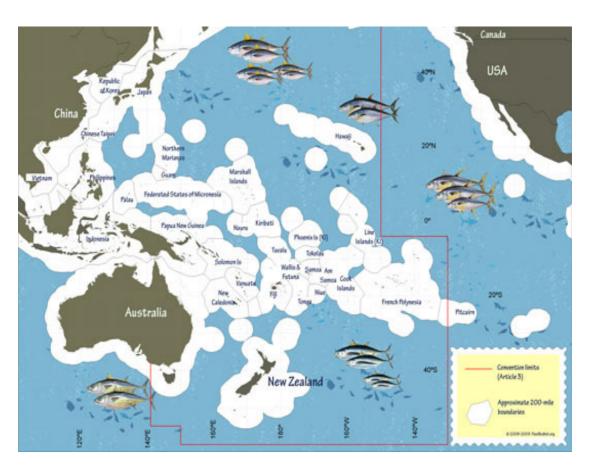
Pacific Regional Report of the Cooperative Performance Audit: Managing Sustainable Fisheries









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Foreword

Performance auditing, actively promoted by PASAI, 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.

To this end, PASAI has developed a program of Cooperative Performance Audits within the region. The focus to date has been on environmental auditing as environmental issues, such as sustainable fisheries management, cross country borders and boundaries. 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 sustainable fisheries management is the third in this series. The actions governments take to sustainably manage their fishery resources is critical as the revenue generated from the sale of these resources is a significant contributor to the gross domestic product of most Pacific island states. The issue of sustainability is also fundamental to the long-term protection of this valuable resource.

We are pleased to present the result of our audit work in this report. The report highlights areas where improvements in fisheries management capacities will provide benefits for individual countries and also for sustainable regional management approaches.

This report is the culmination of a team effort but special mention must be made of the financial assistance and support provided by our development partners: the Asian Development Bank and the INTOSAI Development Initiative. The Regional Working Group on Environmental Auditing, the Oceanic Fisheries Program of the Secretariat of the Pacific Community and the Secretariat of the Parties to the Nauru Agreement provided invaluable technical support and advice over the course of the audit.

I commend this report to Pacific island governments, regional fishery stakeholders, and environmental organisations involved in sustainable fishery management practices.

François MONTI

President of the chamber of account of New-Caledonia,

Chairman of the PASAI Governing Board

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Abbreviations and Glossary of Terms

ADB	Asian Development Bank
CPAs	cooperative performance audits
DWFNs	Distant Water Fishing Nations
EEZs	Exclusive Economic Zones
FADs	fish aggregating devices
FAME	Fisheries, Aquaculture and Marine Ecosystems division
FFA	Forum Fisheries Agency
FFVs	Foreign Fishing Vessels
FSM	Federated States of Micronesia
GDP	Gross Domestic Product
IDI	INTOSAI Development Initiative
INTOSAI	International Organisation of Supreme Audit Institutions
IUU	illegal, unreported and unregulated fishing
KPIs	Key Performance Indicators
LOE	Line of Enquiry
MCS	Monitoring Control and Surveillance
MoU	Memorandum of Understanding
OFP	Oceanic Fisheries Programme
PAE	Party Allowable Effort
PASAI	Pacific Association of Supreme Audit Institutions
PICT	Pacific Island Country and Territory
PNA	Parties to the Nauru Agreement
PPBs	Pacific patrol boats
PRAI	Pacific Regional Audit Initiative
RFMOs	Regional Fisheries Management Organisations

RWGEA	INTOSAI Regional Working Group on Environmental Auditing
SAI	Supreme Audit Institution
SPC	Secretariat of the Pacific Community
TAE	total allowable effort
TMPs	Tuna Management Plans
TUFMAN	Tuna Fishery Data Management System
TVMA	Te Vaka Moana Arrangement
UNCLOS	United Nations Convention on the Law of the Sea
UNFSA	United Nations Fish Stocks Agreement
USMLT	US Multilateral Treaty
VDS	vessel day scheme
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission
WCPO	Western and Central Pacific Ocean
WGEA	INTOSAI Working Group on Environmental Auditing

Glossary of Terms

Performance Audit – An audit of the economy, efficiency and effectiveness with which an audited entity uses its resources in carrying out its responsibilities.

Cooperative Audit – A cooperative performance audit involves a group of audit offices undertaking an audit on the same subject at the same time. An overview report is usually prepared, as well as individual reports by each audit office for tabling in their respective jurisdictions.

1. Summary

This report provides a regional overview of the process and outcomes of the third Cooperative Performance Audit in the Pacific region. At the aggregate level, it reports the significant findings about managing sustainable fisheries (in particular the tuna fishery) in the nine Pacific island countries, which were the focus of the audit. The report also records the achievements against Pacific Regional Audit Initiative (PRAI) objectives, including building performance auditing capacity within PASAI (see Appendix).

Introduction

This report assesses the contribution of the third Cooperative Performance Audit to the achievement of the Pacific Regional Audit Initiative (PRAI) objectives. It contains some high level observations about managing sustainable fisheries in Pacific island states, based on comparative results across the nine individual country audit reports. It also contains several examples of good practice that the audits found and includes key messages identifying where improvements are required to augment sustainable tuna fishing practices.

The report should be of interest to Pacific island governments, donor agencies, and organisations involved in offshore fishery issues.

The report also assesses how performance audit capability in Pacific island audit offices is increasing as a result of the cooperative audit approach (see Appendix).

PRAI Objectives and Outcomes

The overarching PRAI objective is 'to raise Pacific public auditing to uniformly high standards'. To achieve this objective, one of the PRAI outputs is to build and sustain public auditing capability through the conduct of cooperative audits with participating Supreme Audit Institutions (SAIs) in the Pacific region.

The PRAI work program notes that SAI capacities differ across the region but they all face similar human resource capacity challenges. In seeking to address this issue, one of the strategies used is to develop performance auditing capacity through a cooperative approach. This component of the PRAI supports cooperative performance audits that result in individual national reports and an overview regional report.

Why audit the management of sustainable tuna fisheries in the Pacific?

The decision of Pacific auditors-general to focus on managing sustainable fisheries as the preferred audit topic was influenced by scientific information that a number of tuna species are under stress in the Western and Central Pacific Ocean (WCPO) owing to unsustainable fishing practices.

Annual catches of tuna in the WCPO are on average around 58 per cent of world total tuna catches. This represents an annual multi-billion dollar industry involving the fishing fleets of distant water fishing nations (DWFNs), such as China, Japan, the USA and members of the European Union. Stakeholders have expressed concern that Pacific island countries were not receiving fair and reasonable compensation for the extraction of this resource from their Exclusive Economic Zones (EEZs).

Which SAIs participated?

Nine PASAI member audit offices took part in the audit: PICT 1, the Federated States of Micronesia (FSM), Fiji, PICT 2, Palau, Samoa, the Solomon Islands, Tonga and Tuvalu. Owing to confidentiality reasons, the reports of two SAIs are not identified in this regional report, as they have not yet been made public within their jurisdictions. As a result, these Pacific island states are referred to as Pacific Island Country and Territory (PICT) - PICT 1 and 2. Of the SAIs participating in the third cooperative audit, the majority had participated in either the first or the second cooperative audit. The Solomon Islands SAI was new to the cooperative performance audit approach.

The governments of the nine Pacific island countries are members of the Forum Fisheries Agency (FFA) and the Western and Central Pacific Fisheries Commission (WCPFC). In addition, FSM, PICT 2, Palau, the Solomon Islands and Tuvalu are members of the Parties to the Nauru Agreement (PNA). These three organisations - FFA, WCPFC and PNA - are key regional fishery stakeholders.

Support for the audit

The Asian Development Bank (ADB), the INTOSAI Development Initiative (IDI), the Pacific Association of Supreme Audit Institutions (PASAI) and the INTOSAI Regional Working Group on Environmental Auditing (RWGEA) supported the audit. The Oceanic Fisheries Program of the Secretariat of the Pacific Community (SPC) provided technical advice on fishery management issues and scientific information on the health of tuna stocks within the region and associated conservation management measures.

The audit teams worked together on the planning phase and the reporting phase of the audit, using a peer review approach. They received support from expert advisors including in-country support during fieldwork, audit analysis and report drafting. The provision of off-site electronic communication between the advisors and team members was also beneficial.

Cooperative Audit Objective and Scope

The aim of the audit was for each participating SAI to assess the effectiveness of the management of offshore fisheries (in particular the tuna fishery) by national fisheries authorities in accordance with national fisheries policies and frameworks, by examining:

- Line of Enquiry (LOE) 1 Are the key aspects of management of offshore fisheries planned?
- Line of Enquiry (LOE) 2 Are the economic returns from offshore access agreements and fishery licences appropriate? and
- Line of Enquiry (LOE) 3 Is decision-making of offshore fisheries informed by accurate assessments of the fishery? Are changes in the status of the fishery monitored and reported?

The audits focused on the operations of key agencies in each country. Usually this involved fishery management authorities or ministries as well as those agencies responsible for maritime surveillance and response. It was intended that each participating SAI would report its findings in its own jurisdiction and that a high-level regional perspective would be contained in this regional overview report.

Overall Audit Conclusion

The objective for the cooperative audit was to assess the effectiveness of the management of sustainable tuna fisheries within the EEZs of nine Pacific island states.

The overall audit conclusion was that most of the audited Pacific island states need to strengthen their tuna fishery management arrangements in the following areas:

- there are multiple international, regional and sub-regional fishery governance arrangements and Pacific island states need to be mindful of their obligations in this regard. A key concern is that while national fishery laws are in place, these require regular review and updating so they remain in alignment with improvements in these broader arenas;
- furthermore, while government objectives are set out in legislation, these need to be documented and reinforced in sector planning arrangements such as tuna management plans. These plans are important to guide implementation and monitor fishing operations within country EEZs to promote the sustainability of tuna resources;
- fishery access agreements and vessel licensing arrangements with distant water fishing nations are important contributors to the GDPs of these Pacific island states. However, in the majority, these arrangements tend to be shrouded in secrecy. For public accountability purposes, it is important that these arrangements are open and transparent. It is also important that proper accounting practices are used to ensure that the revenues received by national treasuries from the sale of fishing rights are correct. Regular reporting to stakeholders on the results of management of the tuna fishery would further enhance public accountability;
- there are funding and capability constraints, which limit the effectiveness of existing monitoring arrangements. Weaknesses in the collection, sharing and analyse of data compromised effective tuna fishery decision-making at the national level.

The individual audit reports recommended areas where improvements could be made. In conjunction with progress in sub-regional arrangements, the implementation of those recommendations should lead to improved management practices to support the sustainability of the tuna fishery in these Pacific island states. Areas for regional improvement have also been identified.

Key Findings

The main findings from each of the three lines of enquiry are presented below.

The overall finding for the <u>first line of enquiry</u> is that, while government objectives are set out in legislation, these objectives need to be reflected in sector planning arrangements.

A legal framework formalises the broad objectives of government in the context of international and regional obligations. However, to ensure the effectiveness of the framework, implementation planning tools, such as management plans/strategies are required. These documents enable responsible agencies to appropriately plan to risk manage the threats to tuna stocks within their EEZs and report on the outcomes of their actions

The Forum Fisheries Agency (FFA) has a *Regional Tuna Management Development Strategy,* 2009-2014. This document encourages FFA members to implement national fisheries

management plans based on national tuna fishery status reports.

The results for this line of enquiry are summarised in part 4 of this report (table 4.1).

The key findings for this line of enquiry were mixed and identified areas for improvement:

- while it is positive that in each jurisdiction audited there was a law to guide actions
 for the sustainable management of the country's tuna fishery, only five of the nine
 audits reported that there was alignment between the national framework and
 international and regional obligations. The Tonga audit sought improvements in this
 regard;
- it is good to note that in seven of the nine jurisdictions that had multiple agencies with fishery management responsibilities, five had co-ordination arrangements in place. While this was not uniform across the jurisdictions, the Samoa audit reported on a good practice, a high-level Cabinet sanctioned committee to address development and management issues related to sustainable fishing within Samoa's EEZ. However, in other jurisdictions such as Palau, the audit reported that fisheries governance coordination arrangements were fragmented and incomplete and recommended improvements in this area;
- despite encouragement from the FFA, only five of the nine jurisdictions audited reported that a current tuna management plan was in place;
- internal policies and procedures are a useful administrative tool to support consistency in decision-making. Only five of the nine audits reported these were in place. The FSM audit recommended improvements in this vital area.

Comment on first line of enquiry

The specific fisheries management arrangements of Pacific island states are more effective when they are compliant with international, regional and sub-regional obligations. As a consequence, it is important that the legal framework is regularly reviewed and updated to promote compliance with these obligations. Where government objectives are set out in legislation, there is often a need for further guidance, through national planning approaches, to ensure those objectives are achievable.

The audits broadly found that the necessary legislative requirements for managing sustainable fisheries are in place, but risks emerge where these do not align with international obligations. In addition, the achievement of government objectives concerning sustainable tuna fishery management practices are not, in most cases, supported by appropriate planning and management processes.

Where management approaches are not formalised and fully implemented, it is challenging to effectively monitor the operation of the framework and report to stakeholders whether objectives are being achieved.

The overall finding for the <u>second line of enquiry</u> is that, while there have been important sub-regional developments, it is difficult to provide assurance that economic returns to the Pacific island states involved in this audit, are uniformly fair and reasonable.

The *United Nations Convention on the Law of the Sea* (UNCLOS) 1982 provides that where a county does not have the capability to extract the resources within their EEZ, they can enter

into an agreement with other nations to harvest surplus fish stocks. These agreements, commonly termed 'access agreements' are made between Pacific island states and distant water fishing nations (DFWNs), such as China, Japan, Korea, the USA and members of the European Union. It is estimated that the value of the tuna catch in the Western and Central Pacific Ocean is an annual billion dollar industry.

The contribution of offshore fisheries (in particular the tuna fishery) to the gross domestic product (GDP) of Pacific island countries is considerable. For example, the Tuvalu audit report estimated that for the past ten years, the Tuvalu fishery has contributed between 6 and 7 per cent of Tuvalu's total GDP and the FSM report identified that returns from fishing activities represent the second largest return to the national accounts of FSM. The Fiji audit reported that employment in the tuna fishery sector, including local canning operations, was an important contributor to the Fiji economy.

The results for this line of enquiry are summarised in part 4 of this report (table 4.3).

Again, the key findings for this line of enquiry were mixed and identified areas for improvement:

- of the seven audits that reported the national framework outlined conditions for access agreements, only four audit teams were provided with information on these agreements – FSM, Palau, Solomon Islands and Tuvalu;
- only one audit (Solomon Islands) reported that reliable local information was used by negotiators to negotiate access agreements with DFNWs, and only two audits (Solomon Islands and Tuvalu) reported that this included compensation based on realistic regional tuna prices;
- of the eight audits where revenue collection processes were examined for access agreements and fishing licences, three audits reported that this revenue was not properly recorded or accounted for. The FSM audit uncovered that wire transfer payments from some foreign fishing companies receipted at the FSM National Treasury were consistently less than the amounts contained in the national fishery authority's records;
- there is a degree of variability across audit reports that catch limits are in place and are based on the latest scientific tuna stock assessment data. This variability may relate to a lag in the implementation of regional and sub-regional legal frameworks;
- it is positive to note the access agreements that were analysed by audit teams specified catch monitoring arrangements on fishing vessels and at ports where the catch was landed. There were, however, concerns with the capacity of responsible agencies to routinely inspect vessels when unloading catches;
- six of the eight reports in jurisdictions where fishing licences are issued, indicated
 that checklists were used in the licensing process to support conformity with the law
 and consistency in decision-making. Also it was common practice that licensing
 committees were established to oversee this process. The Tuvalu audit noted that,
 while this is a good practice, reliable records of these decisions need to be held to
 foster transparency in decision-making and ensure that delegated officials are
 accountable for the quality of their decisions. Record keeping of licensing decisions
 was variable across the audits;
- FSM, PICT 2, Palau, Solomon Islands and Tuvalu belong to a sub-regional tuna fishing arrangement – Parties to the Nauru Agreement (PNA). From 1 January 2012, PNA members have applied a minimum benchmark fee of US\$5 000 a day for foreign

fishing vessels, with a cap on the number of fishing days set amongst PNA members. This arrangement potentially supersedes the need for access agreements. As the approach to setting minimum fees for catch effort is relatively new, most of the PNA member countries audited have transitional arrangements in place;

- Under the US Multilateral Treaty between the US Government and Certain Pacific Island Countries, access fees are paid to participating Pacific island countries enabling the US fishing fleet to fish in their EEZs. As part of this Treaty there is also a Project Development Fund of around USD 1.8 million. Participating Pacific island countries have equal access to this fund for the purposes of fisheries development. The Palau audit found that its fishery agency expended its share of these funds for purposes other than those legally determined under Palau law. The report made a recommendation to rectify this;
- The Tonga report recommended the revitalisation of the commercial tuna fishing and processing industry in Tonga through a partnership between government and industry and the Fiji audit recommended that government agencies work with stakeholders to have Fiji's tuna products internationally accredited.

Comment on second line of enquiry

Fair and reasonable returns from the sale of fishing rights in the EEZs of Pacific island states is essential to the GDPs of these small island countries. These audit findings confirm that there is still a lack of transparency in fisheries access and licensing arrangements in a number of Pacific states. The sub-regional PNA process of selling a 'capped' number of fishing days on the open market to foreign fishing companies will go towards establishing a more open and transparent process. It will also aid the sustainability of the tuna fishery as the total number of catch days, allocated to PNA members, is based on the latest scientific advice. Gains being made through regional and sub-regional fishery management processes to improve transparency in access and licensing arrangements need to be supported by sound accounting practices in individual jurisdictions. A number of audit reports sought improvements in revenue collection and reconciliation processes.

Sustainable management of the tuna fishery in the WCPO is also dependent on administrative arrangements that are implemented to monitor access agreement and licensing conditions, including conservation and management measures. More can be done in the jurisdictions audited to promote transparency and good practice in these arrangements, including instituting reliable record keeping processes.

The overall finding for the <u>third line of enquiry</u> is that the accuracy of fishery data collection and analysis procedures as the basis for good decision making are less than optimal.

Effective decision-making depends on an analysis of accurate, current data. Data gathered through monitoring the health of fish stocks can be used to inform future planning and decision-making at both a regional and Pacific island state level.

The Oceanic Fisheries Program (OFP) of the SPC is the Pacific Community's regional centre for tuna fisheries research, fishery monitoring, stock assessment and data management. The SPC is the scientific services provider and data manager for the Western and Central Pacific Fisheries Commission, the FFA, the PNA and the fisheries administrations of Pacific island states. To assist fishery administrations in their management role, the Oceanic Fisheries

Program has developed a comprehensive, integrated system called the Tuna Fishery Data Management System (TUFMAN). This database is intended to assist Pacific island fishery agencies to record, analyse and summarise their tuna fishery data for relevant decision-making.

There are a number of other regional data management systems involved in fisheries management, including the vessel monitoring system, which is held by the FFA. It holds information on licensing, vessel registration, violations and prosecutions of fishing vessels where they are detected carrying out illegal activities.

It is important that there is a sound data exchange platform between these various data sources so that timely, accurate information is available to decision-makers.

The results for this line of enquiry are summarised in part 4 of this report (table 4.5).

Again, the key findings for this line of enquiry were mixed and identified areas for improvement:

- while eight of the nine Pacific island state audits reported that a fisheries data management strategy was in place, there were several exceptions. Fiji noted that its expired tuna management plan contained one and Tuvalu reported that its strategy needed improvement;
- all audits reported that there were links between national and regional monitoring and reporting. This is a good result for regional collaboration and information sharing;
- the placement of observers on fishing vessels is usually the only independent data
 collection source available on fishing activities, including catch composition, bycatch and gear configuration data. All nine audits reported that the relevant fishery
 authority had trained observers for fishing vessel monitoring purposes. However,
 funding constraints often compromised the effectiveness of the observer program.
 For example, the Samoa audit reported that critical information on fishing trips was
 not fully reported as the observer program was on hold due to financial constraints;
- the TUFMAN database is designed to enable Pacific island fishery agencies to record, analyse and summarise their tuna fishery data for relevant decision-making at both a national and regional level. Seven of the nine Pacific island audits reported that TUFMAN was in use and staff were trained for this purpose. However, both Palau and Tuvalu reported that staff were not adequately trained and recommended improvements in this area;
- of concern is that five of nine audits reported that data is not regularly entered into TUFMAN to maintain its currency. This jeopardises the accuracy of TUFMAN and compromises its key design feature to provide timely reports for decision-making purposes at national and regional levels;
- it is a good result that seven of the nine audits reported that fishing authorities use
 the reports developed by the SPC and the WCPFC for decision-making purposes.
 These reports contain scientific information on sustainability of the tuna fishery and
 as such are important to guide future decisions on catch limits in EEZs;
- reporting to fishery stakeholders including legislatures was much less positive with six of nine audits reporting that this did not occur on a regular basis;
- it is positive to note that the audits of four of the five PNA members reported that the 'real time' daily PNA reports on catch and other fishing activities are accessed regularly and are used to guide fishery decision-making.

- the vessel monitoring system (VMS) held by the FFA is an important monitoring, control and surveillance tool as it provides compliance information on all licensed fishing vessels fishing within national EEZs. It is crucial that national fishery authorities, in the licence application process, consider FFA information on vessels. Eight of the nine audits reported that this was the case with PICT 2 noting that this was done on an irregular basis;
- the Tuvalu audit reported on the need for regular reconciliation between the TUFMAN dataset, which holds licensing information, and the VMS which tracks fishing activities within EEZs. The audit noted that data entry of licensing information was not done in a timely manner. This is an important finding, as improvements in this area could bolster regional compliance arrangements.

Comment on third line of enquiry

The SPC has put in place a regional database, TUFMAN, to assist individual Pacific island fishery agencies to record and analyse their tuna fishery data for decision-making purposes. One of the key tasks of fishery agency officials is to enter required data into TUFMAN. There is variability in the accuracy and timeliness of data entry across the Pacific island states audited. Many audits reported a considerable lag in data entry. This result is further compounded when there is no process for regular reconciliation between TUFMAN data and those held in other key regional systems, such as the vessel monitoring system (VMS).

Obtaining a complete picture of fishing activities across the foreign fishing fleets licensed to fish in the EEZs of the Pacific island states audited is compromised by a less than fully operational and funded observer program.

Regular reporting to stakeholders on the effectiveness of the actions taken by fishery agencies to appropriately manage the tuna fishery is not uniform across the jurisdictions audited. This is a failure in public accountability.

Structure of the Regional Report

This report consists of five parts:

- part 1 provides the executive summary;
- part 2 contains general information on the audit, reasons for the conduct of cooperative performance audits on environmental topics; planning for the audit program including external agency support; and the third regional cooperative performance audit and participating SAIs;
- part 3 provides background to the audit topic, including: international, regional, and sub-regional arrangements, regional monitoring, control and surveillance measures and a brief description of the types of fishing gear used in the Pacific, including fish aggregating devices (FADs);
- part 4 contains the main findings against the three lines of enquiry:
 - 1. Are the key aspects of management of offshore fisheries planned?
 - 2. Are the economic returns from offshore access agreements and fishery licences appropriate?
 - 3. Is decision-making concerning offshore fisheries informed by accurate assessments of the fishery? Are changes in the status of the fishery monitored and reported?

part 5 contains the executive summaries of those national reports that are in the public domain, including responses from the audited entities.

2. Introduction to the Audit

This part sets out the reasons for the conduct of cooperative performance audits on environmental topics; planning for the audit program including external agency support; and the third regional cooperative performance audit and participating SAIs. The audited entities are also identified.

Reasons for the Audit

- 2.1 The cooperative performance audit on managing sustainable fisheries is the third cooperative performance audit to be undertaken in the Pacific Association of Supreme Audit Institutions (PASAI) region. It is part of a program of cooperative performance audits (CPA) in the region with the objective of building performance audit capacity within individual Supreme Audit Institutions (SAIs) to ultimately identify and promote improvements in the effectiveness, efficiency and economy of public administration. Results of performance audit capacity building through the CPA program are reported in the Appendix.
- 2.2 The CPA program is conducted under the Pacific Regional Audit Initiative (PRAI). A key aspect of the PRAI is to build capacity in individual SAIs through participation in cooperative performance audits and cooperative financial audits. This aligns with the strategic objective of INTOSAI for greater cooperation among SAIs.
- 2.3 At the 2008 PASAI Congress, auditors-general decided that the first CPA program should be environmentally focussed. This was a very good fit with the INTOSAI's Working Group on Environmental Auditing (WGEA) work plan that aims to facilitate concurrent, joint, or co-ordinated audits in each of the INTOSAI regions, including PASAI.

Planning for the Audit Program

- 2.4 Initial planning work for the CPA program was undertaken between the 2008 and 2009 PASAI congresses, including discussion at two meetings of PASAI's interim governing body, the Transitional Working Group. The SAI of New Zealand, in its role as coordinator of the ACAG/PASAI Regional Working Group on Environmental Auditing (RWGEA), conducted a survey of PASAI members to identify suitable topics for the CPA program and to find out which SAIs would be interested in taking part.
- 2.5 The survey favoured solid waste management as the topic for the first cooperative performance audit, with freshwater management a close second and fisheries the third choice. Many SAIs expressed interest in taking part in the program.
- 2.6 Planning for the CPA program relied heavily on the guidance produced by the INTOSAI Working Group on Environmental Auditing (WGEA) on conducting cooperative audits to determine the appropriate form of cooperation, and the level of support required.
- 2.7 The CPA program is planned and conducted as co-ordinated audits. That is, the same audit topic is undertaken in each of the jurisdictions, with audit teams coming together at critical points in the audit cycle, planning and report writing. It is expected that each SAI would report in its own jurisdiction, and that a regional report would be compiled to present to the subsequent PASAI Congress and then released more widely to donor organisations, stakeholders in the region and the general public.

External agency support

2.8 The Asian Development Bank (ADB) agreed to fund an advisor to lead the program

and the INTOSAI Development Initiative (IDI) agreed to support planning and reporting meetings for each of the audits. Additional support was provided by IDI with the establishment of a capacity building expert position in the PASAI Secretariat. One of the functional outputs of the capacity building expert is to assist with the delivery of the CPA program.

Results to date

- 2.9 The first cooperative performance audit was completed in 2010 on the environmental topic of solid waste management. Ten Pacific SAIs participated: Cook Islands, the Federated States of Micronesia (FSM), PICT 1, Guam, Papua New Guinea, the Republic of Marshall Islands, the Republic of Palau, PICT 2, Tonga and Tuvalu. The consolidated regional report of these audits is available on the PASAI website: www.pasai.org. Individual SAI audit reports, where available, are on their specific websites.
- 2.10 The second cooperative performance audit was completed in 2011 on the environmental topic of access to safe drinking water. Ten PASAI member SAIs concurrently performed audits of access to safe drinking water laws, policies and practices within their jurisdictions. These were Cook Islands, the states of Kosrae and Yap of the Federated States of Micronesia (FSM), Fiji, Kiribati, Palau, PICT 1, Samoa, PICT 2 and Tuvalu. The consolidated regional report of these audits is available on the PASAI website: www.pasai.org. Individual SAI audit reports, where available, are on their specific websites.

Third Regional Cooperative Performance Audit

2.11 At the 14th PASAI Congress held in Tonga in August 2011, auditors-general agreed to continue with the CPA program, with the third cooperative performance audit being on the topic of managing sustainable fisheries (in particular the tuna fishery). Again, ten Pacific SAIs decided to participate. The audit objective and high-level lines of enquiry agreed at the Congress were:

To assess the effectiveness of the management of offshore fisheries (in particular the tuna fishery) by national fisheries authorities in accordance with national fisheries policies and frameworks, by examining:

- 1. <u>Line of Enquiry (LOE) 1:</u> Are the key aspects of management of offshore fisheries planned?
- 2. <u>Line of Enquiry (LOE) 2</u>: Are the economic returns from offshore access agreements and fishery licences appropriate?
- 3. <u>Line of Enquiry (LOE) 3</u>: Is decision-making of offshore fisheries informed by accurate assessments of the fishery? Are changes in the status of the fishery monitored and reported?

Why focus on managing sustainable fisheries (in particular the tuna fishery) as the audit topic?

2.12 The decision of Pacific auditors-general to focus on managing sustainable fisheries as the preferred audit topic was influenced by scientific information that a number of tuna species are severely depleted in the Western and Central Pacific Ocean (WCPO) owing to unsustainable fishing practices. There are four main tuna species of interest: albacore, big

eye, skipjack and yellow fin. Of these four species, the Secretariat of the Pacific Community (SPC) estimates that:

- albacore are overfished in the North Pacific but not in the South;
- bigeye are overfished;
- skipjack are not overfished; and
- yellow fin are likely to be overfished in the very near future.
- 2.13 Tuna migrate across the Pacific through the Exclusive Economic Zones (EEZs) of Pacific island states and the high seas. In 2010, the SPC estimated that 2.4 million tonnes of tuna were caught in the WCPO. The majority of these (75%) were caught by purse seine fishing vessels of distant water fishing nations (DWFNs) with licences to fish in the EEZs of individual Pacific island states.
- 2.14 Because tuna are highly migratory, stock assessments and fishery management approaches are best undertaken with a regional (and often Ocean) perspective in mind as opposed to sole reliance on an individual EEZ management approach. This rationale supports the conduct of a regional cooperative performance audit to assess how individual countries are managing their off-shore tuna fishery within the context of regional imperatives.

Participating audit offices

- 2.15 Nine PASAI member SAIs concurrently performed audits of managing sustainable fisheries within their jurisdictions: PICT 1, the Federated States of Micronesia (FSM), Fiji, PICT 2, Palau, Samoa, Solomon Islands, Tonga and Tuvalu. Owing to confidentiality reasons, the reports of two SAIs are not identified in this regional report, as they have not yet been made public within their jurisdictions. As a result, these Pacific island states are referred to as Pacific Island Country and Territory (PICT) PICT 1 and 2.
- 2.16 This high level of participation in the third cooperative performance audit, replicates that of the first and second regional cooperative performance audits. Again, this level of participation provides a representative cross-section of Pacific island states, enabling the development of a regional overview report.
- 2.17 Table 2.1 sets out the focus of each of the individual audit offices for the audit.

Table 2.1 Audit offices and audit focus

PICT 1 Ministry of Marine Resources (MMR)

FSM National Oceanic Resources Management Authority (NORMA)

Fiji Department of Fisheries under the Ministry of Fisheries and Forests

PICT 2 Ministry of Fisheries and Marine Resources Development (MFMRD) and Police Maritime Unit (PMU)

Palau Bureau of Marine Resources (BMR)-Oceanic Fisheries Management (OFM) and those agencies responsible for operating and monitoring the offshore fisheries: the Division

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A fisheries expert from the Secretariat of the Pacific Community provided this information to audit teams.

	of Marine Law and Enforcement (DMLE), Ministry of Finance, and Bureau of Revenue, Customs and Taxation (BRC&T)
Samoa	Ministry of Agriculture & Fisheries (MAF) - Fisheries Division and the Ministry of Foreign Affairs & Trade. (MFAT)
Solomon Islands	The Ministry of Fisheries and Marine Resources and Police Maritime
Tonga	Ministry of Agriculture and Food, Forests and Fisheries (MAFFF)
Tuvalu	The Tuvalu National Fishery Department (TNFD) a division in the Ministry of Natural Resources (MNR) and the Maritime Surveillance Unit (MSU) under the Police Department and the Office of the Prime Minister (OPM)

Source: Country audit reports.

Audited entities

2.18 As indicated in Table 2.1, in most instances, the country audits examined the operations of agencies with responsibility for fisheries management and in some instances those agencies with a role in monitoring, control and surveillance activities such as Police Maritime Units. This enabled an examination of key aspects of managing sustainable fisheries, including whether effective co-ordination arrangements are in place between the responsible agencies.

3. Managing Sustainable Fisheries in the Pacific region

This part provides a background to the audit topic, including: governance and fisheries management frameworks — international, regional, and sub-regional arrangements, regional monitoring, control and surveillance measures and a brief description of the types of fishing gear used in the Pacific, including fish aggregating devices (FADs).

International Governance Arrangements

United Nations Convention on the Law of the Sea

- 3.1 The *United Nations Convention on the Law of the Sea* (UNCLOS) 1982 defines the rights and responsibilities of nations in their use of the world's oceans and establishes guidelines for the management of natural marine resources. It also created an Exclusive Economic Zone (EEZ), which extends 200 nautical miles from the land. Countries have sole exploitation rights over all natural resources within their EEZs. Where a county does not have the capability to fish the resources within their EEZ, they can enter into an agreement with other nations to harvest the surplus fish stocks.
- 3.2 Table 3.1 provides information on the size of the EEZs, controlled by the Pacific island states, which are part of this audit.

Table 3.1 Pacific island state and EEZ

Pacific island state	EEZ (km2)	Land area (km2)
	(SPC, 2009)	(SPC, 2008)
PICT 1	1,830,000	237
Federated States of Micronesia	2,978,000	701
Fiji	1,290,000	18,272
PICT 2	3,550,000	811
Palau	629,000	444
Samoa	120,000	2,935
Solomon Islands	1,340,000	28,370
Tonga	700,000	650
Tuvalu	900,000	26

Source: Secretariat of the Pacific Community.

The United Nations Fish Stocks Agreement

3.3 There are many important fish stocks that either live straddling EEZs or that migrate through these zones. The *United Nations Fish Stocks Agreement* (UNFSA) 1995 provides a framework for managing straddling and highly migratory fish stocks in the high seas. These fish stocks are regulated by Regional Fisheries Management Organisations (RFMOs). The Agreement requires countries to control fishing activities of their vessels on the high seas.

It also provides for the right of countries party to the UNFSA to monitor and inspect vessels of the other parties, to verify compliance with internationally agreed fishing rules of RFMOs.

3.4 These organisations play an important role in contributing to sustainable fisheries management and, in many instances, provide an effective means to govern fish stocks that migrate across national jurisdictions or are found in the high seas.

Regional Governance Arrangements

The Western and Central Pacific Fisheries Commission

- 3.5 The Western and Central Pacific Fisheries Commission (WCPFC) was established by the *Convention for the Conservation and Management of Highly Migratory Fish Stocks* (i.e. tuna species, billfish, marlin and swordfish) in the Western and Central Pacific Ocean (WCPF Convention). This convention came into force in June 2004. Membership includes the following PASAI member countries: Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Republic of the Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and participating Territories—American Samoa, Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia and Tokelau. Developed countries, such as Japan, Korea, Chinese Taipei and the United States have commercial fleets of vessels fishing in the Western and Central Pacific Ocean. These countries are also members of the Commission. Commercial fishing for migratory fish stocks, especially tuna in the WCPO, is an annual multi-billion dollar industry.
- 3.6 The WCPFC Convention seeks to address problems in the management of high seas fisheries resulting from unregulated fishing, over-capitalisation, excessive fleet capacity, vessel re-flagging to escape controls, insufficiently selective fishing gear, unreliable databases and insufficient multilateral co-operation for conservation and management of highly migratory fish stocks.
- 3.7 The WCPFC is a Regional Fisheries Management Organisation, as prescribed by the UNFSA. One particularly important relationship for the WCPFC is with the regional fisheries body known as the Pacific Islands Forum Fisheries Agency (FFA). The FFA is an organisation comprised of independent Pacific island countries who share a common fisheries interest in the Pacific Ocean region. The WCPFC coordinates very closely with the FFA, whose members are also members of the WCPFC. The Secretariat of the Pacific Community (SPC) is another important relationship for the WCPFC. The SPC's Oceanic Fisheries Program serves as the Commission's science services provider and data manager to ensure that there is no duplication of effort in the area of collection and processing of scientific data on fishing activities in the region.
- 3.8 As can be seen is the diagram below, annual catches of tuna in the Western and Central Pacific Ocean (WCPO) are highly significant in terms of world catches.

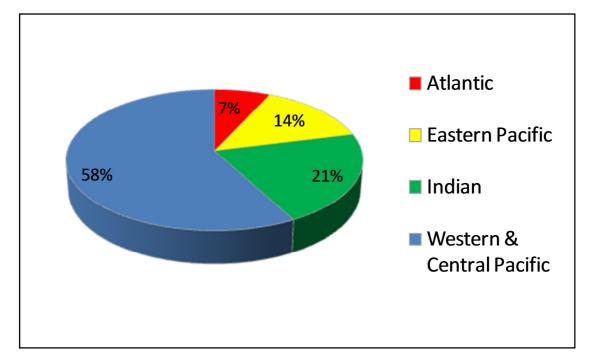


Figure 3.1 WCPO tuna catches compared with other regions

Source: Secretariat of the Pacific Community.

Pacific Islands Forum Fisheries Agency (FFA)

- 3.9 The South Pacific Forum Fisheries Agency Convention, signed on 10 July 1979, established the Pacific Islands Forum Fisheries Agency (FFA). The Convention entered into force on 9 August 1979. Member countries of the FFA include: Australia, Cook Islands, Republic of Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.
- 3.10 The FFA is a regional fisheries body and its principal objective is "to enable member countries to manage, conserve and use the tuna resources in their Exclusive Economic Zones and beyond, through enhancing national capacity and strengthening regional solidarity".

3.11 The main functions of the FFA are to:

- collect, analyse, evaluate and disseminate to parties relevant statistical and biological information for the living marine resources of the region and in particular the highly migratory species (including tuna);
- collect and disseminate to parties relevant information on prices, shipping, processing and marketing of fish and fish products;
- provide, on request, to any party technical advice and information, assistance in the
 development of fisheries policies and negotiations, and assistance in the issue of
 licences, the collection of fees or in matters pertaining to surveillance and
 enforcement; and
- seek to establish working arrangements with relevant regional and international organisations, particularly the South Pacific Commission.

3.12 Currently, FFA focuses its work on:

- fisheries management providing policy and legal frameworks for the sustainable management of tuna;
- fisheries development developing the capacity of members to sustainably harvest, process and market tuna to create livelihoods; and
- fisheries operations supporting monitoring, control and surveillance of fisheries as well as treaty administration, information technology and vessel registration and monitoring.

Sub-regional Governance Arrangements

Parties to the Nauru Agreement

- 3.13 Since 1992 the countries of Solomon Islands, Tuvalu, Kiribati, Marshall Islands, Papua New Guinea, Nauru, Federated States of Micronesia (FSM) and Palau, [commonly referred to as the Parties to the Nauru Agreement (PNA)] have worked collaboratively to manage the tuna stocks within their national waters. These Pacific island states collectively account for a significant bulk of the region's tuna catch and 58 per cent of the purse seine catch. The collaborative arrangement under which these countries have worked is the "Palau Arrangement for the Management of the Western and Central Pacific Purse Seine Fishery" or the Palau Arrangement. This arrangement is a multilateral treaty governing the operation of purse seine vessels in the national waters of PNA members. Its primary purpose is to limit the number of vessels operating in the waters of the PNA. PNA decision-making is based on consensus. The PNA Secretariat, located in the Marshall Islands, has an extensive consultative process among PNA members and supports meetings at technical, official and ministerial level, with regular meetings at leaders' level.
- 3.14 In 2011, PNA members decided to apply a minimum benchmark fee of US\$5 000 a day for foreign fishing vessels from 1 January 2012. The application of the minimum benchmark fee across the PNA region significantly transformed the value of the fishery, in particular, purse seine access. A memorandum of understanding (MoU) stipulating a minimum benchmark fee of US\$5 000, was signed by the majority of PNA members. This action means that the value of the purse seine fishery has increased to around US\$142 million from an historic value placed on foreign access estimated at US\$80 million. This is around 45 per cent increase in economic returns to PNA members. It is worthwhile noting that this is based on estimates of 28 469 parties allowable effort (PAE) or fishing days sold at the minimum benchmark fee. The strategic significance of the MoU is that it avoids fishing fleets playing one party off against another and transfers the burden to fishing fleets to compete amongst themselves for access to allowable fishing days.
- 3.15 The Nauru Agreement is implemented through binding implementing arrangements and associated arrangements, which include:
 - **1st Implementing Arrangement, 1983**, setting minimum licensing standards, including reporting, inspection and onboard observation, vessel identification and "good standing" on the FFA regional register;
 - 2nd Implementing Arrangement, 1990, adding additional conditions relating to the vessel monitoring scheme (VMS), high seas reporting and a prohibition on transhipment at sea;
 - Palau Arrangement, 1995, limiting the purse seine fishery, initially by limiting vessel numbers, but now through the vessel day scheme (VDS) which is described separately in more detail below;

- FSM Arrangement: 1994, establishing arrangements for preferential access among the parties for vessels meeting certain standards for the provision of domestic economic benefits; and
- 3rd Implementing Arrangement (3IA) 2008, applying a fish aggregating device (FAD) closure, 100% observer coverage and catch retention/no tuna discards in PNA EEZs, and prohibition of fishing in high seas pockets for licensed vessels.
- 3.16 Figure 3.2 indicates where PNA members are located with the WCPO.

Marshall Islands

Mircronesia

Palau

Papua New
Guinea

Solomon Islands

Kiribati

Tuvalu

Kiribati

Figure 3.2 The PNA geographical area

The vessel day scheme

- 3.17 The vessel day scheme (VDS) is the mechanism used by PNA to manage purse seine fishing effort sustainably within PNA waters. It is a scheme where vessel owners can purchase and trade days fishing at sea in waters subject to the Parties to the Nauru Agreement (PNA) and is the key PNA conservation measure.
- 3.18 The purpose of the VDS is to constrain and reduce catches of target tuna species, and increase the rate of return from fishing activities through access fees paid by distant water fishing nations (DWFNs). The total allocation of fishing days is set and apportioned between PNA members for one-year periods up to three years in advance. The VDS was originally designed to conserve the target stocks (skipjack and especially yellow fin) and enhance the value of the purse seine fishery. Currently however, it is an important element of the WCPFC measures to conserve bigeye tuna, which are currently overfished.
- 3.19 The parties set the total allowable effort (TAE) in fishing days for each management year (calendar year) and then allocate fishing days to each member (party allowable effort (PAEs)). These limits are based on historical fishing effort, the latest scientific advice on the health of the tuna stocks provided by the Secretariat of the Pacific Community (SPC) and conservation and management objectives set by the WCPFC. For management year 2011, 28 469 days was the TAE set for PNA members. This equated to the following party allowable effort (PAEs) for individual members: FSM -5 552; Kiribati -5 450; Marshall Islands -2 234; Nauru -1 653; Palau -514; PNG -10 073; Solomon Islands -2 146 and Tuvalu -877.

3.20 The 3rd implementing agreement requires that:

To enforce the hard limit of 28,469 days, each Party must ensure that its agreed respective PAE is not exceeded by enabling the transfer/trading of days from other Parties, which have surplus days available for transfer/trading. Where the Party has reached its PAE, it must either buy surplus days from another Party or close off its EEZ to foreign fishing vessels under bilateral access agreements.

3.21 In order to assess the overall effectiveness of fisheries management arrangements, PNA arrangements in PNA member states participating in this audit were examined. Where relevant, they are reported in this regional overview report.

Te Vaka Moana Agreement (TVMA)

- 3.21 The Te Vaka Moana Arrangement provides for a closer co-operation between the Cook Islands, New Zealand, Niue, Samoa, Tokelau and Tonga fisheries industries. Group members currently share EEZ boundaries and the arrangement aims to strengthen the cooperative work already underway. The group is chaired by the Cook Islands.
- 3.22 For the past two years Polynesian countries (specifically Cook Islands, New Zealand, Niue, Samoa, Tokelau and Tonga) have been working together closely to identify fisheries management and development options that will result in greater long term sustainable economic returns from their fisheries. Meetings at ministerial and official level have recognised and demonstrated the value of closer cooperation within the sub-region. Examples of work to date include the development of peer-to-peer networks, mentoring, assisting with strategic planning, policy development and strengthened sub-regional monitoring, control and surveillance (MCS) activities, such as providing assistance to one another with illegal fishing cases.
- 3.23 This increased cooperation on fisheries issues culminated in the heads of each fishery's administration finalising and signing the Te Vaka Moana Arrangement (TVMA) in January 2010. TVMA provides a foundation to design and implement initiatives to improve collaboration in a range of fisheries sectors.
- 3.24 These include: fisheries management, science, industry cooperation, and monitoring control and surveillance. Specific projects include the development of a subsidiary arrangement under the Niue Treaty on Surveillance and Law Enforcement and the progression of a Polynesian Fisheries Development Package. NZ officials are developing a concept note that will guide program design on a program of support for TVMA initiatives.

US multilateral treaty (USMLT)

- 3.25 The US Multilateral Treaty on Fisheries between Certain Governments of the Pacific Island States and the Government of the United States of America is commonly referred to as the "US Treaty". The US Treaty first started in 1987 and has been renewed on two occasions, with the last renewal in 2003 and is due to run for 10 years until 2013. The US Treaty enables US purse seine fishing vessels to fish in the waters of the 16 Pacific island parties, which are: Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
- 3.26 The withdrawal of Papua New Guinea from the Treaty in 2012 prompted the renegotiation of the Treaty prior to its due date.
- 3.27 PNA members have identified the need to bring the US Treaty fishing effort into the

scope of the vessel day scheme so as not to diminish the latter's effectiveness. These negotiations are currently underway.

The Secretariat of the Pacific Community (SPC)

- 3.28 With its headquarters in Noumea, New Caledonia, the Secretariat of the Pacific Community (SPC) is an intergovernmental organisation that provides technical and policy advice and assistance to its Pacific island members. SPC has 26 member countries and territories, including American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji Islands, France, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, United States of America, Vanuatu and Wallis and Futuna.
- 3.29 The SPC vision for the region is a secure and prosperous Pacific Community, whose people are educated and healthy and manage their resources in an economically, environmentally and socially sustainable way.
- 3.30 The SPC mission is to help Pacific island people position themselves effectively to respond to the challenges they face and make informed decisions about their future and the future they wish to leave for the generations that follow.
- 3.31 One of SPC's Divisions is the Fisheries, Aquaculture and Marine Ecosystems (FAME) Division, which includes the coastal fisheries and oceanic fisheries programmes. The Oceanic Fisheries Programme (OFP) aims "to provide member countries with the scientific information and advice necessary to rationally manage fisheries exploiting the region's resources of tuna, billfish and related species".
- 3.32 The FAME Division Strategic Plan (2010-2013) addresses three priority areas in ways that are designed to be closely coordinated with, and contribute to WCPFC-level research outcomes:
 - to provide high-quality scientific information and advice for regional and national fisheries management authorities on the status of, and fishery impacts on, stocks targeted or otherwise impacted by regional oceanic fisheries;
 - to collect and analyse accurate and comprehensive scientific data for regional and national fisheries management authorities on fisheries targeting the region's resources of tuna, billfish and other oceanic species; and
 - to improve understanding of pelagic ecosystems in the Western and Central Pacific Ocean.
- 3.33 The building of national capacity to monitor fisheries, manage data, provide technical support to fisheries management and participate meaningfully in regional management discussions is a crosscutting priority for the SPC. This is also a key focus of this regional audit.
- 3.34 Within these priority areas, data and scientific services are provided to PNA as SPC Members and also to the WCPFC, including:
 - core scientific services in stock assessment, evaluation of management options and measures, data management; and
 - implementation of projects regarding estimation of purse seine species composition, bigeye tuna biology, tuna tagging, and others.

Regional Monitoring, Control and Surveillance (MCS) Measures

Nuie agreement on cooperation in fisheries surveillance and law enforcement in the south Pacific region

- 3.35 The Niue Treaty is an agreement on cooperation between FFA members on the monitoring, control and surveillance of fishing operations within the EEZs of FFA members. It was signed on 9 July 1992.
- 3.36 The Niue Treaty includes provisions for common conditions for access, information exchange, and cooperation in enforcement (including provisions for patrols to extend into the waters of another party, sharing of personnel/means of surveillance), cooperation in prosecutions and the enforcement of penalties, and the transparency of penalty schedules across the region. Joint patrolling and enforcement activities are undertaken (e.g. Operation Bigeye between Palau, FSM and the Marshall Islands has been operational since the early 2000s; Operation Island Chief² between Papua New Guinea, FSM, Palau, Marshall Islands, Nauru, Kiribati and the United States of America and other similar joint MCS projects). FFA maintains databases on the regional vessel monitoring system (VMS), licensing, vessel register, violations and prosecutions. France, US, Australia, and New Zealand provide overflight surveillance.
- 3.37 MCS capacity varies in the WCPO area. The region has a network of PPBs (Pacific patrol boats), supplied with the support of the Australian Government. MCS capacity is generally acknowledged to be moderate to good.
- 3.38 An assessment of compliance risks throughout the WCPO fleet was undertaken in 2009. Specific compliance risks identified within the region include:
 - under reporting of catches in vessel logs or weekly reports. Historically 31 per cent of purse seiners would under report, even when observers were on on-board;
 - under-reporting of by-catches;
 - · failure to inspect vessels on landing;
 - landings into foreign ports;
 - failure to implement pre-fishing inspections to check licence and other details (e.g. ships master);
 - high observer turnover;
 - observer reports of violations not acted upon;
 - weaknesses in implementation of fisheries violations in some countries; and
 - weak system of information exchange and data base management.

Vessel monitoring system (VMS)

3.39 FFA's vessel monitoring system (VMS) allows FFA members to track and monitor fishing activities across the region. Based at the FFA's regional headquarters in Honiara, Solomon Islands, but accessible to all FFA member countries, this satellite-based system monitors the position, speed and direction of registered fishing vessels. This improves the effectiveness of vessel surveillance, because if the VMS of one FFA country is down, another FFA member country may assist in reporting and monitoring illegal fishing operations. For instance, if Tuvalu was having trouble with its VMS system, Nauru could inform Tuvalu if there were illegal fishing activities detected in Tuvalu's waters. The VMS is one of the measures set out under the Niue Treaty to combat illegal fishing.

² http://www.ffa.int/operation_island_chief_2010

- 3.40 In order to be granted a licence to fish in the waters of a FFA member, every foreign vessel needs to have a VMS system (automatic location communicator) fitted to their vessel. If a licensed vessel was found with its VMS system turned off, the vessel would be fined in accordance with the laws of that particular Pacific island state.
- 3.41 FFA and its members acknowledge that there are weaknesses in systems of information exchange and database management. Because of this, a core component of the FFA MCS strategy is to strengthen information exchange amongst FFA members. For this reason, an important focus of the FFA MCS strategy is to support measures to enhance information management and analysis at the national and regional levels. Improved information management systems need to be supported by improved analytical capability at both levels. Strengthened information management systems should allow for the routine cross-referencing of different data sources (e.g. VMS, logbooks, observer reports, port inspections, etc.) to verify compliance, as well as better support exchange of information under current and future agreements (e.g. the Niue Treaty).
- 3.42 The quality and availability of information for national fisheries authorities, which were the subject of this audit, were examined during it.

Types of Fishing Gear Used in the WCPO, including Fish Aggregating Devices (FADs)

Types of fishing gear used in the WCPO

3.43 There are principally three types of fishing gear used in the WCPO to catch tuna: the purse seine method, pole and line, and long line. Figure 3.3 illustrates the historical catch of tuna using these three methods. As can be seen in this Figure, there has been a demonstrable growth in the share of catch by purse seine fishing vessels over the last 20 years.

2,800,000 ■ PURSE SEINE OTHER 2,400,000 ■ POLE-AND-LINE 2,000,000 ■ LONGLINE 1,600,000 1,200,000 800,000 400,000 1968 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994

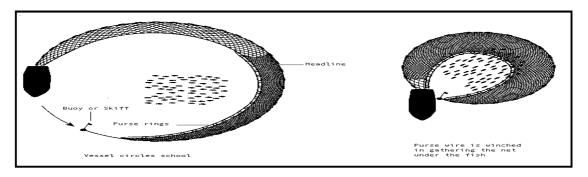
Figure 3.3 Comparative tuna catches by fishing method

Source: SPC.

Purse seine fishing method

3.44 The purse seine method of fishing involves the vessels encircling a school of fish with a large 'wall' or net, which is then brought together to retain the fish by using a line at the bottom that enables the net to be closed like a purse. Figure 3.4 below illustrates this type of fishing method.

Figure 3.4 The purse seine fishing method



Source: SPC.

Pole and line

3.45 Pole-and-line, or 'bait-boat' fishing, attracts schools of surface fish to the vessel, where they are driven into a 'feeding frenzy' by throwing live or dead bait into the water and spraying water onto the sea surface to simulate the escape of small prey. Lines are used to hook the fish, which are then pulled on board by manual or powered devices. On these vessels, used primarily for catching skipjack tuna, the fishermen stand at the railing or on special platforms, and fish with poles and lines. See the figure below for an illustration.

Figure 3.5 The pole and line fishing method

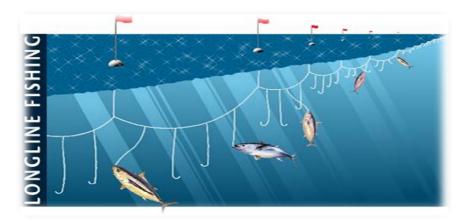


Source: SPC.

Longline

3.46 The longline method of fishing involves a fishing vessel using a long line, which has many short lines (called snoods) carrying baited hooks attached. The snoods are attached at regular intervals to a longer main line that is laid on the bottom of the ocean or is suspended horizontally with the help of surface floats. Main lines can be over 100km long and can carry several thousand hooks. See the figure below for an illustration.

Figure 3.6 The longline fishing method



Source: SPC.

Fish aggregating devices (FADs)

- 3.47 Marine life is attracted to floating objects, and FADs are designed to mimic this effect for gathering or aggregating fish. They can be pieces of wood tied together and weighted or sophisticated steel structures, anchored to the sea floor and fitted with electronic monitoring equipment that can transmit detailed information to fishing vessels by radio, including water temperature and quantity of fish in the vicinity. See figure 3.7 for an illustration of a type of FAD used.
- 3.48 In terms of sustainability of tuna resources, the use of FADs has become a concern especially where purse seine fishing vessels are involved. This is because most of the attracted species are juvenile tuna and other juvenile species.³ As such, it is more likely that catches at FADs will be juvenile marine species and other non-target species (by-catch) such as dolphins and sharks.⁴
- 3.49 The 3rd Implementing Arrangement Regulation 2009 set by PNA aimed to minimise fishing using FADs. In the 3rd Implementing Arrangement Regulation 2009, it was agreed by the PNA to close FAD fishing for a period of 3 months (between 1 July and 30 September each year). Any fishing vessel caught breaching this arrangement would be fined accordingly.

Figure 3.7 Type of fish aggregating devices (FADs)



Source: SPC.

³ International Greenpeace Views paper 2010.

⁴ ibid.

4. Main Findings against Each Line of Enquiry

The part presents overview findings against each line of enquiry (LOE). They are supplemented by good practice examples identified during the individual country/state audits and also some of the key messages from these individual audits.

Line of Enquiry 1: Management of the Fishery is Planned

- 4.1 This line of enquiry (LOE) is concerned with the tuna fishery management practices adopted by the individual Pacific island states, which are subject to this audit. Of particular interest, is the alignment of these laws, strategies and policies with international and regional obligations. These obligations are derived from:
 - the United Nations Convention on the Law of the Sea (UNCLOS) 1982;
 - the Convention for the Conservation and Management of Highly Migratory Fish Stocks 2004; and
 - the South Pacific Forum Fisheries Agency Convention, 1979.
- 4.2 At the subregional level, there are additional requirements concerning monitoring, control and surveillance measures and data sharing requirements. As well, signatories to the Parties to the Nauru Agreement (PNA) are obliged to cooperate with each other through binding implementing arrangements and associated arrangements.
- 4.3 It is important that this array of obligations and responsibilities are expressed in country legislation and tuna management practices and updated regularly to maintain their currency. The legal framework also sets the parameters for the administration, measurement, and enforcement of the goals and objectives of the fishery.
- 4.4 Because of the requirement to translate international and regional obligations into national systems, individual audit teams examined the degree to which these were expressed in legislation, strategies, and management plans in the countries audited.
- 4.5 Table 4.1 sets outs the national legislation, policies and plans in place concerning the sustainable management of the tuna fishery in the nine audited Pacific island states.

Table 4.1: Management of the fishery is planned

SAI	National fisheries law and/or policy	Law/policy aligns with international and regional obligations, including surveillance	National fisheries management authority exists	If more than one agency has fisheries management responsibilities, coordination mechanism in place	Fisheries authority has a tuna management plan (TMP)	TMP is current and regularly reviewed	TMP contains objectives, strategies and performance measures	TMP contains: 1. conservation measures; 2.training/employment measures; 3. monitoring, control and surveillance measures	Fisheries authority has internal policies and procedures to guide tuna fisheries management actions
PICT 1	Yes	Yes	Yes	Multiple agencies involved, no coordination mechanism	Yes	Yes reviewed bi-annually.	Yes	1. Yes 2. No 3. Yes	Yes
FSM	Yes	No	Yes	Yes	Yes, but it is obsolete	No	No, the one that is being developed has performance measures.	Yes, all of the above.	No
Fiji	Yes	No, However draft Decree does.	Yes	No	Not current	No	Yes, under 2nd TMP 2006-2010	Yes, under 2nd TMP 2006- 2010	Yes
PICT 2	Yes	Yes	Yes	One agency is responsible for everything	No, still in draft	No, still in draft	No	No	No

Palau	Yes	Yes	Yes	Yes	Yes	No	contains	1. Yes, 2. Yes and 3. Palau	No
i didd	163	103	103	103	103	NO	objectives and	has a monitoring and	140
							-	_	
							strategies, but	surveillance measure	
							no performance	although it is not in the TMP	
							measures		
Samoa	Yes	No	No, a Fisheries	Yes	Yes	No.	TMP contains	Yes	Yes
			Division under				objectives and		
			Ministry of				strategies, but		
			Agriculture and				no performance		
			Fisheries (MAF)				measures.		
			,						
Solomon	Yes	No, not all but	Yes	Yes	Yes	No	No	Yes for all 3 items	Yes
Islands		some							
Tonga	Yes	Yes	Yes	Only one agency has	TMP first	TMP first	Yes, has	Yes	No
				fisheries	drafted in 2001,	drafted in	objectives and		
				management	revised in 2010	2001,	strategies but		
				responsibility.	but still not	revised in	no performance		
					finalised and	2010 but	measures.		
					adopted.	still not			
						finalised	·		
						and			
						adopted.			
						auopteu.			
Tuvalu	Yes	Yes	Yes	Yes	Yes	Yes, but	Yes	Yes for all 3 items	Yes
						not yet			
						adopted			

Source: Individual SAI audit reports.

Legal framework

- 4.6 It is positive to note that in each jurisdiction audited there is a legal framework to guide administrators who are responsible for sustainably managing the country's tuna fishery. Five of the nine audited country reports also indicate that there is alignment between the national legal framework and international and regional obligations, including surveillance. It is important that legal frameworks are regularly reviewed and updated to ensure this level of compliance is maintained. Where audit reports identified deficits in this area, recommendations were made to rectify these anomalies.
- 4.7 For example, the Solomon Islands audit report recommended that:
 - the (new Fisheries) Bill should address matters including Solomon Islands subregional, regional and international fishing industry obligations and the support structure to assist the Ministry to meet its obligations.

Co-ordination arrangements between responsible agencies

- 4.8 While each of the audited jurisdictions has an agency to administer and manage fishery arrangements, seven of the nine audits reported that, where there are multiple agencies with fishery management responsibilities, there was a co-ordination arrangement in place. This result indicates improvements are required, especially where there is a need to share information on a timely basis to expedite appropriate monitoring, control and surveillance responses to illegal, unreported and unregulated (IUU) fishing practices.
- 4.9 The Samoa audit reported on a Cabinet sanctioned Committee that was established to address development and management issues related to sustainable fishing within Samoa's EEZ. This Committee includes all relevant fishery stakeholders as well as the Police Maritime Unit responsible for surveillance activities. Such a Committee arrangement provides an administrative mechanism for the exchange of information on a timely basis.

Planning – tuna management plans (TMPs)

- 4.10 The Pacific Islands Forum Fisheries Agency (FFA) was established by the *South Pacific Forum Fisheries Agency Convention*. The FFA is a regional fisheries body and its principal objective is "to enable member countries to manage, conserve and use the tuna resources in their Exclusive Economic Zones and beyond, through enhancing national capacity and strengthening regional solidarity". To this effect, through the Regional Tuna Management Development Strategy, 2009-2014, it encourages FFA members to implement national fisheries management plans based on national tuna fisheries status reports. Pacific island country audits sought to test the take-up and implementation of tuna management plans within their jurisdictions.
- 4.11 Only five of the nine Pacific island audits reported that a tuna management plan (TMP) was in place. Others reported that it was either not current, obsolete or was in draft form. This is not a good result as a key function of an operational TMP is to identify and manage risks to the sustainability of tuna stocks through placing limits on the number and types of licences issued to fishing vessels.
- 4.12 Of those TMPs that were in place:
 - only one was reviewed and updated regularly;
 - two had objectives, strategies and performance measures to assess effectiveness;

- however, two that were in draft form included measures to assess the performance of the TMP.
- 4.13 All five operational TMPs included conservation measures, training and employment measures and monitoring, control and surveillance measures. Where TMPs are in place, the level of guidance they provide to the administration of sustainable fishing practices seems to be sufficient. However, in the absence of TMPs, it is difficult to assure governments and stakeholders that their tuna resources are being well managed.

Internal administrative guidance

- 4.14 Another useful administrative tool to provide guidance for staff within the fishery authority to sustainably manage the tuna fishery is the use of internal policies and procedures. Only five of the nine country audits reported that these were in place. This is a poor result.
- 4.15 The FSM audit reported that there were no written internal policies and procedures in place to guide staff charged with performing their required tasks. As a result, Board members, management and staff may not have the proper guidance in order to efficiently and effectively carry out their duties and responsibilities due to the lack of an approved operating manual. These weaknesses could potentially affect the authority's ability to effectively and efficiently manage the tuna fishery resources. The audit recommended that this oversight be remedied.

PNA requirements

4.16 The audit offices of PNA members, which were part of the audit, reported that the requirements of PNA were adopted in fisheries management policy and that compliance was monitored. This goes towards ensuring the effectiveness of the PNA sub-regional arrangement to sustainably manage the purse seine fishing effort by Distant Water Fishing Nations.

Individual SAI recommendations concerning LOE 1

The following table presents the focus of recommendations made by individual SAIs to improve performance in these areas.

Table 4.2 – The focus of individual SAI recommendations relating to LOE 1

SAI	Recommendation focus
FSM (National Office)	Rec 1 – sought an update of the FSM tuna management plan including that performance measures be developed related to achieving international and regional objectives. Rec 2 – focused on updating the legal framework to manage the fishery to ensure compliance with the FSM national code and that operational policies and procedures are developed and adopted to guide decision-making. Rec 3 – sought to enhance the operation of the Fisheries Management and Surveillance Working Group including regular reporting of their fisheries monitoring, control and surveillance activities.
Fiji	Processed on broad ranging improvements to the legal framework including: Processed on broad ranging improvements to the legal framework including: Processed on broad ranging improvements to the legal framework including: Processed on broad ranging improvements Management Decree; Provided and update of tuna management plan and total allowable catch; Formalise arrangements with Fiji Navy and Police to define responsibilities and ensure effective surveillance of Fiji's EEZ; Work with stakeholders to have Fiji's tuna products internationally accredited; Secure additional staff to comply with regional requirements.
Palau	Rec 1 – sought that a regulation be passed to supplement the management framework of offshore fishing especially with regard to catch limits. Rec 2 – sought to improve the performance of the Palau Fisheries Advisory Committee so that it would perform its duties as required by Palau law. Rec 3 – clarify for staff the management arrangements of the responsible fishery agency and ensure efforts with the enforcement agency are properly coordinated. Rec 4 – focused on updating the Palau Tuna Management Plan and that regular assessments of its implementation are conducted. Rec 5 – focused on improved monitoring arrangements to support compliance with regional fisheries agreements and also with the terms and conditions of the fishing treaties that Palau is a party to. Rec 6 – sought an increase in and improvement to the number and process of vessel inspections when catches are unloaded at port. Rec 7 – recommended that a policy framework be established to regulate and provide guidance on the enforcement of the law concerning tuna fisheries in Palau. This framework will align with regional and international obligations and also set uniform fines and penalties for illegal fishing activities. Rec 8 – recommended that annual consultations with fishing companies as required by fishing agreements occur and that Palau's interests are promoted and protected during this process.

Samoa	Rec 1 - sought a review of the Act to ensure compliance with international and regional obligations.
	Rec 2 – include KPIs in the TMDP to enable monitoring of its performance over time.
Solomon Islands	Rec 1 – finalise new Fisheries Act as a matter of priority.
	Rec 2 – finalise and adopt new tuna management plan to ensure compliance with regional and international obligations.
	Rec 3 – focused on improved MCS activities in the SI EEZ, including:
	 recovery of outstanding fines for illegal fishing activities;
	 assess effectiveness of SI's MCS activities; implement Ministry's corporate plan concerning enforcement of SI fisheries laws.
Tonga	Recs 1-6 - sought improvements in the legal and policy framework including, alignment with international and regional obligations, an improved Tuna Consultative Committee and a review and update of the TMDP.
Tuvalu	Rec 1 - focused on compliance with PNA requirements through a specific regulation.
	Recs 2-5 - focused on development and implementation of planning processes and related staff training.
	Rec 6 – focused on alignment with regional conservation and management measures for tuna stock.
	Recs 7-10 - sought improvements in monitoring, control and surveillance arrangements.
	Recs 11-12 - focused on better reconciliation of fines imposed for unlawful fishing activities

Source: Individual SAI audit reports

Conclusion for LOE 1

4.17 Overall, the cross-audit results indicate that more attention needs to be paid to ensuring that the legal framework is regularly reviewed and updated to ensure compliance with international and regional obligations. Furthermore, while government objectives are set out in legislation, these need to be reflected in sector planning arrangements such as tuna management plans. These plans are important to guide implementation and monitor of fishing operations within country EEZs to promote the sustainability of tuna resources.

Line of Enquiry 2: Economic Returns are Appropriate.

- 4.18 The *United Nations Convention on the Law of the Sea* (UNCLOS) 1982 provides that where a country does not have the capability to fish the resources within their EEZ, they can enter into an agreement with other nations to harvest surplus fish stocks. This mechanism provides the legal framework to allow fishing vessels from Distant Water Fishing Nations (DWFNs) to fish in the EEZs of countries in the Western and Central Pacific Ocean through what is generally termed an 'access agreement'.
- 4.19 The contribution of offshore fisheries (in particular the tuna fishery) to the gross domestic product (GDP) of Pacific island countries is considerable. For example, the Tuvalu audit report estimated that for the past ten years, the Tuvalu fishery has contributed between 6 and 7 per cent of Tuvalu's total GDP and the FSM report identified that returns from fishing activities represent the second largest return to the national accounts of FSM.

Gillett estimates that access fees received by Pacific island countries under 'access agreements' were USD78.5 million in 2007, an increase of about 25 per cent over 1999. Access fees fluctuate widely from year to year because of changing fishing patterns, fleet movements and exchange rates. Fees also vary in terms of their proportion of the catch value of the foreign fleets. Access agreements with DWFNs enable Pacific island fishing authorities to decide the number of fishing licences issued on an annual basis, the annual catch and set out a regulatory framework including stock conservation measures.

- 4.20 Pacific island regional fisheries stakeholders have expressed concern about the lack of transparency in fisheries access and licensing arrangements. The paucity of data available in the public domain on access fee receipts raised concerns about whether or not Pacific island countries were receiving a fair and reasonable economic return from agreements with DWFNs, especially those using the fast and efficient purse seine method of catch.
- 4.21 For these reasons, Pacific auditors-general decided to examine access agreement arrangements within their jurisdictions. Table 4.3 provides this high level examination. This examination includes a number of countries that are Parties to the Nauru Agreement (PNA). This sub-regional agreement has seen PNA members apply a minimum benchmark fee of US\$5 000 a day for foreign fishing vessels from 1 January 2012, with a cap on the number of fishing days set amongst PNA members. This arrangement potentially supersedes the need for access agreements. PNA member countries involved in this audit include: FSM, PICT 2, Palau, Solomon Islands and Tuvalu. As this approach to setting minimum fees for catch effort is relatively new, most of the countries audited have transitional arrangements in place.

⁵ Asian Development Bank, Fisheries in the Economies of the Pacific Islands Countries and Territories, 2009, p. xxvi.

Table 4.3: Economic returns are appropriate.

SAI	1. National framework outlines conditions for access agreements 2. How many agreements are there?	Access agreement negotiators use reliable, local information in negotiation process	Access agreements use a compensation formula, based on realistic regional tuna prices	Additional revenue generation initiatives exist, e.g. export tax on fish landed and transhipped	Revenue from access agreements and licences properly recorded and accounted for	Catch limit set in access agreements and/or licences are based on latest scientific tuna stock assessment data	Access agreements and/or licences specify type of fishing gear	Access agreements and/or licences specify catch monitoring arrangements, e.g. observers on board, use of vessel catch data and port sampling data	Permits for licensing fishing vessels comply with regional requirements (checklist used)
PICT 1	1.Yes 2. Information not provided.	Unclear what information is used.	Unclear how price is determined.	Yes	Yes	Yes, catch limits set but uncertain if this is based on the latest scientific data	Yes	Licences – Yes	2004 checklist is used but unsure if it is complies with regional requirements.
FSM	1. Yes 2. 20 access agreements in FY 2011	No standard guideline used during negotiation	FSM uses Bangkok tuna prices except for the Japanese vessels, which use Yazu prices	Yes, transhipment fee applies, also taxes on wages and salaries for work at a processing plant.	No	No catch limit in the FSM	Yes	Yes	Yes

Fiji	1.No	N/A	N/A	Yes	Yes	Yes, however	Yes	Yes	Yes
	2					catch limit of			
	2. one access					15,000mt has			
	agreement with					remained the			
	Japan. Last used in					same since 2002			
	2007.								
PICT 2	1.Yes	No	Information not	No	Yes	No	No	Yes	Yes
	2. numbers not		available						
	available								
Palau	1. No	No	No	Yes	Yes	No	Yes	Yes	Yes, but was not used
Palau	1. NO	INO	NO	res	res	INO	res	res	res, but was not used
	2. Two								
Samoa	1. yes	N/A	N/A	Yes,	Yes, revenue	Caps on vessel	N/A	N/A	Yes
				Transhipment	from licence	size that can be			
	2. pending access			Fees	fees are	licensed, except			
	agreements with				properly	for smallest			
	Tonga & Tokelau				recorded.	ones.			
Solomon	1. Yes	Yes	Purse Seine VDS	Yes	No	Yes for purse	Yes	Yes	Yes
	2. Nine bilateral		agreement			seine vessels,			
Islands	agreements		standardises			longline in			
			pricing			2013-14			
Tonga	1. No	No access	N/A	N/A	N/A	No	Yes	Yes	Yes
. 5.1.50	20	agreements		,	,				
	2. No								
Tuvalu	1. Yes	No	Prices are based on	Fishing agents	No	Yes	Yes	Yes	Yes
	2. Twelve		regional advice	provide					
				employment					
	had CAL and the area arts								

Source: Individual SAI audit reports.

Access agreement negotiations

- 4.22 Of the six audited Pacific island countries where the national fishery framework specifies conditions attached to access agreements, only four audit offices were provided with details of these agreements by the relevant fisheries authority. The exceptions were PICT 1 and PICT 2.
- 4.23 Of concern is the lack of reliable local information used by negotiators when negotiating access agreements, with only one audit report, the Solomon Islands, indicating that local information was used in the process. Only two countries, the Solomon Islands and Tuvalu, reported that compensation was based on realistic regional tuna prices. It is worthwhile noting that both countries are PNA members. This result reinforces concerns expressed by regional fisheries stakeholders about the lack of transparency attached to the negotiation process, the content of the agreements and the economic return from tuna catches. During fieldwork, a number of audit teams found that the terms and conditions of access agreements were often dictated by the DWFN.
- 4.24 On a more positive note, seven audits reported that additional revenue generation initiatives were in place, mostly attached to the payment of transhipment fees and taxes paid on the wages of workers employed in tuna processing or other port handling activities. The Fiji audit reported that jobs directly related to fisheries represent about 3.8% of the total number of jobs in Fiji (wage, salaried and self-employed). An important component of fisheries employment in Fiji is those jobs related to offshore fishing. This included employment on fishing vessels as well as onshore tuna processing facilities.

Access agreement and licensing revenue is properly recorded and accounted for

- 4.25 In all the Pacific island states audited, the national fishery authority is responsible for negotiating prices for access agreements and consequently the price of licences issued to individual fishing vessels. Each national fishery authority holds these data. DWFNs and their commercial fishing fleets make payment to the general revenue account of the relevant Pacific island state. For this reason, it is important that there is close communication between both agencies and that regular reconciliations take place.
- 4.26 Sound accounting practices require that all transactions be properly recorded in the national books of accounts and reported to the public by means of financial statements. Of the eight audits where revenue collection processes were examined for access agreements and licences, three audits reported that this revenue was not properly recorded or accounted for.
- 4.27 The FSM audit uncovered that there was no monthly bank reconciliation process in place to provide assurance that fishing rights fees received under the access agreement with their main DWFN were correct and paid in a timely manner. In addition, wire transfer payments from some foreign fishing companies receipted at the FSM National Treasury were consistently less than the amounts contained in the fishing authority's records. The audit recommended that the national fishery authority and the Department of Finance & Administration reconcile, on a monthly basis, the bank accounts involved to ensure the accuracy of the collection and recording of all foreign fishing rights fees.
- 4.28 The Tuvalu audit revealed that there is no formal reconciliation process to ensure that payment has been made. The Treasury Department in the Government of Tuvalu receipts the payments. However, there was no formal process to notify the national fishery authority that the payment had been received or the amount of the payment. Consequently,

the audit recommended that reconciliation of the total amount of fishing revenue identified in the records of the national fishery authority to the actual cash received by the Treasury is performed on a monthly basis and the process is formally documented.

4.29 Under the US Multilateral Treaty between the US Government and Certain Pacific Island Countries, access fees are paid to participating Pacific island countries enabling the US fishing fleet to fish in their EEZs. As part of this arrangement, the Treaty provides for an annual Project Development Fund (PDF) of around USD 1.8 million. Participating Pacific island countries have equal access to the PDF to undertake projects related to the development of their fisheries. Between fiscal years 2008 and 2011, Palau received around USD 605 000 under this arrangement. The Palau audit found that its fishery agency expended Palau's share of the PDF funds for purposes other than those legally determined under Palau law. The report made a recommendation to rectify this.

Catch limit set in access agreements and/or licences are based on latest scientific tuna stock assessment data

- 4.30 To promote resource sustainability, it is important that Pacific island states safeguard against the risk of overfishing. As noted previously, the SPC has identified that three of the four tuna species are either classified as overfished or at risk of being so. As tuna catches in the Western and Central Pacific Ocean represent more than half (58%) of the world's total catches, it is important Pacific island states take note of the latest scientific tuna information to inform decisions on catch limits and as a result, safeguard this valuable resource.
- 4.31 While catch limits are in place for the majority of Pacific island states involved in this audit, there are notable exceptions. The FSM, PICT 2 and Palau audits reported that no catch limits were in place. However, because these countries are PNA members, it may well be that this PNA requirement (for the purse seine tuna fishery) has not yet been fully implemented in these jurisdictions. It is important that regional and sub-regional stakeholders monitor closely the implementation of conservation and sustainability measures promoted by regional fishery organisations, such as the Western and Central Pacific Fisheries Commission (WCPFC), the FFA and the PNA.

Monitoring of access agreement and licensing conditions

- 4.32 Conservation and management measures contained in the PNA Third Implementing Arrangement highlight the controls that are required by the PNA to minimise by-catch, that is to limit the catch of juvenile stock and/or non-target or protected species such as sharks, dolphins etc. These measures include the prohibition of FADs at certain times, requirements to retain catch, the prohibition on fishing in certain areas of the high seas and requirements for the use of observers on board fishing vessels. These measures reflect those required by the WCPFC.
- 4.33 While it is noteworthy to see that six of the seven relevant audits found that the types of fishing gear are specified in access agreements and/or licensing conditions, it is important that catch monitoring arrangements are in place to ensure these specifications are met. Observer programs, port sampling and analysis of vessel catch data are useful mechanisms to make this assessment. Results of these monitoring arrangements will be

assessed in greater detail under the next line of enquiry.

Permits for licensing fishing vessels to comply with regional requirements

- 4.34 A fishery licence is a permit that allows a vessel of a DWFN to enter and perform fishing activities or other related activities in the EEZs of Pacific island states. Criteria to assess the issuing of fishing licences are typically spelt out in law and in international and regional binding instruments. As a result, it is important that those officials with responsibility for making these decisions are fully acquainted with these legal requirements and adhere to them consistently. A checklist is a useful administrative device for this.
- 4.35 The audits of six of the eight jurisdictions where licences are issued, indicated that checklists were used to guide the issuing of fishing licences. However PICT 1 reported that it was not clear if compliance with international requirements was complete and Palau found that while a checklist was available, it was not used. Conformity with regional FFA obligations is an essential fishery management tool as the FFA holds a list of vessels of 'good standing'. This means that fishing vessels have not engaged in illegal fishing activities and comply with requirements to have an automatic location communicator fitted to their vessel for vessel monitoring purposes. Assessing compliance with these controls is an important management measure.
- 4.36 It is common practice in the Pacific island states that were audited, for a licensing committee to be established to oversee the process and make the final decision. While this is a good practice, reliable records of these decisions need to be held to foster transparency in decision-making and ensure that delegated officials are accountable for the quality of their decisions. Record keeping of licensing decisions was variable across the audits.

Individual SAI recommendations concerning LOE 2

The following table presents the focus of recommendations made by individual SAIs to improve performance in these areas.

Table 4.4 – The focus of individual SAI recommendations relating to LOE 2

SAI	Recommendation focus
FSM (National Office)	Rec 1 – sought improvements in internal accounting practices to ensure the accuracy of the collection and recording of fishing rights fees.
Fiji	Rec 1 – review cap to number of licences issued. Rec 2 – explore opportunities for access agreements with other countries. Recs 3-4 – enhance transparency and accountability around funds received under terms of US MLT.

Palau	Rec 1 – recommended a review of the entire fishing access and permit process to ensure a more equitable economic return to Palau from the sale of this resource. This review would identify direct and indirect economic returns to Palau. Rec 2 – recommends that the responsible agency focuses on improved monitoring arrangements to support compliance with regional fisheries agreements, including the US Multilateral Treaty and that the TUFMAN database record all fishing activities within the Palau EEZ to monitor that Palau receives its appropriate share of access fees. Rec 3 – recommends that the responsible agency ensure that development funds received under the US Multilateral Treaty are used for the purposes specified and in accordance with Palau law. Also that details of this expenditure are reported to Congress on an annual basis, as required by law.
Samoa	Rec 1 – maintain current taxation framework as it is fit for purpose.
	Recs 2 – 3 – better identification of viable funding options to ensure
	development goals of Samoa are met.
	Rec 4 – the progress and status of access agreement negotiations are
	prioritised and progress reported.
Solomon Islands	prioritised and progress reported. Recs 4-6 – focused on putting in place a formal fishing licensing policy that:
Solomon Islands	Recs 4-6 – focused on putting in place a formal fishing licensing policy that:
Solomon Islands	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.;
	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences.
Solomon Islands Tonga	Recs 4-6 – focused on putting in place a formal fishing licensing policy that: • meets regional obligations (PNA); • ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.;
	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a
	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga.
	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use
Tonga	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use of revenue from US MLT to revitalise tuna industry in Tonga.
Tonga	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use of revenue from US MLT to revitalise tuna industry in Tonga. Recs 1-4 sought improved operation of the Access Agreement and Licensing
Tonga	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use of revenue from US MLT to revitalise tuna industry in Tonga. Recs 1-4 sought improved operation of the Access Agreement and Licensing Committee, in a licence review process.
Tonga	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use of revenue from US MLT to revitalise tuna industry in Tonga. Recs 1-4 sought improved operation of the Access Agreement and Licensing Committee, in a licence review process. Recs 5-9 improved compliance with PNA requirements on adherence to PAEs and closure of EEZ once fully utilised.
Tonga	 Recs 4-6 – focused on putting in place a formal fishing licensing policy that: meets regional obligations (PNA); ensures that fishing licences are only issued in accordance with the law and are cross-checked against requirements of other agencies, e.g. seaworthiness etc.; includes procedures for renewal of licences. Rec 1 – a partnership between government and industry to develop a commercial fishing and processing operation in Tonga. Rec 2 – improved administration of fishing licensing arrangements and use of revenue from US MLT to revitalise tuna industry in Tonga. Recs 1-4 sought improved operation of the Access Agreement and Licensing Committee, in a licence review process. Recs 5-9 improved compliance with PNA requirements on adherence to

Source: Individual SAI audit reports

Conclusion

4.37 The negotiation of access agreements with DWFNs still appears to contain an element of secrecy. Given the contribution of this sector to the GDPs of Pacific island states, more needs to be done at a regional and national level to ensure that economic returns are fair and reasonable. Arrangements under the PNA are proactive in this regard and lessons

learned from this experience could be mirrored elsewhere in the region.

- 4.38 Poor accounting practices and lack of co-ordination between national fishery authorities and Treasury offices need to be addressed and automatic system based reconciliation processes established.
- 4.39 While catch limits were specified in most jurisdictions audited, these could be enhanced by consistent regional application to promote sustainability of the tuna fishery in the WCPO.
- 4.40 The issuing of licences to fish in the EEZs of audited jurisdictions, in most instances, would benefit from a more transparent approach to decision-making. This would further support public accountability.

Line of Enquiry 3: Is Decision-making of the Tuna Fishery Informed by Accurate Assessments of the Fishery?

- 4.41 Analysis of accurate, current data is fundamental to effective decision-making. Data gathered through monitoring the health of fish stocks can be used to inform future planning and decision-making at both a regional and Pacific island state level.
- 4.42 The Oceanic Fisheries Program (OFP) of the SPC is the Pacific Community's regional centre for tuna fisheries research, fishery monitoring, stock assessment and data management. The SPC is the scientific services provider and data manager for the Western and Central Pacific Fisheries Commission, the FFA, the PNA and the fisheries administrations of Pacific island states. To assist fisheries administrations in their management role, the Oceanic Fisheries Program has developed a comprehensive, integrated database system called the Tuna Fishery Data Management System (TUFMAN). This database is intended to enable Pacific island fishery agencies to record, analyse and summarise their tuna fishery data for relevant decision-making.
- 4.43 The vessel monitoring system (VMS) operated by the FFA holds information on licensing, vessel registration, violations and prosecutions. It also automatically tracks fishing vessels in the WCPO.
- 4.44 The quality and coverage of information currently available from a range of sources to national fisheries authorities, which were the subject of this audit, were examined during this regional audit.
- 4.45 Table 4.5 compares monitoring arrangements, data management and related issues across the nine audited jurisdictions.

Table 4.5: Monitoring the status of the fishery

SAI	National framework includes a fisheries data management strategy	National framework links national and regional monitoring and reporting requirement	Training for observer program and monitoring of quality of observer data	Fisheries authority uses SPC TUFMAN database and staff trained in its use	Required data is regularly inputted into TUFMAN and is up to date	Fisheries authority uses SPC/WCPFC reports to aid decision making	Fisheries authority reports to stakeholders eg legislature, on regular basis	FFA information on fishing vessels and IUU activities used in decision making on permit issuing or renewal
PICT 1	Yes	Yes	Yes	Yes to both	Yes	Yes	Yes	Yes
FSM	Yes	Yes	Yes	Yes	No, 3 years of backlog in 2011	Yes	No, did not comply with the annual reporting requirement from CY 2005 to CY 2010	Yes
Fiji	Is provided in the TMP but timeframe has expired	Yes	Yes	Yes		No	Yes	Yes
PICT 2	Yes	In place but not effectively implemented	Yes but limited	Yes	No	Irregular	No	Irregular
Palau	Yes	Yes	Yes	Yes TUFMAN is used but staff are not well trained	No	Yes	No	Yes

Samoa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Solomon	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Islands								
Tonga	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Tuvalu	The data management strategy needs improvement	Yes	Yes	Staff are not well trained to fully utilise TUFMAN	No	Yes	No	Yes

Source: Individual SAI audit reports.

National fisheries framework includes a data management strategy

- 4.46 Eight of the nine audited Pacific island states reported that a fisheries data management strategy was in place. Fiji noted that its expired TMP contained one. As well, Tuvalu reported that its strategy needed improvement.
- 4.47 All audits reported that there were links between national and regional monitoring and reporting. This is a good result for regional collaboration and information sharing.

The observer program

- 4.48 The observer program is conducted under the auspices of the FFA. The FFA trains observers and also provides support for them in their roles. Training includes not just how fishing is done and how to report on it but also how to work on a boat at sea, fire fighting, navigation, basic first aid and sea safety training. Some observers are also trained to participate in scientific research done by the SPC such as training in collecting scientific samples and tagging tuna.
- 4.49 The placement of observers on fishing vessels is usually the only independent data collection source available for regulated fishing activities, such as by-catch, catch composition, and gear configuration data. Trip reports and other data obtained directly from fishermen can have some bias associated with them, so it is important that there is an independent data source.
- 4.50 PNA requirements include 100 per cent observer coverage on purse seine fishing vessels in member EEZs. Vessels using other types of fishing gear such as long-line may have observers placed on them by the relevant fishing authority. This decision is generally dependent on the vessel's history, the potential risk of unlawful activity that may exist and funding.
- 4.51 All nine audits reported that the relevant fishery authority had trained observers for fishing vessel monitoring purposes. However, funding constraints often compromised the effectiveness of the observer program. For example, the Samoa audit reported that critical information on fishing trips was not fully reported as the observer program was on hold due to financial constraints.

TUFMAN database

- 4.52 The collection and management of tuna data is one of the core tasks for staff employed in national fishery authorities. The data they collect should provide a clear picture of the fishery and a solid basis for management decisions. It also offers a picture of historical fishing patterns. To support this task, the Oceanic Fisheries Department of the SPC has developed a comprehensive, integrated database system called the Tuna Fishery Data Management System (TUFMAN). This database is designed to enable Pacific island fishery agencies to record, analyse and summarise their tuna fishery data for relevant decision-making at both a national and regional level.
- 4.53 Seven of the nine Pacific island audits reported that TUFMAN was in use and staff were adequately trained for this purpose. However, both Palau and Tuvalu reported that staff were not adequately trained and recommended improvements in this area.
- 4.54 Of more concern is that five of nine audits reported that data is not regularly entered into TUFMAN to maintain its currency. This jeopardises the accuracy of TUFMAN and compromises its key design feature to provide timely reports for decision-making purposes at national and regional levels.

Reporting

- 4.55 A key feature of any monitoring system is the capacity to not only monitor program/project effectiveness over time but to enable the production of reports for decision-makers so that operational improvements can be made. Reporting on levels of effectiveness is also important to public and stakeholder confidence so that they can assess whether agencies are achieving their stated goals. The typical mechanism for this is the annual reporting requirement of individual legislatures. For this reason, the audit teams examined the regional and national reporting arrangements of the responsible agencies.
- 4.56 It is a good result that seven of the nine audits reported that fishing authorities use the reports developed by the SPC and the WCPFC for decision-making purposes. These reports contain scientific information on sustainability of the tuna fishery and as such are important to guide future decisions on catch limits in EEZs.
- 4.57 Reporting to fishery stakeholders including legislatures was much less positive with six of nine audits reporting that this did not occur on a regular basis. It is interesting to note that while FSM reported that its national fishery authority did not comply with its annual reporting requirements for a five-year period, its 2010-11 annual report was completed while the audit was in progress. This report could well be a model for the region as it clearly presents information on its access agreements with DWFNs, the revenue derived from these agreements, the type of fishing gear used and the number of vessels licensed to fish under each agreement. The report provides a comprehensive overview of all fishing related activities, such as transhipment and the unloading of catches. It also reports on FSM compliance with its international and regional obligations.
- 4.58 It is also positive to note that the audits of four of the five PNA members reported that the 'real time' daily PNA reports on catch and other fishing activities are accessed regularly and are used to guide fishery decision-making.

How data on illegal, unreported and unregulated (IUU) fishing activities is used

- 4.59 The principal economic impact of illegal, unreported and unregulated (IUU) fishing on developing countries is the direct loss of the value of the catches if the IUU fishing was not taking place. Available estimates worldwide place the economic loss of illegal fishing to be between \$10 billion to \$23 billion annually.
- 4.60 These losses include not only the loss to GDP, but revenue from landing fees, licence fees and taxes payable by legal fishing operators. In addition, there are indirect impacts in terms of loss of income and employment in related industries. IUU fishing also significantly impacts the sustainability of the targeted species and the marine ecosystem.
- 4.61 As a consequence, it is important that IUU fishing activities are closely monitored in the WCPO. As noted previously, the vessel monitoring system (VMS) is an important monitoring, control and surveillance tool in providing compliance information on all licensed vessels fishing within national EEZs. It is also a critical data source to support enforcement and legal action against non-compliant vessels.
- 4.62 For this reason, it is crucial that national fishery authorities in the licence application process consider FFA information on vessels, which have been engaged in illegal fishing activities. Eight of the nine audits reported that this was the case with PICT 2 noting that this was done on an irregular basis.
- 4.63 The Tuvalu audit reported on the need for regular reconciliation between the dataset, which holds licensing information, and the VMS which tracks fishing activities within

EEZs. The audit noted that data entry of this information was not done in a timely manner.

4.64 The Tuvalu report found that:

VMS uses TUFMAN licensing data to cross check that all vessels in Tuvalu's waters have a fishing licence and that the vessels have not used all of their allocated vessel days. Without timely licensing data, the ability and effectiveness of the VMS to monitor fishing in Tuvaluan waters is greatly decreased.

4.65 An assessment of risks throughout the WCPO fleet was undertaken in 2009. One of the main findings related to the weak system of information exchange and database management. The Tuvalu audit supports this risk assessment and reinforces the message to regional fisheries stakeholders that data management and system integration are key to effective MCS arrangements and ultimately the sustainability of the tuna fishery in the WCPO.

Individual SAI recommendations concerning LOE 3

The following table presents the focus of recommendations made by individual SAIs to improve performance in these areas.

Table 4.6 – The focus of individual SAI recommendations relating to LOE 3

SAI	Recommendation focus
FSM (National Office)	Rec 1 - focused on improvements in the accuracy and timeliness of fisheries data collection and input by suggesting that an operational manual be developed for staff with data entry responsibilities and that their performance in carrying out these duties is monitored by management.
Fiji	Rec 1 - focused on improved reporting arising from better and more complete data management: use of TUFMAN data to enhance decision making; back up data off site; maintain a database to record illegal fishing activities in EEZ; impose penalties on vessel captains for not providing log sheets and record penalties; strengthen observer program; board all vessels that arrive and depart from Fiji ports.
Palau	Rec 1 –sought training for data entry in TUFMAN database and regular monitoring of the database to ensure its accuracy and reliability. Rec 2 – focused on the need for regular reconciliation of data between vessel log sheets, observer reports and port sampling reports and recommended that sanctions be levied on fishing vessels where incomplete vessel log sheets are identified. Rec 3 and 4 - sought improvements in both internal reporting to the Palau Congress and also to external regional agencies to enhance country and regional fisheries decision-making.

Samoa	Rec 1 – improvements sought to administration of observer program including better data management. Rec 2 – work with regional partners (SPC) to verify completeness and accuracy of reports from TUFMAN database to support decision making.
Solomon Islands	Rec 1 – periodic reporting to stakeholders on fishing activities within SI EEZ.
Tonga	Rec 1 – sought improvements to accuracy of data collected on tuna fishing. Rec 2 – integration of scientific data into decision-making.
Tuvalu	Recs 1-12 - focused on improvements in TUFMAN data entry, including reconciliation between data sources such as weekly reports, vessel log sheets and observers reports and better and more frequent analysis of available data. Recs 13-14 - sought improvements to the management of the observers program in Tuvalu.

Source: Individual SAI audit reports

Conclusion

- 4.66 While most national frameworks incorporated a data management strategy, gaps emerged in the robustness of the strategy when examining key data inputs and analysis. These included lack of uniformity in the observer program across the audited Pacific island states. The ability of the regional TUFMAN database to support decision-making depends on the timeliness and comprehensiveness of data entered. Many audits reported a considerable lag in data entry.
- 4.67 Reporting to stakeholders on the results of management of the tuna fishery across the audited countries also needs considerable improvement.
- 4.68 Information exchange, database management and analysis are a particularly challenging area and require the support of regional stakeholders and governments.

5. Executive Summaries

This part contains the executive summaries of those national reports that are in the public domain, and include responses from the audited entities.

Federated States of Micronesia (National Office) Office of The National Public Auditor

To: His Excellency Manny Mori, President Honorable Members of the FSM Congress Federated States of Micronesia

RE: Performance Audit on Management of Tuna Fisheries in the FSM

We have completed a *Performance Audit on the Management of Tuna Fisheries in the FSM for Fiscal Year 2009, 2010 and 2011.* The audit on Management of Tuna Fisheries was undertaken by the Office of the National Public Auditor of the Federated States of Micronesia (FSM) as part of an initiative developed by the Pacific Association of Supreme Audit Institutions (PASAI) with the support of the Asian Development Bank (ADB) and the INTOSAI Development Initiative (IDI).

The objective of the audit was to assess the effectiveness of the management of off-shore tuna fisheries by National Oceanic Resources Management Authority (NORMA) in accordance with policies and frameworks, by examining whether: (1) Key aspects of management of off-shore fisheries are planned; (2) Economic returns from off-shore fishery licences and access agreements are appropriate; (3) Decision-making concerning off-shore fisheries are informed by accurate assessments of the fishery; and changes in the status of the fishery are monitored and reported. We conducted this audit in accordance with generally accepted government auditing standards.

NORMA is the government's regulatory and management arm within FSM's 200 mile Exclusive Economic Zone. The authority is governed by a Board of Directors. The authority is responsible to: (1) Ensure that resources are used in a sustainable way; (2) Obtain the maximum sustainable economic benefits from the resources; and (3) Promote economic security for the nation through resource use.

The audit revealed that the Board of Directors does not provide adequate oversight over the operational duties in carrying out their key activities of enhancing and enforcing the main fishery legislation. Consequently, the following weaknesses existed:

- outdated tuna management plan (TMP) left NORMA with no clear guidelines in managing tuna resources:
- there are no official by-laws to govern the actions including the duties and responsibilities of NORMA's Board members. In addition, NORMA has not developed an internal policy framework to provide the necessary direction and guidance to manage their daily operation;
- inactive Fisheries Management and Surveillance Working Group:
- o no assurance that fishing right fees from Japan is collected and deposited in the

bank; and

- o unreliable data caused by inaccurate and untimely reporting. The key aspects of management of fisheries are inadequately planned. Secondly, the economic returns from the tuna fishery licences and access agreements may be appropriate, however, the current processes of collecting and issuing fishing licences do not ensure proceeds are properly collected and recorded. Lastly, the decision-making concerning off-shore fisheries may be affected by the untimely reporting of data from fishing activities. We recommended the following:
 - the Board of Directors should ensure that an updated TMP is developed by management and presented for review and approval to meet the current trends in the fishery industry. For instance, management should consider performance measures to be incorporated in the TMP to meet regional and international requirements like the VDS;
 - the Board of Directors should create and adopt its by-law. In addition, NORMA executive management should develop appropriate policies and procedures for the operational level. For example, develop an operating manual and submit it to the Board of Directors for review and adoption in order to guide the staff in executing their required duties and responsibilities;
 - the Board of Directors should require quarterly reports from the working group to ensure that their recommendations are considered when formulating policies and in implementing appropriate monitoring and control of fisheries surveillance activities;
 - ➤ NORMA and the Department of Finance & Administration should reconcile the bank accounts involved to ensure the accuracy of the collection and recording of all foreign fishing rights fees especially those involving the account in Japan;
 - > adequate monitoring of staff's operational duties and responsibilities.

Respectfully yours,

Haser Hainrick National Public Auditor.

Fiji

Managing sustainable fisheries

Background

Fisheries are an important source of food, employment, economic activity and recreation for the people of Fiji. Effective management of fisheries resources is important not just from an environmental perspective but also because of its impact on the country's economy and the livelihood of its population.

Coverage

The audit on "managing sustainable fisheries" looked into three main areas which include the planning of offshore fisheries", economic returns from offshore fisheries" and "management decision is informed by accurate information".

The audit focused on the Department of Fisheries as the agency entrusted with regulating, administering and monitoring the fisheries sector.

Key findings

Planning of offshore fisheries

- The draft decree on offshore fisheries submitted to the Attorney General's Office for vetting in November 2010 includes provisions for the management, development and sustainable use of fisheries and marine resources, but is yet to be vetted.
- The last tuna management plan developed provided a framework for the conduct of a stable and profitable tuna fishery in Fiji for the years 2006 to 2010. A similar documented strategy for the ensuing years has not been developed.
- There are no formal arrangements between the Department of Fisheries, the Naval Division and the Fiji Police Force to define roles and expected outcomes from surveillance conducted and any legal proceedings for incidences of non compliance with the legislation.

Economic returns from offshore fisheries

- Increases in licences issued over the four years 2008 to 2011 resulted in corresponding increases in the revenue earned from issue of such licences for those years.
- However despite the growth in revenue, total catches from offshore fisheries for those years were still less than the annual total allowable catch quotas of 15,000mt.

Management information is informed by accurate information

- There is evidence that the Department utilises information gathered from economic, surveillance and monitoring reports to influence its decisions on maximising economic returns from its tuna industry.
- Observer programs are hindered by a lack of human and financial resources.
- There is no database maintained to record illegal fishing vessels.

Overall conclusion

Despite the lack of an all encompassing framework for offshore fisheries management and a relevant documented TMP for the current term, planning for offshore fisheries for the two years 2011 to 2012 has been provided for under the Department of Fisheries' annual corporate plans for the respective years. Furthermore, surveillance of Fiji's vast waters has been a significant challenge due to a lack of resources.

Tuna fishery has been a significant contributor to the economy's GDP through revenue, exports and employment. Total allowable catch quotas have not been realised or exceeded over the past 4 years 2008 to 2011. To capitalise on the disparity, the Department consequently increased numbers of licences permitted to be issued over this period resulting in corresponding revenue increases.

The Department relies on regional organisations' reports to monitor the status of its tuna fisheries, which currently is not in an over-fished state. However there is little evidence to support the fact that the Department utilises information gathered from economic, surveillance and monitoring reports to influence its decisions on maximising economic returns from its tuna industry.

General recommendation

The Department of Fisheries should continuously follow up with the Solicitor General's Office in having the draft decree on offshore fisheries management vetted to enable its transmission to Cabinet for endorsement. The Department should also consider developing a TMP for the current term as this document provides strategies that are more descriptive for the management of sustainable fisheries. The Department should continue to make the best use of information gathered from economic analysis, surveillance and monitoring activities to enhance decisions made that will maximise its economic returns.

Tevita Bolanavanua Auditor-General FIJI

Palau

Performance Audit on Managing Sustainable Fisheries (Tuna)



REPUBLIC of PALAU

P.O. BOX 859 KOROR, PALAU 85946 TEL: (880) 438-2489 FAX: (880) 488-2184 HOTLINE: (820) 488-5887 F.MAII: palanopaghyalaung nom

Office of the Public Auditor

1.0 Executive Summary

February 14, 2013

Honorable Fleming U. Sengebau Minister Ministry of Natural Resources, Environment and Tourism Office of the Minister Ngerulmud, Republic of Palau 96939

Dear Minister Sengebau:

This audit report presents the results of our performance audit on managing sustainable fisheries, Tuna Fishery in particular, which is managed by the Bureau of Marine Resources-Oceanic Fisheries Management (BMR-OFM) under the Ministry of Natural Resources, Environment and Tourism (MNRET), and the monitoring and surveillance of Tuna Fisheries which is managed by the Division of Marine Law Enforcement (DMLE) under the Ministry of Justice.

The audit scope covered the period of October 1, 2007 through September 30, 2011.

Our audit objective was to assess the effectiveness of the management of off-shore fisheries by Palau fisheries authorities in accordance with national fisheries policies and frameworks by auditing whether;

- key aspects of management of offshore fisheries are identified and planned;
- economic returns from offshore fishery licenses and access agreements are appropriate;
 and
- decision-making concerning offshore fisheries is informed by accurate assessments of the fishery; and changes in the status of the fishery are monitored and reported.

The audit report disclosed significant findings and recommendations for the responsible agencies to improve in managing sustainable fisheries within the Republic.

Office of the Public Auditor

Key Findings:

Key Aspects of management of offshore fisheries are not adequately identified and planned

- The BMR-OFM has not promulgated regulations for the management of offshore fishing.
- Fisheries governance arrangements are fragmented.
 The Tuna management plan needs updating.
- 4. BMR-OFM did not comply with 27 PNCA Section 168 in the approval foreign fishing
- 5. The DMLE does not use the inspection checklist during inspections of fishing vessels.
- 6. Palau failed to meet the observer's coverage requirement.
- 7. BMR-OFM officials did not conduct any inspections on fishing vessels upon unloading
- 8. Lack of uniform fines for unauthorized fishing vessels.

It is not clear that economic returns from offshore fishery licenses and access agreements are appropriate

- 1. No annual consultations as required within the fishing agreements.
- 2. License fees, export tax, and fishing agreements need to be reviewed and adjusted to take account of the economic value of tuna fisheries.
- 3. Funds received from the US multilateral treaty are not used to fund fishing activities.

Decision-Making concerning offshore fisheries is not informed by accurate assessments; and changes in the status of the fishery are not monitored and reported

- 1. Fishing (Tuna) activities are not properly recorded in the TUFMAN database.
- 2. Inaccurate log sheets
- 3. The Minister did not comply with the reporting requirements as required in 27 PNCA Section 125.
- 4. Regional Reporting needs improvement.

As a result, we are not able to provide assurance that the tuna fishery is being adequately managed, or that the people of Palau are realizing the full economic benefit of the tuna resource, or that decision-making is informed by good information about the status of the tuna fishery.

In light of the forgoing conditions, we recommend the Minister of the Natural Resources. Environment and Tourism collaborate and coordinate with the Bureau of Marine Resources-Oceanic Fisheries Management, the Division of Marine Law Enforcement, FFA, WCPFC, and FFA member countries to address and correct the deficiencies to improve the management of tuna fisheries.

Finally, we would like to extend our appreciation to the management and staff of Ministry of Natural Resources, Environment and Tourism, Bureau of Marine Resources-Oceanic Fisheries

Office of the Public Auditor

Management, and Division of Marine Law Enforcement for their cooperation and professional courtesy extended to us during the audit.

Sincerely,

Satruning Tewid Acting Public Auditor

Samoa

Performance Audit Report on Managing Sustainable Fisheries

Background

The effective management and sustainable conservation of the fisheries resource is very important not just from an environmental perspective but also because of its impact on country economies and the improvements to the livelihoods of the population. However, the variability in oceanography and the impacts of climate change influence the availability of tuna within the Pacific waters. Therefore it is important for the Pacific region to have cohesive efforts to achieve sustainable management of our tuna resources.

Over recent years, the Samoan Government has progressively made developments to the management of tuna resources. Such developments included the launching and implementation of the second tuna management plan 2011–2015 by the Ministry of Agriculture and Fisheries through the fisheries division. Also included is the current formation of an agriculture & fisheries sector to take a collaborative approach to the management of tuna fisheries in Samoa given the different contributions from a number of agencies involved.

Samoa's tuna fishery comprises the troll fishery and the tuna longline fishery. Both fisheries operate within Samoa's Exclusive Economic Zone (EEZ) of approximately 120 000 km² involving fishing vessels ranging from nine metres to over 20 metres in length. Participation in the Samoa commercial tuna fishery is exclusively domestic with the fishing fleet all based locally.

The overall objective of this audit was to assess the effectiveness of the actions taken by the Ministry of Agriculture and Fisheries agencies to ensure sustainable fisheries management with particular emphasis on the following:

- key aspects of management of offshore fisheries are planned;
- economic returns from offshore fishery licences and access agreements are appropriate;
- decision making concerning offshore fisheries is informed by accurate assessments of the tuna fishery; and changes in the status of the fishery are monitored and reported.

Key findings

Key aspects of management of offshore fisheries are planned

- There is a legal and policy framework that ensures sustainable management of tuna resources.
- The Fisheries Act 1988 should be reviewed to further enhance the legal framework for fisheries.
- The sector plan and tuna management plan addressed all aspects of sustainable tuna management.

- The current tuna management plan 2011 2014 does not identify key performance indicators (KPIs) for monitoring its performance.
- Commercial Fishing Management Advisory Committee (CF-MAC) should monitor the implementation of the plans.
- Previous tuna management plan 2005-2009 has not been reviewed after its implementation.

Economic returns from offshore fishery licences and access agreements are appropriate

- Licence fees and caps have been reviewed twice by the CF-MAC and amended, taking into account the value and performance of the fisheries industry.
- Negotiations on the access agreements between Tonga and Tokelau should be prioritised and progressively reported.
- The Private Sector Support Facility (PSSF) Fund is an alternative funding that the fishing industry should use to assist with its development.
- The current taxation framework regarding duty free inputs for the fishing industry should be maintained.
- Appropriate assistance from the Development Bank of Samoa should be considered for the development of the fishing industry.

Decision making concerning offshore fisheries is informed by accurate assessments of the fishery; and changes in the status of the fishery are monitored and reported

- Port sampling activities and market landing surveys provide the main source of data for estimation of annual catches and fishing effort for the domestic fleet.
- The observer program should function at all times given the importance it has on the reliability of data collected for decision making.
- Data collected are properly stored and managed using two separate databases, the local offshore database and the regional TUFMAN database.
- The TUFMAN database could not produce all relevant reports needed for better decision making.

Conclusion

Overall, we concluded that substantial progress has been made on the sustainable management of tuna resources. A number of policy and regulatory documents together with regional agreements have been reviewed and revised to provide a comprehensive and coherent institutional and regulatory setting for the fisheries industry to pursue its development.

Despite this progress, there are a number of areas that require further attention by the responsible agencies. Areas that need improving include the effective implementation of the national plans in place; assisting the fishing industry in obtaining alternative funding through current government initiatives and existing government policies; reporting the status of pending access agreements and promoting their finalisation; monitoring the

implementation of national plans under the framework.

The tuna management plan 2011-2014 is the significant document for sustainable management of tuna. Therefore monitoring the performance and outcomes of the plan using KPIs is critical to an assessment of the fisheries sub-sector achievements in this regard. In addition progress reporting of the results during implementation is equally important. The Ministry of Agriculture and Fisheries together with the relevant agencies and committees are commended for adopting an approach to assist the fishing industry review licence fees and licence caps when in times of difficulty.

Fuimaono Papalii Camillo Afele Controller & Chief Auditor Samoa

Solomon Islands

Managing sustainable fisheries in Solomon Islands fisheries Exclusive Economic Zone performance audit report

Background

The fishery (tuna fishery) is an important area for development and investment. The need to make an assessment on the management of sustainable fisheries highlights the importance for Pacific countries to co-share the values and developments of their respective fisheries authorities.

The Solomon Islands is the third largest archipelago in the Pacific. Its Exclusive Economic Zone (EEZ) covers an area of 1.3 million square kilometres. Total tuna catches in Solomon Island waters reached a record level of over 180,000 metric tons in 2010/11. Tuna is a highly migratory fish species and tuna stocks in Solomon Islands waters are part of a regional resource.

The fisheries sector (almost exclusively tuna) makes an important contribution to the national economy. Licence fees from both domestic and foreign vessels in 2011 provided about SBD\$106 million in government revenue. While this is a significant earner for the government, it is only a low percentage of the catch value. Fisheries also provide a major contribution to the Solomon Islands' GDP. Total fisheries export earnings (tuna products including canned tuna, frozen tuna and all marine products) for the period January to June 2011 was SBD\$114 million. This is 8.6% of total export earnings for that six month period.

The performance audit of the management of sustainable fisheries (tuna fishery) in the Solomon Islands fisheries Exclusive Economic Zone (EEZ) is an audit conducted by the Solomon Islands Office of the Auditor General (OAG) in conjunction with other Pacific countries who are members of the Pacific Association of Supreme Audit Institutions (PASAI). PASAI members were assisted by the Asian Development Bank and the INTOSAI Development Initiative (IDI). INTOSAI is the International Organisation of Supreme Audit Institutions of which the OAG is a member.

Audit objective and scope

The objective of the audit was to assess the effectiveness of the management of off-shore fisheries (the tuna fishery) by Solomon Islands fisheries authorities in accordance with national fisheries policies and framework, by examining three very important areas:

- Are key aspects of the management of off-shore fisheries properly planned?
- Are economic returns from off-shore fishery licences and access agreements appropriate? and
- Is decision making concerning off-shore fisheries informed by accurate assessment of the fishery? Are changes in the status of the fishery monitored and reported?

As part of the audit addressing the objective, it also reviewed compliance with relevant legislation and regulations, and Ministry reporting on the management of the fisheries. The administration and enforcement of licensing requirements were also reviewed.

The audit scope covered the period 2009 to 2011. The Ministry of Fisheries and Marine Resources is the primary stakeholder for this audit. This Ministry is responsible for implementing the policies in the areas of the audit. Other important stakeholders for tuna fishing in the Western and Central Pacific Ocean (WCPO), which includes the Solomon Islands Exclusive Economic Zone, include the Secretariat of the Pacific Community (SPC) and the Pacific Islands Forum Fisheries Agency (FFA).

Audit mandate

The Solomon Islands Office of the Auditor General (OAG) has the audit mandate to conduct performance audits under the Solomon Islands Constitution, Section 108, and the Public Finance and Audit Act s36(1). These give power to the Auditor General to carry out audit work.

Auditing standards

This audit has been conducted in accordance with International Auditing Standards, specifically ISSAI 3000, Standards and guidelines for performance auditing based on INTOSAI's Auditing Standards and practical experience.

Overall conclusion

OAG concluded that the lack of up-to-date legislation and Tuna Management Plan to adequately address Solomon Islands regional fisheries responsibilities and the current western pacific fisheries environment prevented the Ministry from adequately planning the appropriate management of off-shore fisheries.

It is not clear to the OAG that, with the current 1998 Fisheries Act in force, the Ministry has focused on addressing economic returns to the Solomon Islands from off-shore fishing licences and access agreements, and assessing whether they are appropriate to the value of tuna taken by vessels from the Solomon Islands Exclusive Economic Zone each year. Over the last year the Ministry has participated in a number of negotiations and discussions aimed at increasing the revenue to the Solomon Islands from fishing in the Solomon Islands Exclusive Economic Zone.

The enactment of a new Fisheries Act and approval of a new Tuna Management Plan will consolidate these recent gains and put in place Solomon Islands legislative requirements that reflect sub-regional, regional and international responsibilities.

The Ministry does not have a formal fishing licence policy and guidelines, particularly to appropriately address new developments in the fishery sector, including the vessel day scheme, and to meet its regional obligations. Fishing licences are not being issued in accordance with the requirements of current legislation, particularly the Tuna Management and Development Plan 1999 under the Fisheries Act 1998. This legislation is recognised as out of date. But until a new Fisheries Act is passed by the Solomon Islands Parliament and a new tuna management plan is approved, the 1998 Act and 1999 TMDP contain and represent the current legislative requirements.

The Ministry has not formalised its procedures for renewal of fishing licences and made them readily available to staff to ensure renewals are processed on time and in accordance with requirements.

In the absence of evidence, at the time of the audit, of appropriate review and assessment of information for off-shore fishing activities in Solomon Islands waters, it is not clear to the

OAG how the Ministry decision-making is informed and changes in off-shore fishing activities monitored and reported. The Ministry provided additional information regarding Solomon Islands participation with regional agencies in monitoring and reporting on fishing activities within the Solomon Islands Exclusive Economic Zone and in the Western and Central Pacific Ocean. This information should be readily available to the Parliament and the Solomon Islands people through more comprehensive reporting in, and more timely reporting of, the Ministry's annual report.

Recommendations

Recommendation 1

OAG recommends that the Ministry progress, as a matter of high priority, the presentation of the Bill for a new Fisheries Act to the Parliament. The Bill should address matters including Solomon Islands sub-regional, regional and international fishing industry obligations and the support structure to assist the Ministry to meet its obligations.

Ministry response: Agree

Recommendation 2

OAG recommends that the Ministry give high priority to the finalisation of the new tuna management plan and formally adopt it in order to more appropriately manage the Solomon Islands tuna fishing industry in accordance with international, regional and sub-regional obligations.

Ministry response: Agree

Recommendation 3

OAG recommends that the Ministry:

- recover the outstanding fines payable from previously completed illegal, unreported and unregulated investigation cases, particularly from 2010;
- assess the effectiveness of its surveillance and enforcement of illegal, unreported and unregulated fishing in the Solomon Islands Fisheries EEZ; and
- implement the Ministry's Corporate Plan 2011-2013 regarding the effective enforcement of Solomon Islands fisheries laws.

Ministry response: Agree

Recommendation 4

The OAG recommends that the Ministry finalise and adopt a formal fishing licence policy and guidelines as a matter of high priority for 2012 in order to appropriately address new developments in the fishery sector, including the vessel day scheme, and to meet its regional obligations.

Ministry response: Agree

Recommendation 5

OAG recommends that all the required approvals from appropriate Solomon Islands agencies should be included in the current Ministry procedures, including to provide

assurance that a fishing vessel is appropriately registered, is seaworthy and safe, and approved before being used in Solomon Island waters.

Ministry response: Agree

Recommendation 6

The OAG recommends that the Ministry should formally issue, including date, the procedures for the renewal of fishing licences and make them readily available to all Ministry staff.

Ministry response: Agree

Recommendation 7

The OAG recommends that the Ministry report periodically, as required, information to stakeholders on fishing activities in the Solomon Islands fisheries Exclusive Economic Zone, including completing as a matter of priority its outstanding annual reports.

Ministry response: Agree

Summary of agency response

The Ministry of Fisheries and Marine Resources considers nearly all the recommendations in the performance audit report to be fair and appropriate. We do not agree with all the conclusions.

Two comments are appropriate at the outset because they impact on many elements of the audit.

First, tuna are highly migratory species and, therefore, effective management can only be achieved through cooperation with other countries. This is achieved through the regional organisations: Western and Central Pacific Fisheries Commission, Parties to Nauru Agreement, Pacific Islands Forum Fisheries Agency and Secretariat of the Pacific Community. Solomon Islands provides information to these agencies and then works with other countries to make management decisions based on analyses and recommendations from the agencies. Collective decisions are then given effect by the Ministry. Therefore, any audit of the effectiveness of the management of Solomon Islands tuna fisheries must consider the collective nature of management and Solomon Islands' specific responsibilities within the collective approach.

Second, the audit was conducted based on the assumption that the 1999 Solomon Islands National Tuna Management & Development Plan is operational. In fact, for a number of reasons this plan was never fully implemented and has not been used in the management of Solomon Islands tuna fisheries for a number of years. It is now very outdated. Rather than assess current management of tuna fisheries against this plan it is more appropriate to assess it against the Fisheries Act, noting there is no operational tuna management and development plan.

Mr. Edward Ronia Auditor-General Solomon Islands

Tonga

Sustainable Management of Tuna in Tonga

This report presents the results of our performance audit on sustainable management of tuna in Tonga.

Objective

The objective of this audit is to assess the sustainable management of tuna by the national fisheries authority in accordance with national fisheries policies and frameworks. The key agency is the Ministry of Agriculture, Food, Forestry and Fisheries (MAFFF), Fishery Division. In order to achieve our objective, the audit focused on the following matters:

- key aspects of management of tuna are planned;
- economic returns from tuna licences and access agreements are appropriate; and
- decision-making concerning tuna is informed by accurate assessments of the fishery.

Key Findings

Key aspects of management of tuna are planned.

- The Fisheries Management Act 2002 is the principal legislation that ensures the conservation, management, and sustainable utilization of fisheries resources in Tonga's waters.
- Tuna management regulation is still a draft and yet to pass.
- The revision of the tuna management and development plan is still outstanding.

Economic returns from tuna licences and access agreements are appropriate.

- Licence fees for both local fishing and foreign fishing vessels need to be revised.
- Regulation for foreign fishing vessel needs to be in place.
- A significant amount of revenue is generated by the Ministries through the US Multilateral Treaty

Decision making concerning tuna is informed by accurate assessments of the fishery.

- There are no authorised and qualified people to verify the accuracy of the observer's records.
- Scientific advice and analysis is not communicated to the industry.

Conclusion

The *Fisheries Management Act 2002* provides for the effective management of fisheries in Tonga's waters. An essential part of the legal framework is the tuna management regulation that needs to be passed for a comprehensive guidance in implementation and enforcement of management measures concerning tuna.

Also, revision of the tuna management and development plan, which provides the objectives and strategic direction for the management of the tuna resource and fulfilment of its

economic potential, is still outstanding and yet to be finalised for adoption.

Tonga opened up its waters again to foreign fishing vessels in August 2011 after a moratorium on foreign fishing licences had been in place for 7 years. As a result there is a need for the MAFFF to have a framework that clearly defines the status of foreign fishing vessels for tuna in Tonga. This would provide for transparency in policies on foreign fishing vessels as well as local fishing vessels.

The Fisheries Division's observers program assists the Division with providing records regarding the tuna catch. However risks to the observer programmer such as bribery and observers recording estimates without performing verification was identified. This means that records of observers may not be relied upon for accuracy. Close supervision and monitoring, and proper training of the observers by the Division would minimise these identified risks.

The Ministries through the US Multilateral Treaty generate a huge substantive amount of its annual revenue. As such, it should consider utilising it on redeveloping and reviving activities related to tuna.

Pohiva Tuionetoa Auditor-General Tonga

Tuvalu

Performance audit on Managing Sustainable Fisheries

Introduction

This is the Office of the Auditor General of Tuvalu's third performance audit report. The audit was conducted on management of sustainable Fisheries in Tuvalu as part of the Pacific Association of Supreme Audit Institution (PASAI) cooperative performance audit initiative.

The Audit Office's mandate, permits the Auditor-General to conduct an audit of all or any particular activities of a public sector entity appropriate and to report findings accordingly to Parliament. The key agencies involved in the audit were the Tuvalu National Fishery Department (TNFD) and the Maritime Surveillance Unit.

The objective of the audit was to assess the effectiveness of the Fisheries Department in the management of offshore fisheries (in particular the tuna fishery) by examining the following:

- Are the key aspects of management of off-shore access agreements and fishery licences identified and planned?
- Are the economic returns from off-shore access agreements and fishery licences appropriate?
- Is the decision making concerning off-shore fisheries informed by accurate assessments of the fishery? Are changes in the status of the fishery monitored and reported?

Key audit findings

The following audit findings were noted during the review process. The finding number corresponds with the detailed recommendations in the main report:

Key aspects of management of off-shore access agreements and fishery licences identified and planned?

- The Government of Tuvalu does not have any regulation in place prescribing minimum mesh-size and closure of the fisheries EEZ when allocated days have been exhausted as required by the PNA (Parties to the Nauru Agreement).
- The Government of Tuvalu should endorse and fund the tuna management and development plan (TMDP) to ensure the full implementation of the key objectives (including the development of its work plan).
- The TNFD should put in place a measure to control and minimise the catch in accordance with the requirements of the PNA additional conservation and management measures.
- TNFD should develop a system that monitors fishing days used by foreign fishing vessels (FFVs) so that TNFD is not relying on FFA for the monitoring, and ensures that VMS records are properly managed and stored in an accessible place.

Are the economic returns from off-shore access agreement and fishery licence appropriate?

• The delegation of power by the Minister of Natural Resources should be aligned with requirements stipulated under the Marine Resources Act of 2008.

- Official records and minutes of the committee to approve fishing licences discussed via email should be filed for transparency.
- Sustainable measures set out by PNA and other regional bodies should be followed to
 minimise overfishing and to ensure continued support from PNA and other regional
 bodies. This includes not modifying agreements to allow fishing on the high seas.
- Establishment of an effective legal framework surrounding the vessel day scheme (VDS) should be legislated, as well as the other requirements of the PNA.
- Effort limits set by the PNA should be complied with to ensure that scarcity of fishing days is established in order to increase the price of their fishing days.
- Monitoring of the days remaining by each vessel should be performed by TNFD, rather than relying on untimely alerts from PNA.
- Reconciliation of the total amount of fishing revenue to be collected in Tuna Fisheries
 Database Management System (TUFMAN) to the actual cash received should be
 performed on a monthly basis.

Is the decision making concerning off-shore fisheries informed by accurate assessments of the fishery? Are the changes monitored and reported?

- TUFMAN data should be up to date by ensuring all staff are able to update the TUFMAN system.
- A regular reconciliation should be performed between log-sheets (TUFMAN), VMS reports and observers' reports to identify FFVs who are yet to submit their log-sheets (and follow up accordingly), do not have a licence, or are not in the position that they reported.
- Imposition of fines on FFV should be in accordance with the *Marine Resource Act 2008* as well as the signed access agreement. Removal of FFV access to Tuvalu's EEZ should occur if non compliance continues.
- Details of licence fees should be entered into TUFMAN, not on a separate excel spreadsheet, to ensure completeness of licence fees received.
- Reconciliation of data entered from log-sheets, observers' reports and weekly reports should occur on a regular basis, to ensure that there is consistency of reporting by FFVs.
- TNFD compare VMS reports on days fished by FFVs with TUFMAN days allocated on a FFV basis to determine FFVs who have exceeded their allocated fishing days.
- Observers' data should be entered into TUFMAN to reconcile it to log-sheets and weekly reports.
- A regular reconciliation between VMS reports and TUFMAN should be performed to
 ensure that all vessels within the EEZ have a licence; the number of days that have been
 consumed by vessels does not exceed their licensed amount; the reporting entered into
 TUFMAN agrees with the FFV's position.
- Effort should be made by the TNFD to meet the 100% observer coverage and ensure that all observer conditions are acceptable. Penalties and fines should be imposed on the FFV if they do not provide the observer with adequate conditions.

Conclusion

Tuvalu has policies and legislation that are applicable to the sustainable management of tuna resources. Tuvalu is also a party to a number of regional and international conventions, protocols and agreements that deal with the sustainable use of managing the tuna resources.

The Tuna Management and Development Plan 2011- 2015 is not yet endorsed by Cabinet or

implemented. The TMDP needs to be endorsed as it covers all aspects of managing sustainable offshore fisheries in Tuvalu.

Significant records of access agreements, joint venture agreements, fine data and fishing licences were unable to be located by the TNFD when requested by audit. This severely limited the scope of the audit testing and more importantly highlighted significant management failures by TNFD.

The management of the vessel day scheme and licensing requires improvement for it to be effective and to ensure that maximum benefit is obtained by Tuvalu.

Improvement is required surrounding timely data entry, management and reconciliation of TUFMAN and the VMS. As this data is relied upon by the SPC and PNA to set limits on fishing effort, the accuracy, timeliness and quality of this data is vital.

Additional effort is required to be put into the observers program to ensure that appropriate coverage is obtained and ensure that the working conditions for the observers are adequate.

In Tuvalu, fishing licences are sold according to demand, rather than sustainability.

Mr Isaako Kine Auditor-General Tuvalu

APPENDIX

Capacity Building through the Cooperative Performance Audit Approach

Background

The Cooperative Performance Audit (CPA) program was launched at the 12th PASAI Congress in Koror, Palau in 2009, as part of the broader Pacific Regional Audit Initiative (PRAI). It was decided that the first round of the program would focus on environmental topics for two reasons. There is a considerable body of guidance available through the INTOSAI Working Group on Environmental Auditing (WGEA) to support cooperative performance audits. In addition, the cooperative performance audit approach lends itself to auditing environmental topics that, because of their nature, cross country borders and can be regional in their impact.

The CPA program, conducted under the auspices of PASAI, has a tiered objective. This is to build performance audit capacity within individual SAIs to ultimately identify and promote improvements in the effectiveness, efficiency and economy of public administration within the countries of the Pacific region. Over the course of the CPA program, a core of skilled performance auditors within individual SAIs is developing. This capacity will enhance the performance of individual SAIs and contribute to more effective auditing of the use of public sector resources in the Pacific.

As at mid June 2012, three cooperative performance audits had been conducted across the Pacific:

solid waste management –
 2009 – 2010;

access to safe drinking water – 2010 – 2011;

• sustainable fisheries management - 2011 - 2012.

Cooperative Performance Audit Methodology

The following diagram illustrates the methodology that has been developed for the CPA program. This is followed by a short discussion on key components, the stages involved and input from a range of stakeholders. Experience to date has demonstrated that the methodology is sound and has enabled a number of SAIs (around ten in each CPA round) to engage in performance audit capacity building as well as delivering performance audit products of value to the Pacific island countries audited.

The methodology is also adaptable and can accommodate improvements identified by Pacific auditors-general, audit teams taking part in the program and participants at a Regional Working Group on Environmental Auditing (RWGEA). Minor adjustments to the methodology will ensure that SAIs participating in the 4th CPA on climate change adaptation (CCA) and disaster risk reduction (DRR) can audit the performance of CCA and DRR strategies put in place by individual Pacific island countries, while still enabling an overview report, identifying regional impacts, to be produced.

Figure A1 - Cooperative performance audit methodology

Scope topic (RWGEA, performance audit advisor and technical expert) to be endorsed by PASAI Congress

Joint planning meeting for audit teams, with expert support & peer review. Audit teams develop individual audit work plans

Each audit team undertakes field work in own jurisdiction

Joint reporting meeting for audit teams, with expert support and peer review

Each audit team completes audit and reports in own jurisdiction

Regional overview report prepared.

Evaluate success and prepare next audit topic

Topic identification/scope

While the broad topic to be audited has previously been identified by auditors-general, it is important that a more precise, auditable topic be developed for endorsement at the subsequent PASAI Congress. Where the topic is environmentally focused, the coordinator of the Regional Working Group on Environmental Auditing (RWGEA) in conjunction with the ADB Performance Audit Advisor and a technical expert on the topic to be audited carries out this work. Technical experts are generally sourced from non-government organisations (NGOs), which are regionally based and have proven expertise in a particular subject area, for example, solid waste management. It is important that contact is made with these organisations as early as feasible to ensure that what is proposed to the PASAI Congress is achievable and is also of relevance to the region and regional stakeholders.

After the topic, audit objective and high-level lines of enquiry are endorsed by the PASAI Congress, SAIs that decide to participate are asked to nominate up to two staff members to take part in the audit, with a preference for one senior and one junior team member and a mix of experience and inexperience. While optimal, this mix within audit teams is often not possible to achieve due to competing audit work demands within SAIs.

Once the audit teams are assembled, they undertake a preliminary study before attending a planning meeting for the audit. The objective of the study is to ensure that the teams are fully acquainted with issues concerned with the audit topic in their individual countries/states.

Planning meetings

Typically, a planning meeting of six days duration takes place. The ADB Performance Audit Advisor and the IDI regional training manager jointly lead the session. Where possible, subject matter experts attend part of the planning session to provide technical advice on related issues and information on Pacific initiatives in the area being audited. This support may continue over the course of the audit. In addition, the Regional Co-ordinator of the Working Group on Environmental Auditing (RWGEA) attends to present international advice on auditing environmental topics. The PASAI Secretariat also provides support.

The objectives of the planning meeting are to:

- develop individual, country/state specific audit work plans of a quality to be approved by respective auditors-general that can be productively used to guide field work; and
- strengthen capacity to develop audit work plans by working together with audit teams from different audit offices and experts.

Outcomes of the planning meeting

Each audit team produces an audit work plan tailored to their individual country/state circumstances. Following the planning meeting, auditors-general review and approve these plans. They are then subsequently used to guide audit fieldwork.

A feedback session is generally conducted on the final day of the planning meeting. Results to date indicate that participants value the peer review approach and contribution from other audit teams in the Pacific. They also indicated that their confidence levels have increased sufficiently so that they feel able to conduct the necessary fieldwork. The contribution of experts was also valued including the contribution of the technical experts.

Audit fieldwork

Audit fieldwork generally takes place over a three to four month period. This is largely dependent on the availability of the audited agencies as well as other audit work commitments within audit offices.

Audit fieldwork and analysis of results and the initial drafting phases can be supported onsite by the ADB Performance Audit Expert and the PASAI Capacity Building Expert. This support is targeted to those SAIs with minimal or no performance audit experience. Time with each SAI can vary and depends on SAI capacity needs and the requirements of the audit teams. In addition, off-site support is provided to all of the audit teams through regular email contact. Technical experts may also provide off-site support and respond to issues raised by audit teams.

Reporting meeting

Typically, a reporting meeting of six days duration takes place towards the end of the audit cycle. A similar peer review process is again used.

Reporting session expectations include:

- finalising individual country audit reports to a reporting standard sufficient for review by their respective auditors-general;
- identifying key themes across Pacific island countries/states for inclusion in the regional report; and
- sharing 'lessons learned' from cooperative audit experiences and highlighting what could be done better next time.

Outcomes of the reporting meeting:

For each cooperative performance audit to date, all of the reporting session expectations were realised. Ten individual country reports were drafted for head of SAI review. Key themes were identified for the regional overview reports; and audit teams reflected on their cooperative audit experience and made suggestions as to what could be done better next time.

At the reporting meeting, the audit teams agreed to a timetable for report clearance through respective auditors-general and associated quality control measures; the distribution of draft reports to audited agencies for comment; and the preparation of audit reports for public release or tabling in respective legislatures.

Regional overview report

Following the tabling/public release of individual SAI audit reports, the ADB Performance Audit Advisor and the co-ordinator of the RWGEA prepare a regional overview report. This report consolidates findings from individual SAI reports to provide a regional perspective on the particular audit topic that was examined. To date, the number of SAIs participating in a cooperative performance audit has averaged ten per audit. This enables the regional overview report to be broadly representative of administrative arrangements in Pacific island countries and, as such, provides a well-based regional perspective on a particular topic.

Results from the Cooperative Performance Audit Program

The First Cooperative Performance Audit - Solid Waste Management

At the commencement of the CPA program in 2009, performance auditing capacity within individual SAIs varied considerably. Table A1 indicates the level of experience of both audit offices and also the audit team members participating in the first cooperative performance audit.

Table A1 Participants in the First Cooperative Performance Audit

SAI	Level of SAI experience	Level of audit team experience
Cook Islands	high	3 – mixed
FSM	medium	2 – mixed
Fiji	high	2 – high
Guam	high	1 – high
Marshall Islands	low	2 – low
Palau	high	2 reduced to 1 - mixed
PNG	low	2 – low
Samoa	low	2 – low
Tonga	low	2 reduced to 1 - low
Tuvalu	low	1 – low

The mix of skill levels of participants in the first cooperative audit was an important contributor to success. This was because, in addition to training in the technical aspects of performance auditing, participants engaged in a peer review of the work of other audit teams. This supported mutual sharing of experiences and learnings and assisted building capacity across all participants. An increase in confidence in the performance audit process was a demonstrable outcome of the first cooperative performance audit across all audit teams.

Results of the First Cooperative Performance Audit on Solid Waste Management

- Ten SAIs were involved, five new to performance auditing.
- 19 auditors were involved of whom 13 developed performance auditing skills and knowledge, and six auditors enhanced existing skills.
- Ten individual, country specific audit reports were produced. Eight are now in the public arena. As well, the SAI of Fiji has lodged its report with the Public Accounts Committee that oversees its operation.
- Individual audit reports recommended areas where improvements could be made. The implementation of those recommendations should lead to improved solid waste

- management in the Pacific island countries audited and associated environmental benefits. and
- A regional overview report was produced for release at the PASAI Congress in August 2011.

The Second Cooperative Performance Audit on Access to Safe Drinking Water

Table A2 provides similar information to Table A1 on audit offices and audit team members participating in the second cooperative audit.

Table A2 Participants in the Second Cooperative Performance Audit

SAI	Level of SAI experience	Level of audit team experience
Cook Islands	high	2 - low
FSM – State of Kosrae	low	1 - low
FSM – State of Yap	low	1 - low
Fiji	high	2 - mixed
Kiribati	low	2 - low
Palau	high	1 - high
PNG	medium	2 - low
Samoa	medium	2 - mixed
Tonga	medium	2 - mixed
Tuvalu	medium	2 reduced to 1 - low

Results of the Second Cooperative Performance Audit on Access to Safe Drinking Water

For the second cooperative performance audit, the auditors-general of participating SAIs adopted a range of strategies to build and sustain performance auditing capacity within their offices. These are outlined below:

- ten SAIs participated, three new to performance auditing;
- 16 auditors were involved, of whom eleven developed performance auditing skills and knowledge and five enhanced existing skills;
- of the ten SAIs participating in the second cooperative performance audit, seven SAIs had participated in the first cooperative audit. Of these seven, four included audit team members who had not previously participated in the cooperative performance audit program. They were Cook Islands, Fiji, PNG and Palau. These team members were supported by a body of performance auditing experience

within their SAIs that could be leveraged. The remaining three SAIs introduced a new team member with the team led by a participant from the previous cooperative audit. They were Samoa, Tonga and Tuvalu. The three SAIs of Kosrae, Yap and Kiribati and their team members were new to the cooperative performance auditing approach and decided to build performance auditing capacity through their participation in the CPA program;

- ten individual, country/state specific audit reports were developed and as at 30 June 2012, eight are in the public arena; and
- a regional overview report was developed based on the results of individual SAI audit reports and is available on the PASAI website: www.pasai.org.

The Third Cooperative Performance Audit on Sustainable Fisheries Management

Table A3 provides similar information to Tables A1 and A2 on audit offices and audit team members participating in the third cooperative audit.

Table A3 Participants in the Third Cooperative Performance Audit

SAI	Level of SAI experience	Level of audit team experience
Cook Islands	high	2 - mixed
FSM	high	2 - high
Fiji	high	2 - mixed
Kiribati	medium	2 - mixed
Palau	high	2 - mixed
Samoa	medium	2 - mixed
Solomon Islands	medium	2 - low
Tonga	medium	2 - low
Tuvalu	medium	2 - mixed

Results of the Third Cooperative Performance Audit on Sustainable Fisheries Management

For the third cooperative performance audit, the auditors-general of participating SAIs adopted a range of strategies to build and sustain performance auditing capacity within their offices. These are outlined below:

- nine SAIs participated, one new to cooperative performance auditing;
- 18 auditors were involved, of whom ten developed performance auditing skills and knowledge and eight enhanced existing skills;
- of the nine SAIs participating in the third cooperative performance audit, seven SAIs

had participated in the first and second rounds of the CPA program, while FSM had participated in the first. Of these eight SAIs, two included audit teams whose members had not previously participated in the cooperative performance audit program. They were FSM and Tonga. In the case of FSM, both auditors were experienced performance auditors and adapted readily to the cooperative approach and the Tongan team, while inexperienced, was supported by a newly established Performance Audit Division within the Tongan Audit Office. The remaining six SAIs introduced a new team member with the team led by a participant from the previous cooperative audit. They were Cook Islands, Fiji, Kiribati, Palau, Samoa and Tuvalu. The SAI of the Solomon Islands and its team members were new to the cooperative performance auditing approach. However, the Solomon Islands Audit Office also has a dedicated Performance Audit Division and a Technical Advisor to support the audit team;

- individual, country specific audit reports were drafted, however, owing to the complexity of the audit subject matter and compressed timelines, a number of teams concluded that they needed extra time to do more fieldwork;
- the audit reports of FSM, Tuvalu and the Solomon Islands have been released in the public arena and the Fiji Audit Office has presented its report to its Public Accounts Committee; and
- a regional overview report was developed, based on the results of individual SAI audit reports.

Performance Audit Skills Gained through the CPA Program

Performance audit skills gained by participants in the CPA program include:

- developing a detailed audit work plan and suitable audit methodology related to the broad audit objective, that was endorsed by heads of SAIs, and tailoring the plan to the circumstances of each Pacific island country/state being audited;
- gaining an understanding of the relevance and application of auditing standards that underpin each stage within the performance audit cycle: planning, consultation, evidence gathering, analysis, drafting and reporting⁶;
- peer review support for other teams;
- presentation skills for audit plans and reports;
- fieldwork, evidence gathering and testing the adequacy of evidence against the audit topic;
- analysis of audit evidence and translating this into audit findings and potential recommendations; and
- report writing, focusing on key messages.

⁶ At the reporting meeting for the 3rd CPA, it was interesting to note that audit teams had a robust discussion on the sufficiency and relevance of their evidence base to support their audit conclusions and that a number opted to undertake more fieldwork to ensure these auditing standards were met.