



MINISTRY OF FISHERIES

Annual Report

FY 2015/2016

CONTENTS

1	INTRODUCTION	3
2	Foreword.....	4
3	OFFICE OF THE HON MINISTER.	6
4	OFFICE OF THE CHIEF EXECUTIVE OFFICER	6
5	CORPORATE SERVICES DIVISION	7
5.1	Workforce	7
5.1.1	Organisational Structure	8
5.2	Human Resource Development and Training	8
5.2.1	Staff Appointments / Promotions/Resigned/Dismissed/Death.....	8
5.2.2	Long-Term Study	9
5.2.3	Short-Term Training, Workshops, Local and Overseas Meetings.....	9
5.3	Financial Section	12
5.3.1	Finance Support Staff.....	12
5.3.2	BUDGET	12
5.3.3	Commentary Note for Target sources only	13
5.4	Asset Management Section	13
5.4.1	Assets Management.....	13
5.5	Information Communications and Technology (ICT)	15
5.5.1	ToFish Network/Computer Services (LAN)	15
5.5.2	Internet Services/Websites/Email (WAN).....	15
5.5.3	ELibrary services.....	16
6	FISHERIES MANAGEMENT AND DEVELOPMENT DIVISION	16
6.1	Fisheries Management and Development Section	16
6.2	Fisheries Policies Section	18
6.3	Fisheries Economic and Statistics Section.....	18
6.3.1	Export Performance	18
6.3.2	Tuna Fishery	18
6.3.3	Deepwater Line Fishery (DWLF).....	19
6.3.4	Sea cucumber Fishery	20
6.3.5	Aquarium Fishery	20
6.3.6	Home consumption.....	21
6.3.7	Domestic Market Survey.....	22
6.3.8	Duty free and Consumption Tax (CT) Exemption Scheme	23
7	FISHERIES SCIENCE DIVISION	24
7.1	Aquaculture Section.....	24
7.1.1	Winged Pearl Oyster (Pteria penquinn)	25

7.1.2	Giant clams (<i>Tridacna</i> sps)	25
7.1.3	Milkfish (<i>Chanos chanos</i>)	26
7.1.4	Seaweed – <i>Kappaphycus</i> sp	26
7.1.5	Micro-Algae – live feed (Brown algae – <i>T. Iso</i>).....	27
7.1.6	Sea urchin – <i>Ripneustes gratila</i>	27
7.2	Coastal Section.....	27
7.2.1	Monitoring of the existing SMA areas	29
7.2.2	Expansion of FAD program in Tonga.....	30
7.3	Offshore Fisheries Section:	31
7.3.1	Offshore Resource Assessment and Development Section.....	31
7.3.2	Tuna Fishery	31
7.3.3	Flag States Reporting – National Fleets	31
7.3.4	Annual catch estimates of non-target, by-catch associated and dependent species ..	32
7.3.5	Coastal States Reporting – Foreign Fleets	33
7.3.6	Way forward	36
7.4	OUTER ISLANDS.....	36
7.4.1	Vava’u Fisheries	36
7.4.2	Ha’apai Fisheries	39
7.4.3	Niuatoputapu Fisheries.....	41
7.4.4	‘Eua Fisheries	42
8	FISHERIES COMPLIANCE DIVISION (FCD)	43
8.1	LICENSE AND CERTIFICATION SECTION.....	44
8.1.1	Achievements.....	44
8.2	Vessel Monitoring System (VMS) Section.....	45
8.2.1	Achievements.....	45
8.3	Observer Program Section	47
8.3.1	ACHIEVEMENT.....	47
8.3.2	CHALLENGES FOR OBSERVER PROGRAM SECTION.....	47
8.3.3	WAY FORWARD.....	47
8.4	Enforcement section.....	48
8.4.1	Achievements.....	48
9	CHALLENGES FOR THE MINISTRY OF FISHERIES	49
9.1	Major challenges in the sector plan include:	49
9.2	For the Ministry, key challenges include:	49
10	Annex 1: Staff Lists for FY2015/2016.....	51
11	Annex 2: Acronyms and Abbreviations.....	53

1 INTRODUCTION

This Report provides an overview of the Ministry of Fisheries performance from July 2015 to June 2016 in Tonga and the region.

The mandate of the Ministry of Fisheries involves conserving, managing, developing and sustainable utilization of the Kingdom's aquatic resources to ensure food security and improve the social and economic well-being of the people of Tonga. During the FY 2015/16 the Ministry of Fisheries experienced a great number of challenges. These included a transitional period of reform and moving towards having a new organizational structure. Despite the problem of technical and financial resource limitations the Ministry was still able to deliver its mandate to meet the goals of the Corporate Plan.

Tonga's fishing ground stretches from 15°S to 23.5°S latitude and 173°W to 177°W longitude. The extent of Tonga's EEZ is approximately 700,000km² compared to its land area of 747km². The challenge therefore, lies in effectively managing the development of sustainable fisheries and maximising economic benefits from the country's fisheries resources.

The layout of this report reflects the functional organizational structure of the Ministry of Fisheries. This structure was approved by Cabinet during the year and was fully implemented towards the end of the reporting period.

The Ministry of Fisheries comprises four divisions:

- Corporate Services Division (CSD)
- Fisheries Management and Development Division (FMDD)
- Fisheries Science Division (FSD)
- Fisheries Compliance Division (FCD)

The Corporate Services Division comprises the following four sections:

- Finance
- Human Resource
- Information and Communication Technology
- Assets and Corporate

Fisheries Management and Development Division comprises the following four sections:

- Management and Development Planning
- Policy
- Economics
- Statistics.

Fisheries Science Division comprises the following three sections:

- Offshore fisheries
- Aquaculture
- Coastal Fisheries (which includes the outer islands consisting of Niua, Vava'u, Ha'apai, and Eua, and the Special Management Area (SMA) program)

Fisheries Compliance Division comprises the following four sections:

- Enforcement
- Vessels Monitoring System
- Observers
- Licensing

2 FOREWORD

The Ministry of Fisheries annual report provides an overview of the challenges and achievements for the year under the direction and leadership of Honourable Semisi Tauelangi Fakahau, Minister of Agriculture, Food, Forests and Fisheries.

Highlights of the year were the re-instatement of the Ministry of Fisheries as a stand-alone government agency, and the appointment of Dr Tu'ikolongahau Halafihi as the Ministry's new Chief Executive Officer. These actions were assigned high priority by stakeholders in the fisheries sector.

The Tonga Fisheries Sector Plan (TFSP) was developed with technical and financial assistance from the World Bank and the International Fund for Agricultural Development. The TFSP provides a solid foundation for seeking financial support from development partners for high priority activities and projects.

A key event was the Ministry's participation in the Royal Agriculture Show in Niuatoputapu, Niuafu'ou, Vava'u, 'Eua and Tongatapu, with the presence of their Majesties King Tupou VI and Queen Nanasipau'u as Guests of Honour, and to address every ceremony and award the prizes to the winners of the judged events in the respective islands. The Government Ministries, District and Town Officers, private sector, farmers, women, fisherfolk, youths and communities worked closely together and their efforts made the Royal Agriculture Show a successful national event. The Ministry of Fisheries acknowledges the teamwork and effort put together by all participants.

The Ministry's budget was increased from **\$1,749,821** in 2014/15 to **\$2,059,400** in 2015/16. The total number of permanent staff was 48.

A new divisional structure has been implemented for the Ministry. The Corporate Services Division focuses on administrative support like information technology, human resource development and management of the budget. The Fisheries Management and Development Division focuses on development, implementation and review of fisheries management and development plans. The Fisheries Science Division provides scientific and monitoring services, as well as leading the implementation of Special Management Areas and provision of extension services. The Fisheries Compliance Division is responsible for the enforcement of fisheries legislation to ensuring effective compliance with fisheries management requirements under the law. This encompasses vessel licensing and monitoring, control and surveillance including rules and regulations giving effect to Tonga's regional and international obligations.

The total marine product export, excluding aquarium products, during 2015/16 was 1,743 metric tons. The total fish export in this financial year was valued at TOP\$10.3 million, which is a 54.2% increase from the total value of fish export during the same period in the last financial year.

The three-main export marine products from Tonga are tuna, snapper and aquarium species. A total of 1,531 metric tons of tuna was exported, a 160% increase, with a total value of TOP\$9.8 million, a 100% increase. The snapper fish export was 95 metric tons and valued at TOP\$0.64 million. Total Aquarium products export of 143,928 pieces was valued at TOP\$0.48 million.

The market survey in Vava'u, Ha'apai and four main fish markets in Tongatapu estimated a total of 77 metric tons harvested with a value of TOP\$0.67 million.

Under the exemption scheme of duty and consumption tax on fuel, fishing gear and bait, it was estimated that a total of TOP\$3 million of government revenue was forgone.

The Special Management Area (SMA) Programme has so far established 12 SMAs and its implementation is progressing well including the on-going activities listed below:

- Kolonga and Kotu management plans approved by the Minister;
- the ADB provided funding for the establishment of 7 new SMA's in Vava'u;

- the Ridge to Reef Project started with a plan to establish 4 new SMA's in the Tongatapu Fanga'uta Lagoon for Nukunukumotu, Nukuleka, Lapaha and Holonga;
- the Tonga Health Project agreed to finance the establishment of 5 new SMAs for Ha'atafu and Navutonka in Tongatapu, and Mango, Fonoi and Matuku in Ha'apai.

The total catch of commercial fish species namely, albacore, bigeye, yellowfin, and skipjack tuna by the domestic fishing fleet was 459 metric tons.

Six foreign fishing vessels were active during the year; 5 Taiwanese flagged vessels and 1 Chinese flagged vessel. The total catch of these six vessels was 1,754 metric tons.

The total catch by weight for all deep-water snapper fish species was 160.5 metric tons.

A fishing trial on Bluenose under a NZ funded project to determine its abundance in the southern waters of Tonga EEZ, and the potential for Bluenose to access commercial markets is continuing.

There are eleven (11) commercial pearl oyster farms operating in Vava'u. Pearl Oyster Farm owners have established a National Pearl Farming Association (NPFA) with assistance from the Ministry of Fisheries, and the Ministry of Labour and Commerce. The Ministry of Fisheries handed over one of its old equipment and tool sheds to the NPFA to be used as a Pearl Oyster Museum. The renovation work on the old shed is progressing well and should be in full operation as a museum for the marketing of pearls and other by-products soon.

Seaweed farming at Vaipua was damaged by Cyclone Ula. In early 2016 another Cyclone Winston also damaged rafts with only a few seedlings remaining. The Ministry is now focusing on trying to revive and re-establish seaweed seedlings with the aim to commercialise the farming of seaweed throughout the outer island groups on Vava'u, Ha'apai, Tongatapu and Niuatoputapu

The 'Eua fish market has been upgraded with an ice making machine installed with financial assistance of the Government of New Zealand. The operation of the 'Eua Fish market is jointly managed by the Ministry of Fisheries and the 'Eua Fishermens' Association.

A total of 39 fishing vessels were licensed to fish within Tonga's EEZ during the year. There were six foreign tuna longline fishing vessels, four local tuna fishing vessels, seven commercial sport fishing vessels, and 22 deep-water snapper fishing vessels.

AT regional and international levels, Tonga has signed the Niue Treaty Subsidiary Agreement (NTSA), signed and ratified the Food and Agriculture Organization of the United Nations Agreement on Port State Measures (PSMA) to Prevent, Deter and Eliminate Illegal Unreported and Unregulated (IUU) Fishing.

Amongst the emerging challenges were the need to re-establish the Ministry of Fisheries (MoF) to operate separately from the Ministry of Agriculture, Food and Forests (MAFF), and the implementation of the Tonga Fisheries Sector Plan.

The Ministry acknowledges the on-going effort and support of the international development partners and regional agencies, as they contribute significantly towards the advancement of the development of fisheries in Tonga, in particular the New Zealand Ministry of Foreign Affairs and Trade, Australia's Department of Foreign Affairs and Trade, the Australian Centre for International Agricultural Research (ACIAR), the Forum Fisheries Agency (FFA), Secretariat of the Pacific Community (SPC), the Government of China, the Government of Japan, the Western and Central Pacific Fisheries Commission (WCPFC), the Food and Agriculture Organisation (FAO) of the United Nations, the World Bank, and the Asian Development Bank (ADB).

3 OFFICE OF THE HON MINISTER.

The Minister responsible for Tonga's fisheries is Hon. Semisi Taelangi Fakahau, Minister of Agriculture and Food, Forests and Fisheries. The Minister has a long and internationally recognised level of expertise in fisheries development and management, and work experience in national, regional and international fisheries situations, and the very first Pacific Island national to graduate with a University Fisheries Science degree with honours, as well as being the first Pacific Island national to be appointed as Government Head of Fisheries, in 1982. Significant achievements for the Minister's office during the year included leading Tonga's delegations in most regional and international Fisheries and Ocean fora.

The reporting year was a year of transition following the announcement of the re-instatement of the Ministry of Fisheries as a stand-alone government agency. This clearly indicates the Government's political will to revitalise the development of the fisheries sector, as being one of the country's three key economic sectors, to ensure sustainable economic growth and food security.

4 OFFICE OF THE CHIEF EXECUTIVE OFFICER

The first Corporate Plan 2016/17 -18/19 for the new Ministry of Fisheries was prepared in 2016 with the assistance of the Fisheries Executive Advisor funded by the NZ Ministry of Foreign Affairs and Trade. The plan is part of a national approach to planning and is directly linked to the Tonga Strategic Development Framework.

The Corporate Plan provides a renewed focus on the development and management of the country's sustainable fisheries. The plan supports the establishment of community based special management areas, and fosters sustainable and profitable commercial fisheries and aquaculture.

The Tonga Fisheries Sector Plan (TFSP) was developed during the reporting period. The TFSP was developed with technical and financial assistance from the World Bank and the International Fund for Agricultural Development, and provides a solid foundation for seeking financial assistance from development partners for some of the high priority projects.

The Ministry is appreciative of the efforts and support provided by the international development partners and regional agencies, which contribute significantly towards the development of fisheries in Tonga, in particular the New Zealand AID, AusAID, the Australian Centre for International Agricultural Research (ACIAR), the Forum Fisheries Agency (FFA), the Secretariat of the Secretariat of the Pacific Community (SPC), the Government of China, the Government of Japan, the Western and Central Pacific Fisheries Commission (WCPFC), the Food and Agriculture Organisation (FAO) of the United Nations, the World Bank, and the Asian Development Bank (ADB).

Hon. Cabinet Ministers approved the new position of Chief Executive Officer (CEO) for the Ministry of Fisheries. The new CEO of the Ministry of Fisheries, Dr Tu'ikolongahau Halafihi, was appointed and commenced in his new role in mid-June 2016. Mr. Vilimo Fakalolo, (Deputy CEO Corporate Services) was the acting CEO for the Ministry for most of the reporting period, assisted by Dr. Siola'a Malimali, (Deputy CEO Fisheries Science).

The Acting CEO for Ministry of Fisheries represented the Ministry and the Government of Tonga at the following meetings: Annual meeting of the Forum Fisheries Committee Officials; accompany the Hon Minister to the annual FFC Ministerial meeting; Management Options Consultations meetings, pre WCPFC; annual WCPFC meeting; US Treaty negotiation meetings; FFC Officials meetings; and the final US Treaty Negotiation meeting.

The CEO's office was supported by the staff members listed in Table 1 below.

Table 1: CEO Office, FY 2015/16

Name	Post
Dr Tu'ikolongahau Halafihi	CEO
Mrs Salote Koloamatangi	Senior Legal Officer
Mrs Pele Tuiano	CEO Secretary

5 CORPORATE SERVICES DIVISION

The Corporate Service Division is headed by Mr Vilimo Fakalolo, Deputy CEO. The CSD is made up of five sections: Finance, Human Resources, Information and Communication Technology, Assets and Corporate.

5.1 WORKFORCE

The Ministry has a total of 48 permanent staff posts that were approved under the Budget Estimates for 2015/16. During the Financial Year 2015/16 all of those permanent posts were either filled or in the process of being filled. There were 6 labourers hired in late 2015/16 due to problem of under-staffing faced by the Ministry of Fisheries. Details of the approved posts for 2015/16 are as shown in **Table 2** and the approved posts are listed in **Annex 1**.

Table 2: Permanent Posts as at June 30, 2016

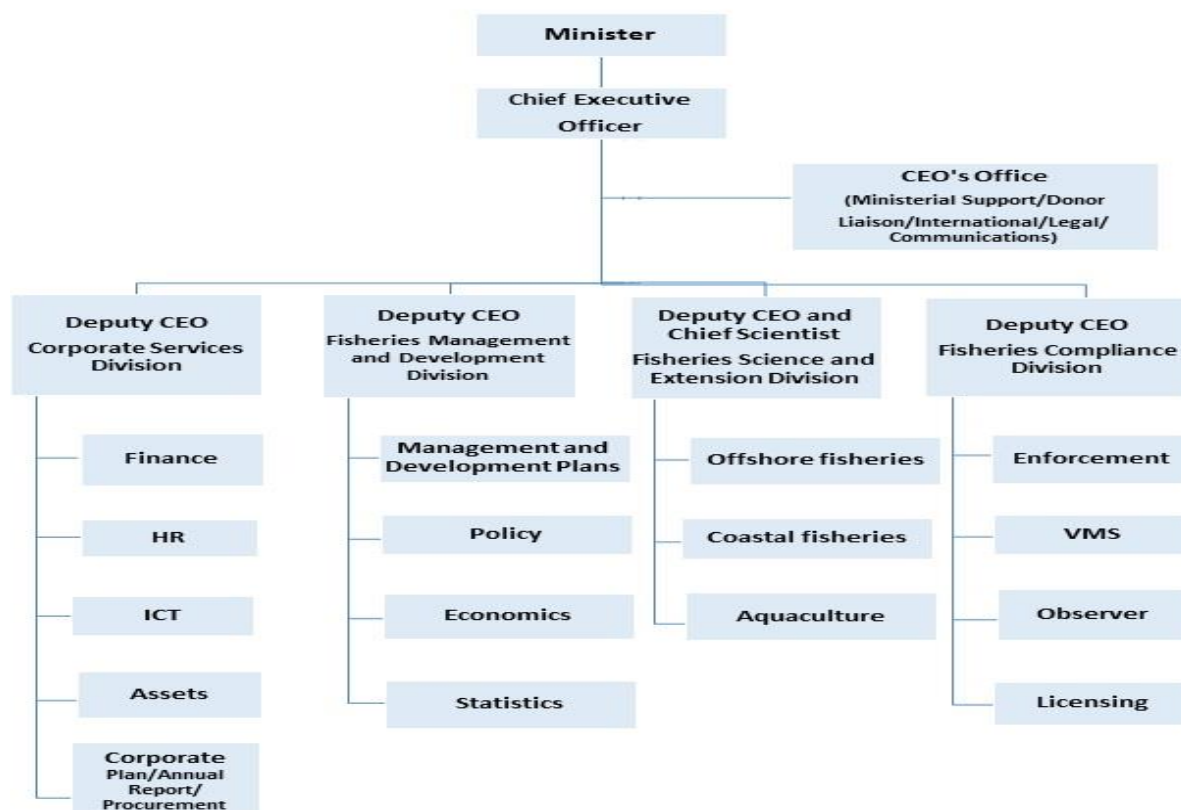
Level	Post Title	Post Abbreviation	No. of Post	No. of Vacancies
L1	Chief Executive Officer	CEO	1	
L/2	Deputy Secretary	DS	2	
L/5	Principal Fisheries Officer	PFO	2	
L/7	Senior Fisheries Officer	SFO	1	-
L/9	Fisheries Officer	FO	8	
	License and Certification	LCO	1	-
	Senior Technical Officer	STO	1	
	Technical Officer Grade. I	TOI	1	-
	Computer Programmer	CP	1	-
	Principal Accounting Officer	SAO	1	-
L/11/	Technical Officer Grade II	TOII	9	-
L/11/	Assistant Research Officer	ARO	1	-
	Senior Fisheries Assistant	SFA	5	-
	Fisheries Assistant	FA	5	-
L/13	Computer Assistant	CA	1	-

L/14	Fisheries Trainee	FT	8	-
Total Established Posts			48	

5.1.1 ORGANISATIONAL STRUCTURE

Ministry of Fisheries organisational structure as at Financial Year 2015/16 is shown below in Figure 1. This organisation structure was firstly discussed during the FY 2015/16 with the assistance of the Fisheries Executive Advisor, Steve Dunn.

Figure 1: Ministry of Fisheries draft-organisational structure as at financial year 2015/16



5.2 HUMAN RESOURCE DEVELOPMENT AND TRAINING

This Section is responsible for human resources development and planning and coordination of staff training. Table below outlines the names of the officers working under this Section.

Table 3: HRD and Training support staff: FY 2015/16

Name	Post
Mrs. Makeleta Mahe	Technical Officer Grade II
Mrs Ruby Kolo	Fisheries Trainee
Ms. 'Ana 'Akauola	Fisheries Trainee
Mr. 'Uluaki Vaipuna	Driver
Mr. Lui Makaafi	Labour

5.2.1 STAFF APPOINTMENTS / PROMOTIONS/RESIGNED/DISMISSED/DEATH

Table 4: Staff appointments/promotion/resigned/dismitted/deceased July 2015-June-2016

Name	Designation	Promoted/appointed/dismissed/resigned/deceased
Latu Aisea	Fisheries Officer	Appointed
Salote Koloamatangi	Legal officer	Transferred from Justice and promoted
Seiloni Inoke Toakuru	Fisheries Officer	Transferred to Marine and Ports and promoted.
Ofa ki Navuso Faletau	Fisheries Officer	Appointed
Samuela Pohiva	Fisheries Officer	Appointed
Tracy Aisea	Fisheries Officer	Appointed
Viliami Fatongiatau	Resource Assessment	Labour
Siosua Vaiangina	labour	Labour
Kolo Fe'ao	Fisheries Trainee	Resigned
Kolo Feao	labour	Deceased

5.2.2 LONG-TERM STUDY

Mr. Martin Finau, Fisheries Officer was awarded a scholarship to study for Masters in Fisheries Policy starting 2016 – 2017 but his scholarship was deferred.

5.2.3 SHORT-TERM TRAINING, WORKSHOPS, LOCAL AND OVERSEAS MEETINGS

Staff continued to benefit from short term training courses and meetings organized and funded by regional and international organizations. Table 5 shows local and overseas training courses and meetings which enabled the Ministry of Fisheries to develop staff skills and knowledge in various capacities.

Table 5: Training Courses and Meetings Attended during reporting period

MONTHS AND DURATION	MEETING TITLES AND HOST COUNTRIES
March 2 - 3 July	Pacific Island Fisheries Officer Course, Nelson, New Zealand
March 12 - 2 July	Seminar on Tropical Marine Industry Development for Developing Countries, Haikou/Hainan, China
22 – 27 June	2015 Oceanic Fisheries Stock Assessment Workshop, SPC Office, Noumea
June 30 – 2 July	FFC Ministers and Forum Fisheries Ministers meeting- FFCMIN11 – Funafuti, Tuvalu
6 – 8 July	Inter – sessional Working Group on the Regional Observer Programme-IWG-ROP4, Nadi, Fiji
15 – 17 July	Special PACP Trade and Fisheries Officials and Ministers/ The Special PACP Trade and Fisheries Ministers Meeting, Suva, Fiji

20- 21 July	FFA/TVM Effective newsroom and online engagement seminar for national fisheries information officers, Auckland, New Zealand
1-4 August	FFA Pre-SC WG and Special FFC
1-13 August	Pre – FFA meeting and eleventh regular session of the Scientific Committee, Pohnpei, FSM.
3 – 5 August	US Treaty Renegotiating Sessions, Auckland, New Zealand
19 – 20 Aug	Pacific Island Countries – US Regional workshop on trade, Investment and Private Sector Development, Suva, Fiji
19-21 Aug	Table Top Workshop of the Multilateral Subsidiary Agreement, FFA, Solomon Islands
21-10 Sept	2015 Seminar on Inland Fishery Resources Enhancement and Management for Asia-Pacific Countries, Wuxi, Jiangsu, China
31-4 Sept	WCPFC Northern Committee meeting and 11 th Consultation for future Cooperation between FFA and Japan, Sapporo, Japan
16-30 Sept	Technical and Compliance Committee Meeting (TCC11), Pohnpei, FSM
5-8 Oct	Workshop on Strategic Planning for Agriculture and Fisheries Statistics for the Pacific Island Countries, Nadi, Fiji
6 -9 Oct	Pacific Islands Ocean Acidification Project Regional Workshop, Auckland, New Zealand
7-16 Oct	Operation Kuru kuru 2015, FFA, Solomon Islands
17 – 14 Nov	SPEC Practical Safety Fishing and Financial Management, Santos, Vanuatu
25 – 14 Nov	PIC Special Training – Fisheries Resources Specialist for Pacific Island Countries, Wuxi, Jiangsu, China
26 – 18 Nov	Sustainable Fisheries Management in the Pacific Ocean region, Wollongong, Australia
1 – 9 Nov	2015 Ministerial Workshop on Marine Management and Blue Economic Development for Maritime Silk Road Countries, China
3- 5 Nov	Te Vaka Moana Data Analysis Workshop, SPC, Noumea
16 – 15 Dec	Second Program for Civil Servants from Pacific Island Countries
16- 20 Nov	Training course on policy evaluation and evidence policy design and development and review of Marine Aquarium Management Plan plus a work attachment at Ministry of Primary Industries in Wellington, New Zealand.
24 – 27 Nov	Regional Workshop on Organization of Official Veterinary- Safer Food
23 – 8Dec	Special FFC95 (WCPFC 12 preparation) WCPFC Management Options Workshop, annual WCPFC12, Bali, Indonesia
1 – 10 Dec	Assist on imported of wild milk fish fry from Christmas Island to Tonga, Christmas Island, Kiribati.
7 – 11 Dec	Regional Training Course for Pacific SIDS

8 – 12 Feb	Training on Marine Spatial Planning, Suva, Fiji
8 -12 Feb	16th Regional Observer Coordinators Workshop, FFA, Solomon Islands
15 – 19	Front line Management Mentor Leadership Training, FFA, Solomon Islands
8 -10 February	US Treaty –Officials Special Meeting, Nadi, Fiji
15 – 19 Feb	Workshop for Join Analysis of Sea Turtle Mitigation Measure Effectiveness in Longline Fisheries, HONOLULU
15 – 4 Mar	Attachment at SPC for Cost Benefit Analysis Training, NOUMEA
23 – 25 Feb	TE VAKA MOANA- Offshore Fisheries Management Workshop, AUCKLAND
29 – 4 Mar	Yearly community based survey at Waitabu Marine Park, TAVEUNI, FIJI
3 – 21 Mar	19 th MCS Working Group Meeting and other MCS related back to back meeting Emerging Technologies Workshop, 5 th Global Fisheries Enforcement Training Workshop, Regional Information Management System Workshop, AUCKLAND Regional Information Management Framework (RIMF) Workshop 18 -21 March 2016
7 – 9 Mar	FAO Regional Conference for Asia and the Pacific. PUTRAJAYA, MALAYSIA
7 – 19 Mar	Attachment with the FFA whereas one week will be in FFA Headquarters in Honiara Solomon Islands and one week attending the annual FFA MCS Working Group meeting in Auckland, New Zealand
15 – 17 Mar	South- South Experience Sharing Workshop on the TOPIC” Dealing with Mainstreaming and Synergies among Biodiversity related means in the updated/ revised national biodiversity strategies and action plans, Kenya
11 – 16 Apr	Fisheries Ministerial Study Tour, Wellington and Auckland, New Zealand
20 - 22 Apr	Annual Te Vaka Moana Governing Council Meeting. Rarotonga, Cooks Islands
22- 17 May	PIC Special Training – Marine Bio- Acoustic Technology, China
25 – 29 Apr	VMS Training, USP, Suva, Fiji
25 – 29 Apr	Tenth Tuna Data Workshop, SPC, Noumea
3- 20 May	Pre FFC and 98 TH FFC Officials meeting, Port Vila, Vanuatu
23- 27 May	US Treaty Meeting, Nadi, Fiji
12- 01 June	2016 Seminar on Value – Added Fishery Product Development and Market System Construction for Developing Countries, China
16 – 20 May	HACCP Training support for Competent Authority, Suva, Fiji
8 – 10 June	Tokelau Arrangement Workshop, Nadi, Fiji

3 – 22 June	International workshop on seaweed and fisheries production development, Suva, Fiji
20- 24 June	US Treaty Renegotiating Meeting, Auckland New Zealand
23 – 24 June	Te Vaka Moana Professional Writing Workshop (focus on fisheries policies and fisheries management plans) Apia, Samoa
4 – 8 July	2016 Oceania fisheries stock assessment training workshop, SPC, Noumea
8 – 11 Aug	Training course on Radio and Broadcasting Techniques, China
4 -6 July	Special Officials Forum Fisheries Committee Ninth Meeting Annual Ministerial Forum Fisheries Committee Thirteenth Meeting Port Vila, Vanuatu
11 – 15 July	Global Conference on Committee on Fisheries (COFI – FAO) – Thirty- second session, FAO headquarters, Rome
11 – 22 July	Training on Fisheries Trade, FFA, Solomon Islands
9 - 22 July	2016 Oceania Fisheries Stock Assessment Training Workshop (Advanced Stock Assessment Workshop, SPC, Noumea
11 – 15 July	Improving the knowledge base for Ciguatera monitoring and protection of public health and local economics, Pacific Island Countries and Territories, SPC, Noumea
July 13 - 2 Aug	Seminar on Aquaculture and Technical Extension for Developing Countries. Jiangsu, China
July 28 - 11 Aug	PRE- FFA meeting, 2 nd Meeting of ER-EM Working Group and 12 th Regular Session of the Scientific Committee, Bali, Indonesia

5.3 FINANCIAL SECTION

5.3.1 FINANCE SUPPORT STAFF

The Finance services were carried out by fisheries staff are listed below.

Table 6: Finance support staff

Name	Post
Mr. Tevita Talakai	Accountant
Mrs. Katalina T Fifita	Technical Officer Grade II
Mrs. Mele Holo'ia	Technical Officer Grade II

5.3.2 BUDGET

The total Budget for Expenditure increased from **\$1,749,821** in 2014/15 to **\$2,059,400** in 2015/16. Revenue collected from target sources decreased **\$4**, from **\$1,048,204** in 2014/15 to **\$1,048,200** in 2015/16.

The salary allocation accounted for FY 2015/16 is the largest share of the budget accounting for 63.1% of the approved budget; the operating budget accounted for the remaining portion i.e. 36.9%. The details of the budget allocation are provided in Table 7.

Table 7: Funding by major component, 2014/15 -2015/16

Expenditure by Major Component	2014/15 (T\$)	2015/16 (T\$)
Established staff	1,045,975	1,299,100
Un-established staff	38,609	35,000
Travel and Communication	137,300	133,000
Maintenance and Operations	180,042	261,700
Purchase of Goods and Services	264,350	272,100
Operational Grants and Capital	83,546	58,500
Total	1,749,821	2,059,400

Table 8: Revenue Performance

Revenue sources with collection for FY 2014/15 -2015/16

Revenue Sources	FY 2014/15	FY2015/16	Variances
Target Sources	1,048,204	1,048,200	-4
Sales of produce and product	58,026	73,192	15,166
FFA (US Treaty)	1,622,699	1,069,386	-553,313
Rentals	208,374	485,115	276,741
Licences	216,018	213,938	2,080
S/Total	2,105,117	1,841,631	-263,486
Non-Target Sources			
Consumption Tax	48,322	90,864	42,542
Fish Bond	1,700	1,100	-600
Development projects	175,056	120,147	-54,909
S/Total	225,078	212,111	-12,967
G/Total	2,330,195	2,053,742	-276,453

5.3.3 COMMENTARY NOTE FOR TARGET SOURCES ONLY

- Total revenue reported was \$1,841,631, of which \$1,069,386 (58%) was received as proceeds from the Multilateral Treaty on Fisheries with the USA; \$213,938 (12%) was received from Fishing Licences, \$485,115 (26%) received from Rental and the remaining 4% from the sale of produces and products.

5.4 ASSET MANAGEMENT SECTION

5.4.1 ASSETS MANAGEMENT

The Asset Management and Engineering Services Section mainly provides the services of repairs, maintenance and recording of Ministry of Fisheries Assets, and supporting other related needs from other Sections. Support staff members are listed in Table 9.

Table 9: Assets Management and Procurement, Engineering Servicing staff, 2015/16

Name	Post
Mr Sioeli Pasikala	Fisheries Officer
Mr Pala'a Mausia	Senior Fisheries Assistant
Mr. Siosifa Fisi'ipeau	Senior Fisheries Assistant
	(He passed away in June,2016)

The Asset Management section is mainly focused on managing and monitoring of Fisheries assets including repair and maintenance of government vehicles.

During 2015 - 16, the following major outputs were achieved by the Assets Management unit.

- Repair and maintenance of fisheries vehicles and outboard motors.
- Completed the construction of Fish Market at 'Eua.
- Designed, planned and estimated the costing for Tu'imatamoana Fish Market processing facility.
- Managed the renovation of the main office building.
- Transferred government vehicle P 1497 to Vava'u Division to replace P 1478 which was transferred back to Tongatapu.
- Routinely checked the sea water pump, and transfer that duty to the Aquaculture Division.

Table 10: Table below provides an inventory of all vehicles in operation in 2013.

Transportation Pool 2014

Year Purchase	Register Number	Type	Location	Standard	Fund	Remarks
1994	P 1026	Toyota Hiace	Sopu	Poor Condition	PDF	To be replaced
1997	P 1120	Toyota Hilux	Sopu	Poor Condition	JICA	To be replaced
1997	P 152	Toyota Hilux	Sopu	Poor Condition	PDF	To be replaced
2004	P 1351	Toyota Hiace	Sopu	Poor Condition	PDF	Need replacement
2007	P 1497	Toyota Hilux	Sopu	Fair Condition	TFP	Transfer to Vava'u
2013	P 1774	Toyota Hiace	Sopu	Good Condition	FD	
2013	P 1775	Toyota Hiace	Sopu	Good Condition	FD	
2013	P 1776	Toyota Truck 2Ton	Sopu	Fair condition	FD	
2007	P 1478	Toyota Hilux	Vava'u	Poor condition	TFP	Transfer to Tongatapu

2013	P 1736	Toyota Hilux	Pangai Hp	Good Condition	PDF	New Vehicle
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Mostly the Ministry's vehicle are over 10 years old and have become expensive and uneconomical to repair and maintain. It is recommended that most are replaced with new vehicles.

5.5 INFORMATION COMMUNICATIONS AND TECHNOLOGY (ICT)

The Section continues in pursuing its goal to provide timely and quality ICT services (computer, network hardware and software and internet related technology) for internal and external purposes; to store, maintain and monitor official records and publications in electronic formats for historical purposes and future references; and the dissemination of fisheries information for the Ministry of Fisheries, Government Agencies, fishing communities, and regional and international organizations. In addition, the Section plays another key role in keeping the public and stakeholders informed through publishing and updating the fisheries website on fisheries developments.

Support staff members are listed in Table 11.

Table 11: Information and Communication Technology staff, 2015/16

Name	Post
Mrs Lavinia Vaipuna	Computer Programmer
Mr Ofa ki Navuso Faletau	Fisheries Officer

The core ICT services are:

5.5.1 TOFISH NETWORK/COMPUTER SERVICES (LAN)

The recruitment of Mr. 'Ofa ki Navuso Faletau, System Administrator in June 2015 strengthened the network services of the Ministry.

The Local Area Network (LAN) runs under 3 servers, with many PCs and laptops. Despite many limitations and lack of resources experienced during the year the section still managed to facilitate the heavy work flow and maintain effective communications networks.

Computer services largely involved: (i) operation and maintenance of all computer hardware and software; (ii) operation and maintenance of the Division's internet connection, email services and websites; (iii) development and maintenance of databases required for planning and management purposes, and (iv) training of Fisheries personnel on use of computer equipment and software applications. Services were available to all staff at Tongatapu, Pangai, and Neiafu.

5.5.2 INTERNET SERVICES/WEBSITES/EMAIL (WAN)

The Internet, Websites and Email services facilitates the Ministry's communication inside and outside the office. The email service allows staff to access their emails remotely. The Ministry of Fisheries maintains its official website www.tongafish.gov.to.

5.5.3 ELIBRARY SERVICES

During the reporting period, the service was not in operation following the librarian's appointment to another post. Although the services are online there are still old physical publications in the library that need scanning and uploading to the website. It is planned to develop a project proposal seeking funds on assisting us in performing these duties in the future.

6 FISHERIES MANAGEMENT AND DEVELOPMENT DIVISION

The Fisheries Management and Development Division of the Ministry of Fisheries is a newly established division of the ministry which is responsible for delivering the ministry's program of fisheries management and development planning and policy for coastal and offshore fisheries. These are the core statutory functions of the division that in turn drive the compliance and science programs. The functions of the division include:

- Formulations and review of Fisheries Management and Development Plans
- Fisheries policy development and review
- Economics of fisheries
- Market and trade reports
- Statistics
- Data management
- Project oversight and reporting

Four sections of the ministry deliver program under this Division which include the Fisheries Management and Planning Section, Policy Section, Economics Section, and Statistics Section.

The Fisheries Management and Development Division is supported by the staff members listed in Table 12 below.

Table 12: FMDD staff, FY 2015/16

Name	Post
Mrs.Salome Taufu	Principal Fisheries Officer
Mrs.Mele Atuekaho	Senior Fisheries Officer
Mr. Samuela Pohiva	Fisheries Officer

6.1 FISHERIES MANAGEMENT AND DEVELOPMENT SECTION

Section 7 of the Fisheries Management Act 2002 provides the statutory framework for this Section's functions: It states: The Secretary for Fisheries shall "*progressively prepare and keep under review plans for the conservation, management, sustainable utilization and development of fisheries in the fisheries waters and ensure implementation of such fishery plans.*" This provides the platform to progress fisheries management and development in Tonga.

The core function of the Fisheries Management and Planning Section is to formulate and develop fisheries management and development plans and its implementation and also review the management and development plan for marine fisheries. These management

plans provided the basis for the formulation of the Regulation for Conservation and Management of the fisheries resources.

The following are the major achievements of the Section in the past financial year 2015-16:

- ***Tonga Tuna Management and Development Plan (TMDP), 2015-2017*** – On going implementation of projects and activities under TMDP 2015-2017 Implementation schedules. Activities and projects completed include:
 - (i) Bareboat Charter Policy approved to provide clear directions with respect to charter fishing in the Kingdom’s fisheries waters. The policy also informs legal drafting of relevant amendments to the Fisheries Management Act and regulations that cater for fishing vessels that are chartered for fishing purposes.
 - (ii) Review of current effort limitation and number of fishing vessels authorized to fish in Tonga waters. To date a total of six (6) FFV have been licensed to fish in Tonga’s EEZ. However the government of Tonga still sees Non Communicable Disease (NCD) as one of the major causes of the increasing rate of mortality among the people of Tonga. The Ministry of Fisheries wished to collaborate with other government ministries in addressing this issue by changing the current policy of limiting the number of FFV to six (6) vessels and issue a fishing license for a 7th foreign fishing vessel to fish in Tongan waters. The purpose of this change to the current policy is to ensure an increase in the supply of fish at the local market to cater for the needs of the people and encourage a healthier diet amongst the people of Tonga. A Memorandum of Understanding was sign by the vessel operator of this foreign fishing vessel and the Ministry of Fisheries on the prices of by-catch offload by this vessel and sold into the domestic market.
- ***Marine Aquarium Management and Development Plan*** - This plan is currently under review for the new plan, *Marine Aquarium Management Plan 2017-2021*. The economic survey of the fishery was conducted by the staff of the Division with the assistance of SPC. The outcome of the survey was used in the review of the previous plan. The first draft of the revised plan and the consultation was completed and awaits further amendments before the plan can be submit for Minister’s approval.
- ***Deepwater Fisheries Management and Development Plan (DWFMP)*** – The DWFMP is currently under review. A series of meeting were conducted to discuss the management measures to be incorporated into the new plan. Once the stakeholders have agreed on the measures, the first draft will be completed and internal consultation will be conducted before being submitted for the Minister’s approval.
- ***Sea Cucumber Management Plan*** – The Sea Cucumber Management Plan is currently under review. Cabinet Decision No. 1599 provides new direction for management of this fishery. This includes assigning legal ownership of sea cucumber resources that inhabit the country’s coastal waters to the coastal community. The first internal consultation is completed.

- **National Plan of Action (NPOA) for shark (2014 – 2016)** - Currently implemented by incorporating the management measures in the Minimum Term and Conditions of tuna fishing licences.

6.2 FISHERIES POLICIES SECTION

The following Fisheries Policies have been approved by the Hon. Minister for implementation during the reporting period.

1. Infringement Guidelines for Offshore Fishery
2. Standard Operation Procedure (SOP) for illegal fishing (Inshore Fishery)
3. Data Policy
4. Bareboat Charter Policy

6.3 FISHERIES ECONOMIC AND STATISTICS SECTION

The followings are the major achievements of this section during the financial year July 2015- June 2016.

6.3.1 EXPORT PERFORMANCE

The total marine product exported, excluding aquarium products, during this period was 1,743 metric tons, and this is a 73% increase from the total marine products exported in the last financial year which was predominantly due to substantial increase in tuna exports. All fish exports in this financial year were valued at TOP\$10.3 million which is 54.2% increase from the value of fish exported in the same period in the last financial year. The total marine exports were dominated by tuna, as can be seen in **Figure 1.1**.

Figure 1.1: Total Marine Exports as of July 2015 – June 2016

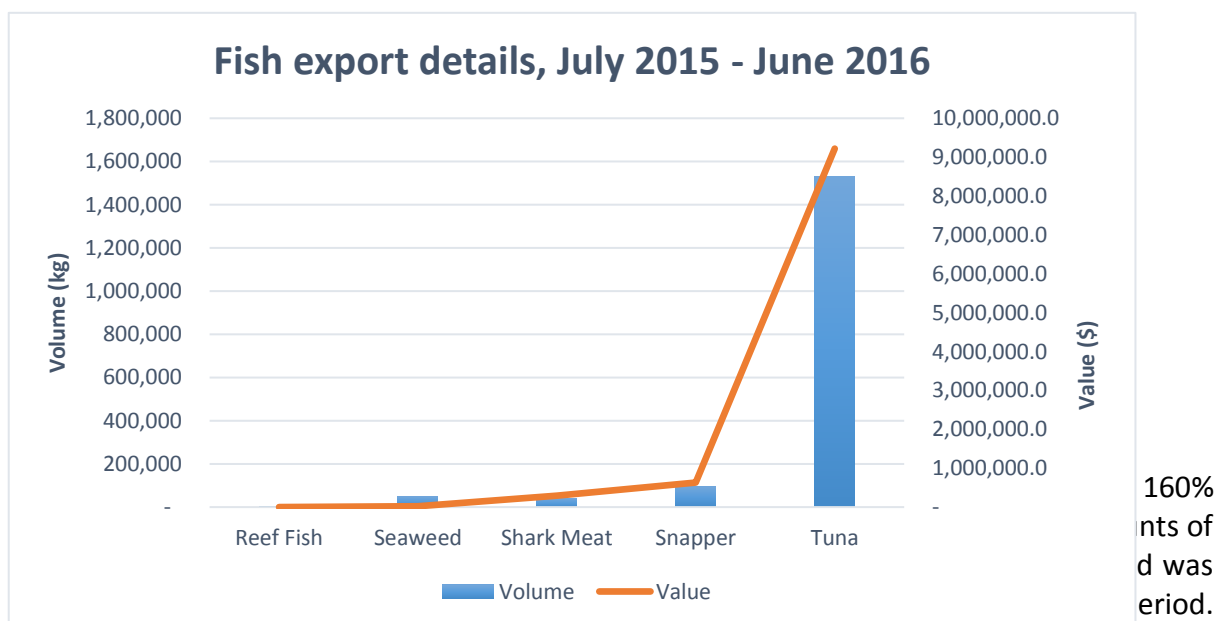
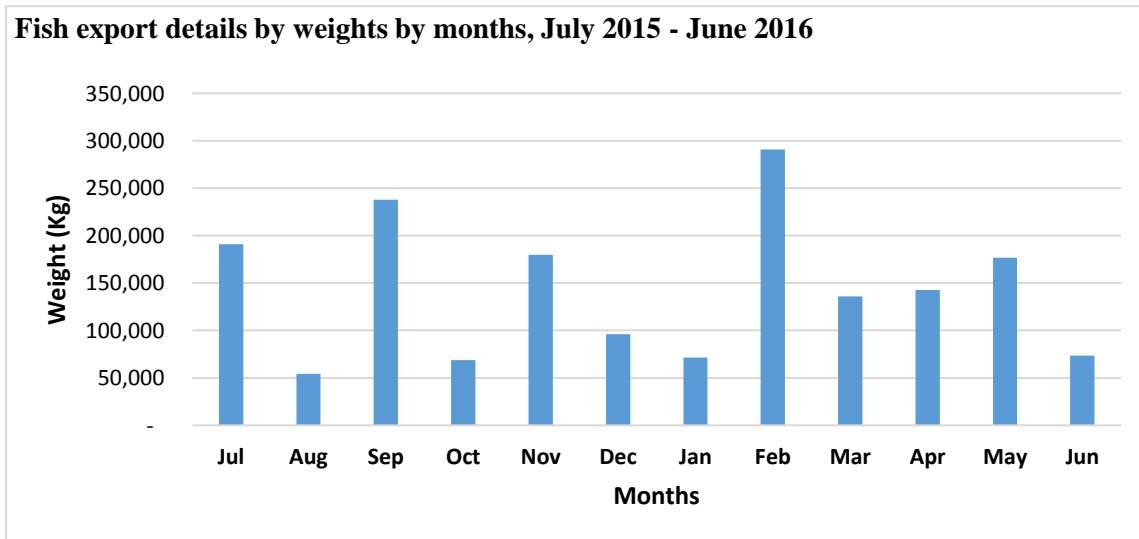
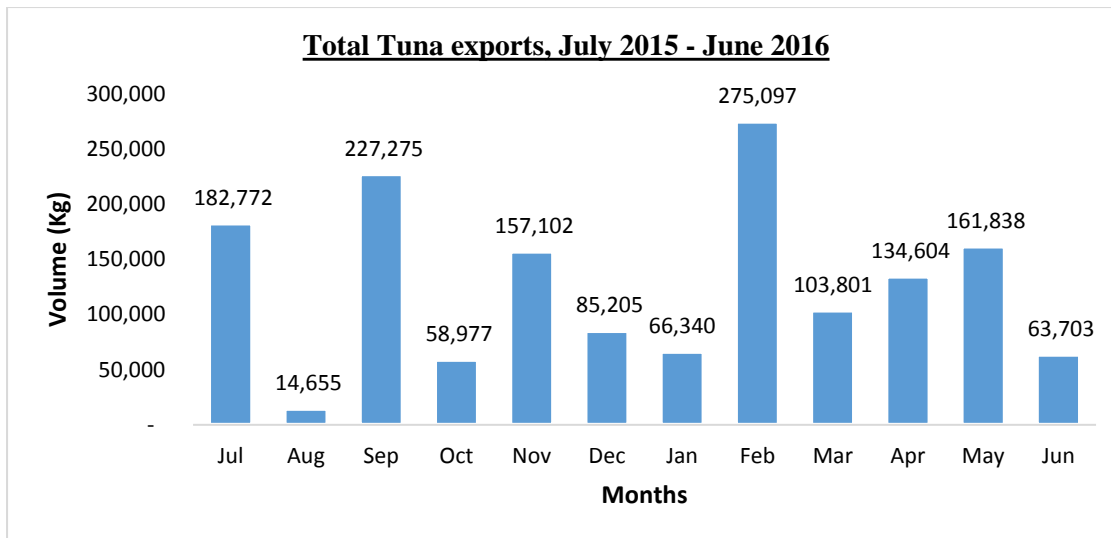


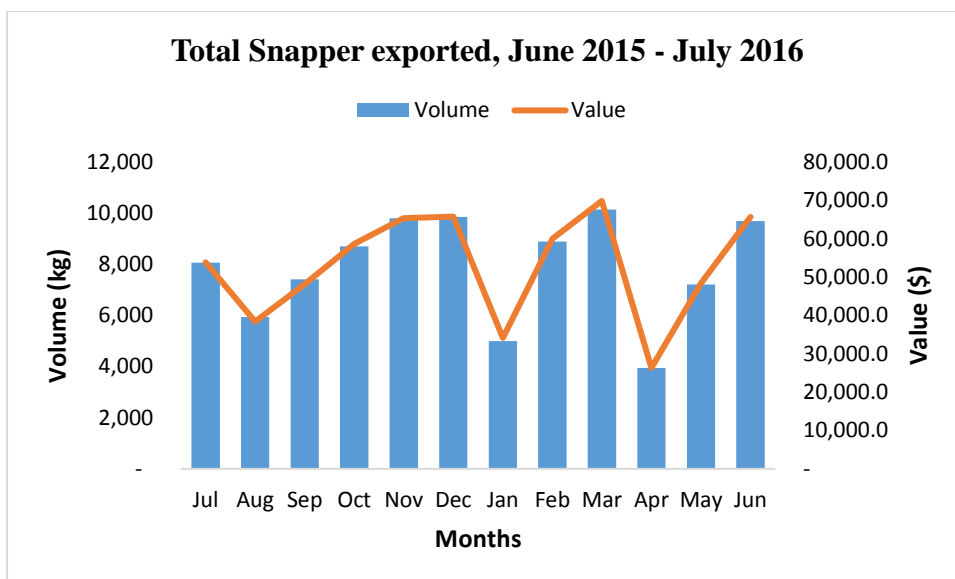
Figure 1.2: Total Tuna Exported by weights (kg), July 2015 – June 2016



6.3.3 DEEPWATER LINE FISHERY (DWLF)

A total of 95 metric tons of snapper was exported in this financial year, contributing 6% to the total quantities of marine products exported. It was valued at approximately TOP\$0.64 million. The export of snapper was dominated by flame snapper (P. Tavake).

Figure 1.3: Total Tuna Exported by weights (kg), July 2015 – June 2016



6.3.4 SEA CUCUMBER FISHERY

The annual closure season for harvest and export of Sea cucumber is the 1st of October to the 31 of March every year. Ministry of Fisheries submitted to the Minister’s Cabinet an application for a five-year moratorium on the harvest and export of bech-de-mer based on analysis of the status of the stock. Currently, the sea cucumber fishery is remained closed.

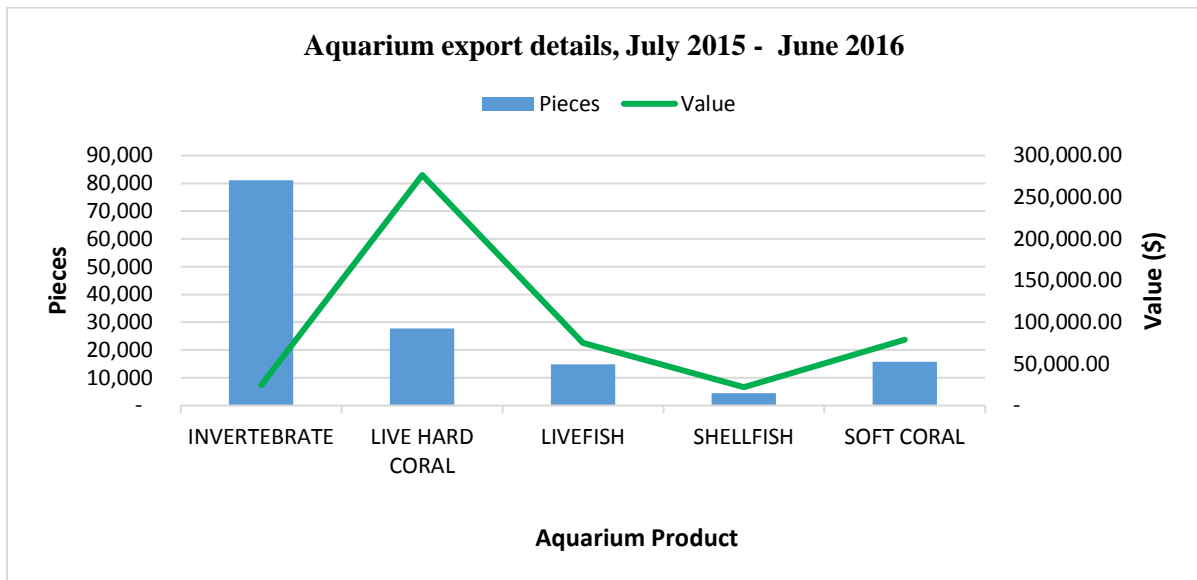
6.3.5 AQUARIUM FISHERY

The total aquarium products exported in this period was 143,928 pieces, was valued at approximately TOP\$0.48 million. This was a 28% decrease in quantities and associated with 8% decrease in value from aquarium exports in the same period last year. The aquarium export was dominated by low value invertebrates in terms on quantity as can be seen in Table 13. The main market for exported aquarium products is the United States.

Table 13: Aquarium exports, July 2015 - Jun 2016

Aquarium products	Quantity (pcs)	Value (\$TOP)
Invertebrate	81,127	24,644.20
Live hard coral	27,746	276,678.00
Livefish	14,890	75,042.00
Shellfish	4,407	22,035.00
Soft coral	15,758	79,175.00
Total	143,928	477,574.30

Figure 1.4: Aquarium exports as of July 2015 – June 2016



6.3.6 HOME CONSUMPTION

A total of 103 metric tons of marine products and 44,186 souvenir pieces were taken by overseas passengers for home consumption purposes in this financial year. This was a 15% decrease from the number of marine products taken for home consumption in the same period last year and a 23% increase in the total amount of souvenirs taken by passengers.

Figure 1.5 shows the variety of fisheries commodities and their amount taken for home consumption. Other than souvenirs, fish were the dominant commodity and followed by crustaceans. Home consumption exports were dominated by New Zealand with 79%, followed by United States with 16% and Australia with 10% of the total exports.

Figure 1.5: Fisheries product taken for home consumption: July 2015 – June 2016

Species Group	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
bechdemer	-	-	4	-	9		-	6	332	19		21	391
crustaceans	1,416	1,018	957	759	1,497	1,196	159	237	175	203	194	220	8,031
fish	4,422	4,056	4,769	3,055	5,857	9,848	668	921	838	768	669	658	36,529
Giant Clam	17	-	-	1	2	-							20
Holothuria	2,335	1,732	1,510	1,273	1,863	2,803	386	318	59	305	259	325	13,168
Jellyfish	66	101	105	107	208	33	105	81	34	76	48	81	1,045
Lobster	277	133	217	213	590	672							2,102
Mollucs	1,119	740	689	601	1,498	1,007	221	188	227	212	166	206	6,874
Octopus	954	931	973	779	1,003	963							5,603
sea anemone	45	2	3	12	9	10	6	6	3		37	33	166
seaweed	13	5	8	7	47	18	11		3		2	1	115
souvenir	6,852	5,110	3,664	6,492	3,970	8,309	1,333	6,238	922	252	829	215	44,186
turbo							16	9			12	2	39

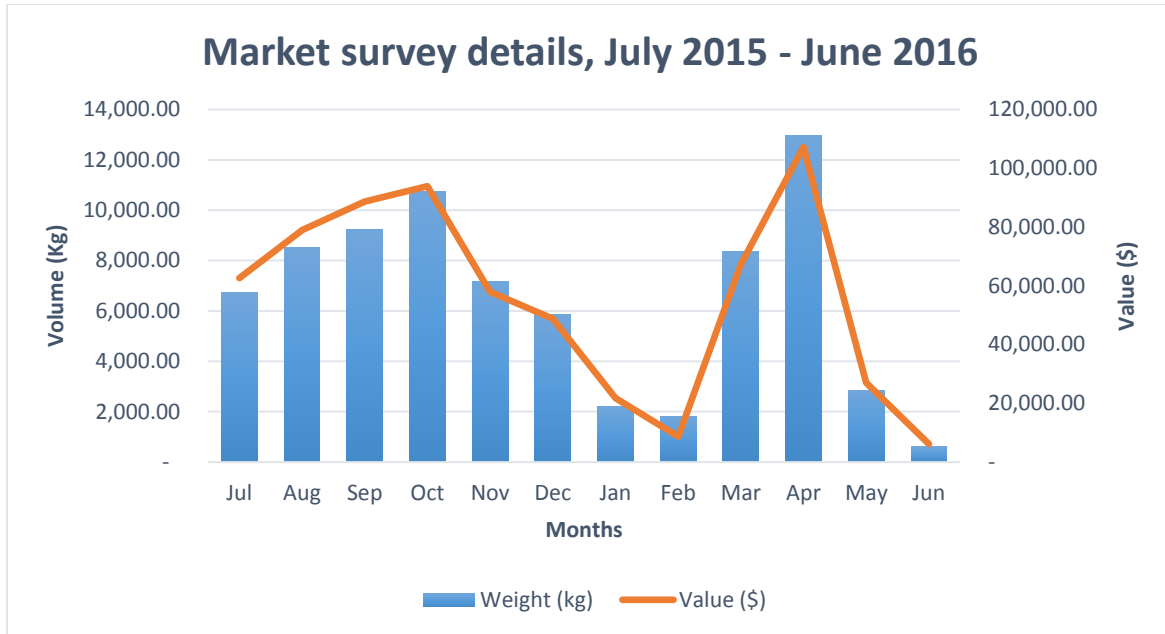
6.3.7 DOMESTIC MARKET SURVEY

A market survey is conducted once every week in a main local fish market with the purpose to gather information based on marine resources market price and estimated volume sold in local markets. This survey includes Vava'u, Ha'apai and four main fish markets in Tongatapu. A total of 77 metric tons of marine resources was recorded in this financial year which is approximately valued to \$TOP 669,057.04. The average price varied according to market demand for fish and production cost. Changes in fish market price are determined by the quantity of marine products available in the market in a particular time. The local market is usually dominated by Fua market followed by Vava'u market. These data reflect inshore fishing only.

Table 14: Market survey as of July 2015 – June 2016

Month	Weight (kg)	Value (\$)
July	6743.77	62671
Aug	8503.25	79012.3
Sep	9233.1	88698.8
Oct	10744.6	93868.9
Nov	7152.2	57901
Dec	5842.5	48825.74
Jan	2224.3	21815.5
Feb	1793.5	8745
Mar	8375.6	67211
Apr	12950.79	107218.8
May	2837.8	26949
Jun	614.8	6140
TOTAL	77016.21	669057.04

Figure 1.5: Local Market survey as of July 2015 – June 2016



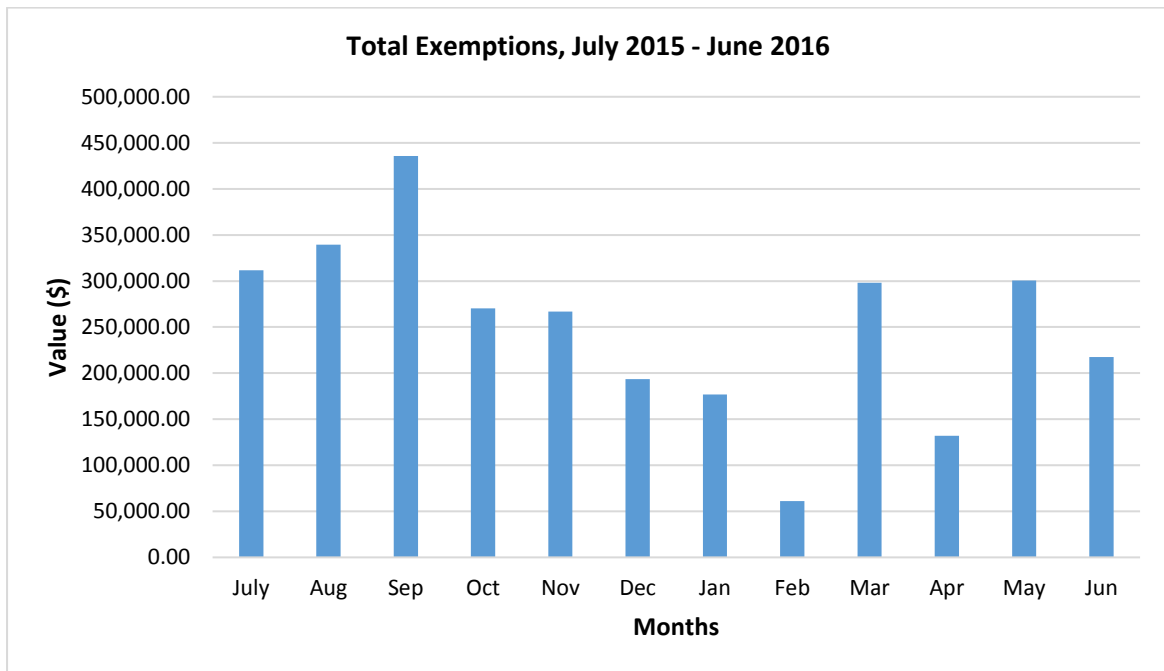
6.3.8 DUTY FREE AND CONSUMPTION TAX (CT) EXEMPTION SCHEME

This Scheme was established with the aim to assist fishermen in the development of the fishing sector. Under this Scheme, duty and CT on fuel, fishing gears and bait was exempted by Cabinet approval. An estimated total of TOP\$3 million of government revenue was forgone under this Scheme for this financial year of which 95% was forgone from CT and 5% from duty free. About 81% of the amount forgone under the Scheme was from fuel alone. A total of 39 fishing vessels were eligible under this scheme and they were predominantly tuna and snapper boats.

Table 15: Total exemptions as of July 2015 – June 2016

Month	Total exemption
July	311,571.82
Aug	339,300.27
Sep	435,577.40
Oct	270,139.06
Nov	266,788.81
Dec	193,467.48
Jan	176,679.40
Feb	61,231.90
Mar	298,175.66
Apr	131,924.88
May	300,467.51
Jun	217,480.79
TOTAL	3,002,804.98

Figure 1.6: Total Exemptions as of July 2015 – June 2016



7 FISHERIES SCIENCE DIVISION

Fisheries Science Division is divided into three main sections including Offshore fisheries, Aquaculture, and Coastal Fisheries which includes the outer islands consisting of Niua, Vavau, Ha’apai and Eua.

Fisheries Science Division is headed by Dr Siola’a Malimali, Deputy CEO.

7.1 AQUACULTURE SECTION

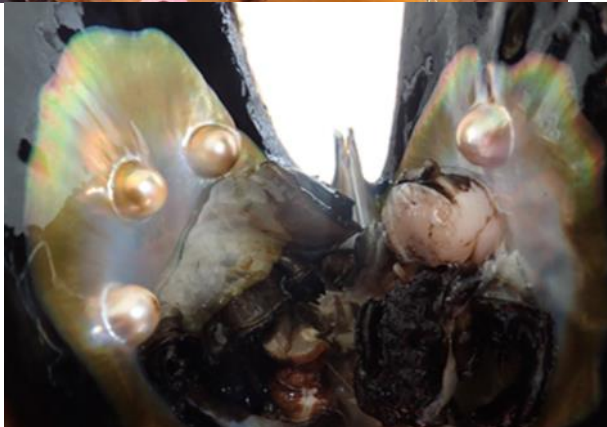
The Aquaculture section is supported by the staff members listed in Table 16.

Table 16: Aquaculture Section: FY 2015 - 2016

Name	Post
Mr Poasi Ngaluafe	Principal Fisheries Officer
Mrs Tracy ‘Aisea	Fisheries Officer
Mr Tonga Tuiano	Senior Fisheries Assistant
Mr Siaosi Fonua	Fisheries Trainee
Mr Tevita Havea	Labour
Mr Sitaleki Mafi	Labour

7.1.1 WINGED PEARL OYSTER (PTERIA PENQUINN)

- Pearl oyster farmers managed to establish 8 areas Vava'u, 4 in Tongatapu, and 2 in Ha'apai.
- Hatchery production managed to produce 500,000 spats which were transferred to the ocean nursery with the collectors.
- Oysters spats were distributed to farmers: In total 9,000 pcs (small size 6 – 7 months old) and 8,000 pcs (medium size less than year old) as the result of hatchery production from 2014-15.
- More than 500 pearl oyster were seeded with average market value (local market) TOP\$40 – 100 for each pearl.



7.1.2 GIANT CLAMS (TRIDACNA SPS)

- Hatchery production managed to produce fertilize 10 million eggs with expectation of 10 -30% survival. Only 1 species managed was spawned (*T.derasa*). Two other species (*T.maxima* and *T.squamosa*) only produced sperm.
- 200 pcs of *T.maxima* were transferred to the ocean nursery at Fafa Island.
- 5,400 pc of *T.maxima* sold to aquarium traders for a total of TOP\$21,563.50.
- Collected 40 *T.derasa*, 25 *T.squamosa* and 10 *T.maxima* as hatchery broodstock.



7.1.3 MILKFISH (CHANOS CHANOS)

- Two shipment of milkfish fry were collected from Kiribati under an FAO technical programme. These were cultured at Sopa pond culture system before transfer to Nomuka.
- Total of 500 fry managed to transfer to Nomuka for further culture at pen culture system at the inside lake.
- Majority of the fry escaped to the lake due to cyclone Winston. The size and number of juvenile milkfish in the lake is unknown but the trial was encouraging up to that point.



7.1.4 SEAWEED – KAPPAPHYCUS SP

- Strains of seaweed were introduced from Indonesia under SPC technical assistance with technical support from Fiji Fisheries.
- Target need to be reached of 1000 seeds before distribution to seaweed farmers.
- Seed reached 3,000 but unfortunately, some were harvest and allowed to dry out and the remainder were damaged by Cyclone Winston in early 2016. As a consequence most of the seed remaining were consumed by rabbitfish.
- Revival of remaining seed manage resulted in more than 300 seeds.



7.1.5 MICRO-ALGAE – LIVE FEED (BROWN ALGAE – T. ISO)

- Mass culture success starting from 250 ml flask to 5000 L outdoor culture system.
- Culture techniques established with supporting staff trained by the JICA Senior volunteer.
- More strains of micro-algae will be the targeted especially tropical species to accommodate current aquaculture commodities culture at Sopo Mariculture Centre including propose hatchery run for sea cucumbers (golden sandfish - *Holothuria lessoni*).



7.1.6 SEA URCHIN – RIPNEUSTES GRATILA

- Managed to spawn the local species but larval development not successful due to low live feed nutritional content (i.e. only one live algae species available but need more than two species - currently not available).



7.2 COASTAL SECTION

The Coastal section supported by the staff members listed in Table XX below.

Table 17: Coastal section office, FY 2015/16

Name	Post
Mr Latu Aisea	Fisheries Officer
Mr Sione Mailau	Technical Officer
Siosiani Matangi	Fisheries Trainee (Media)
Mr Semisi Kaufusi	Labour (Media)

In July 2015 to June 2016, the following major outputs were achieved by this Section:

1. Expansion of SMA program in Tonga (Refer to figure 18 below)

- Kolonga and Kotu management plans were approved by the Minister in December 2015. Currently implementing the SMAs activities according to the management plans.
- The ADB Project started with the establishment of the 7 proposed SMA areas in Vava'u.



- Consultation meeting with these communities to confirm their interest towards SMA program were conducted together with a site visit with the international consultant looking at socio-economic issues for these communities
 - The process is on-going.
- The Ridge to Reef Project started with the establishment of the 4 proposed SMA areas in Tongatapu at the Fanga'uta lagoon. These communities are Nukunukumotu, Nukuleka, Lapaha and Holonga.
 - All four proposed SMAs have completed their management plan. Consultation with other communities is ongoing.
 - Monitoring of fisheries resources at Fanga'uta lagoon was conducted using the creel survey method.
- Negotiations were held with the Tonga Health Project with regards to funding for several potential SMA communities.
 - Confirmed with Ha'atafu, Navutoka, Mango, Fonoi and Matuku communities to receive funding for their SMAs
- An initiative of establishing more SMAs from the Tonga Health project is progressing well. Five SMAs proposed under this project including Ha'atafu and Navutonka from Tongatapu, Mango, Fonoi and Matuku from Ha'apai.
 - There were 28 interested communities registered as at June 2016, however more communities have submitted letter of request to the Ministry.

Table 18: New Special Management Areas (SMAs)

Island Groups	Proposed SMA communities funded by Projects	Donors	Status
Vava'u	Hunga	ADB Project	Not started
	'Utungake		
	Falevai		
	Talihau		
	Lape		
	Útulei		
	Ofu		
Tongatapu	Holonga	R2R Project	Ongoing with their establishment
	Lapaha		
	Nukunukumotu		
	Nukuleka		

7.2.1 MONITORING OF THE EXISTING SMA AREAS

While the focus is to establish more SMAs, it is important to monitor existing SMAs regarding the implementation of their plan. These activities include:

- Regular meetings with the CCMC of existing SMAs
- Assist in replacing of lost boundary markers
- Collected, enter and analysed SMA catch data;
- A SMA “lessons learned” national workshop funded by IUCN held in Ha’apai where town officers and district officers from existing SMAs and interested communities throughout Tonga attended.

Table 19: Number of existing Special Management Areas (SMAs)

Island Groups	Existing SMAs	Status
Vava'u	Ovaka (2008)	Regulated and Monitoring
	Taunga (2013)	Monitoring
Ha'apai	'O'ua (2006)	Regulated
	Felemea (2008)	Regulated
	Ha'afeva (2007)	Regulated
	Nomuka (Kelelesia and Tonumea) (2011)	Monitoring
	Kotu (2015)	Monitoring
Tongatapu	'Atata (2008)	Regulated
	'Eueiki (2008)	Regulated
	Fafa Island (2014)	Regulated
	Kolonga (2015)	Monitoring

While continuing to monitor the existing SMAs, and establish new SMA, there are more communities interested in joining the program, and the list is increasing.

Table 20: Number of communities interested in the Special Management Area (SMA) Program.

Island Groups	Interested SMAs	Year of application
---------------	-----------------	---------------------

Vava'u	Eueiki	2015
	Kapa	2016
	Vaipua	2016
	Makave	2016
	Koloa	2016
Ha'apai	Mo'unga'one	2009
	Uiha	2011
	Ha'ano	2011
	Fakakai	2011
	Pukotala	2012
	Muitoa	2012
	Faleloa	
	Tungua	2012
	Lofanga	2013
Tongatapu	Pangaimotu	2013
	'Eua	2014

7.2.2 EXPANSION OF FAD PROGRAM IN TONGA

The use of Fish Aggregate Device (FADs) is an initiative to help reduce fishing pressure on the coral reefs and coastal areas, and enhance livelihoods.

- New FADs deployed at 'Atata (2 FADs) and Niutopotapu (2 FADs)
- Collected data on FAD fishing
- Workshop training conducted regarding FAD fishing

Table 21: Fish Aggregate Devices (FADs) deployed, location, and status

Date of Deployed	Latitude	Longitude	Status
12/04/2012 Eua	21 23 23.10'S	175 02 06.12'W	Still active
4/04/2014 Eua	21 21.217'S	175 00.042'W	Still active
12/02/2016 Atata	21 01 36.3'S	175 16 34.9'W	Still active
11/04/2016 Eua	21 18 20.4'S	174 56 38.5'W	Still active
9/04/2016 Eua	21 19 22.5'S	174 57 30.4'W	Still active
9/04/2016 Eua	21 18 20.4'S	174 56 38.5'W	Still active
5/05/2016 Ntt	15 55 26.7'S	173 47 35.7'W	Still active
4/05/2016 Ntt	15 55 20.8'S	173 46 25.0'W	Still active
20/09/2016 Atata	21 02 34.8'S	175 18 34.3'W	Damaged by Whale
20/09/2016 Atata	21 02 03.9'S	175 17 31.6'W	Still active



7.3 OFFSHORE FISHERIES SECTION:

The Offshore section is supported by the staff members listed in Table 22 below.

Table 22: Offshore section, FY 2015/16

Name	Post
Mr Martin Finau	Fisheries Officer
Mr Sione Uasike	Fisheries Assistant
Mr Mafi Havea	Fisheries Assistant
Mr Peni Faleako	Fisheries Trainee

7.3.1 OFFSHORE RESOURCE ASSESSMENT AND DEVELOPMENT SECTION

The offshore resource assessment and development section aims to assess Tonga’s utilized and unutilized offshore fisheries resources (mainly tuna and deep water snapper species) and to provide advice to executive management on the status of stocks, and the conservation of these resources with relation to fisheries management and development. The two major offshore commercial fisheries for Tonga are Tuna and Deepwater Snapper fisheries.

7.3.2 TUNA FISHERY

The tuna fishery in Tonga is comprised of national (flag states reporting) and foreign (coastal state reporting) fishing fleets. The Tonga national fleet comprises Tongan flagged longline fishing vessels only. Foreign fleet vessels are from Taiwan and China. Tonga continues to licence foreign tuna vessels. The total catch and effort estimated of primary species and the number of active vessel operates during the period of July 2015 to June 2016 is described in Table 1 and 3. Table 2 and 4 illustrate the catch of non-target species for both fleets. All licensed vessels are allowed to fish in the entire area of Tonga’s fisheries water.

7.3.3 FLAG STATES REPORTING – NATIONAL FLEETS

7.3.3.1 TOTAL CATCH, BY PRIMARY SPECIES

The total catch and effort estimated by primary species for the national longline fleet fishing throughout the Tonga fisheries water (EEZ) for the financial year 2015/16 is summarized in Table 1. Main tuna species are Albacore (ALB), Bigeye (BET) Yellowfin (YFT), and Skipjack (SKJ) tuna. Primary species includes the main tuna species, and four main marlin species, Blue

marlin (BUM), Black marlin (BLM), Striped marlin (MLS) and Broadbill swordfish (SWO). The total catches of primary species by the national fleet was 459mt. During the 2nd half of 2015 a total of three vessels were active until May 2016, with an additional vessel joining the fleet thereafter. The total number of hooks set was 1,164,800.

Table 23: The total catch (mt) and effort (hooks, no. of vessels and no. of trips) estimated for the national fleet (Tonga flagged longline vessels), by primary species, July 2015 to June 2016.

Year	Month	Sea Vessels	Days	Trips	100s of Hooks	Catch in Metric Tons								TOTAL
						ALB	BET	YFT	SKJ	BLM	BUM	MLS	SWO	
2015	Jul	3	51	12	862	3	2	12	1	1	2	2	2	25
	Aug	3	64	14	1076	3	2	17	0	2	2	1	2	30
	Sep	3	60	15	1030	3	1	18	0	1	3	2	4	31
	Oct	3	61	14	1099	1	3	9	0	1	0	2	7	23
	Nov	3	53	12	946	1	1	11	0	2	1	3	1	19
	Dec	3	52	11	929	3	2	24	0	2	2	2	2	37
2016	Jan	3	56	17	996	4	3	94	1	2	4	0	3	112
	Feb	3	44	15	760	3	1	28	0	3	3	0	1	40
	Mar	3	54	12	917	1	2	13	0	1	2		0	19
	Apr	3	54	15	955	3	3	29	0	1	2	0	1	41
	May	4	72	16	1174	4	5	36	1	3	3	1	3	55
	Jun	4	56	15	904	4	2	15	0	2	3	0	2	28
TOTAL			677	168	11648	32	27	307	5	21	25	14	27	459

The catches for the primary species were dominated by yellowfin (67 %) followed by albacore (7%), bigeye (6%), with lesser amount of skipjack with (1%). For the tuna-like species; Swordfish and Blue marlin were both 6% of the total catch of the primary species, followed by Black marlin (5%) and Striped marlin (3%) (Table 1).

7.3.4 ANNUAL CATCH ESTIMATES OF NON-TARGET, BY-CATCH ASSOCIATED AND DEPENDENT SPECIES

The provisional estimated total catches of non-target, associated and dependent species for the national longline fleets are provided in Table 2. The species composition of the catch by weight was dominated by Dolphin fish (*Mahimahi*) totalling 122mt followed by *Wahoo* and *Mako* sharks with 16mt each, *Sailfish* catch was 10mt, and *Short bill spearfish* catch was 8mt.

By-catches are obtained from logsheets and also from observer records as well as port sampling data. Observer records are important for estimating catches of the less valuable species that are less likely to be retained or recorded. Observers have reported high retention rates of target tunas, including those that are discarded due to shark damages. *Wahoo*, *mahimahi*, *moonfish* and billfishes also had high retention rates as these are also valuable components for the fishery, especially the local market.

Table 24: The estimated catches (mt) of non-target and by-catch species, including sharks, by the national longline fleet, in the Tonga EEZ, for years 2015/16 FY (Source: Tufman Reports – unraised longline logsheets)

Non-Target species	2015						2016						TOTAL
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Barracuda	0	0	0	0	1	0	2	1	0	1	0	0	5
Mahimahi	8	11	12	11	17	17	16	5	5	4	7	8	122
Mako sharks	2	3	3	1	1	0	1	0	0	1	1	2	16
Moonfish				0	0							0	0
Sailfish	1	1	1	0	0	1	2	1	0	1	2	1	10
Spearfish	1	1	1	1	1	0	0	0	0	0	1	1	8
Wahoo	1	1	1	0	1	2	4	2	1	1	2	1	16
Others	0	0	1	1	1	1		0	2	0			6
TOTAL	13	17	19	15	22	21	23	9	9	8	14	13	183

7.3.5 COASTAL STATES REPORTING – FOREIGN FLEETS

7.3.5.1 TOTAL CATCH BY PRIMARY SPECIES

Tables 3 and 4 provide description of catch (in metric tons) and effort (hooks and vessels) by foreign-flagged vessels licensed to fish in Tongan water over the 2015/16 FY since the moratorium for locally-based and foreign fishing vessels was lifted in 2011. The overall catch for the primary and non-target species were up to 1,754mt (Table 3 and 4). Foreign fishing vessels have been re-allowed to fish in Tonga water as part of Tonga’s programme to increase tuna fisheries production. In the 2015/16 FY, six foreign flagged longline vessels were licensed to fish in Tonga’s EEZ. The total number of longline fishing vessel licenses (including local, locally-based and foreign licenses) issued will be restricted under the revised Tuna Development and Management Plan 2015 – 2017 so that the total number of licensed vessels at any given time does not exceed fifteen. Further, the number of foreign longline fishing vessel licenses will be restricted so that the total number of foreign vessels that are licensed to fish at any given time does not exceed six. In issuing licenses preference shall be given to local and then locally-based foreign vessels. All licensed fishing vessels shall offload all catch in the authorized ports of Tonga. Among these six (6) foreign fishing vessels, 5 Taiwanese and 1 Chinese flagged vessels were active and operated during the year within Tonga’s EEZ.

Table 25: Catches (metric tonnes) and Effort (hooks) of the primary species for Foreign Fishing Vessels during the period of July 2015 – June 2016. (Source: Tufman Web Reporting Tools)

Year	Month	Vessels	Trips	Fishing 100s of		Catch in Metric Tons									
				Days	Hooks	ALB	BET	YFT	SKJ	PBF	BLM	BUM	MLS	SWO	TOTAL
2015	Jul	5	10	105	3044	72.4	10.1	64.0	1.9	0.0	0.1	2.8	1.6	0.9	154
	Aug	6	7	145	4369	107.6	10.9	51.7	1.2	0.1	0.0	2.3	2.1	1.4	177
	Sep	6	7	119	3502	45.5	8.6	45.8	0.4	0.1		3.7	2.1	1.2	108
	Oct	5	8	77	2250	36.2	10.0	10.7	0.4	0.0	0.2	3.3	2.0	1.3	64
	Nov	3	3	66	2066	79.4	4.6	21.8	0.8	0.0		2.2	0.2	0.5	109
	Dec	5	5	124	3481	101.2	8.7	62.0	3.8	0.0	0.1	6.5	3.7	2.0	188
2016	Jan	6	9	105	2829	80.6	3.4	55.3	2.7	0.0		4.9	1.0	1.0	149
	Feb	6	7	153	3385	52.7	7.0	32.1	3.0	0.0		5.9	0.1	0.9	102
	Mar	7	9	140	3783	78.3	11.9	44.6	1.4	0.0	0.1	3.9	0.1	0.9	141
	Apr	6	8	128	3537	69.3	11.0	25.3	0.8	0.0	0.1	4.5	0.4	0.8	112
	May	5	9	119	3452	76.1	12.7	33.1	1.2	0.0	0.1	3.8	0.2	1.1	128
	Jun	5	6	110	2897	115.6	10.0	29.1	0.4	0.0		3.3	0.2	1.2	160
TOTAL			88	1391	38595	915	109	476	18	0.2	1	47	14	13	1592

Foreign fishing vessels used freezer holds to maintain the quality of fish during longer trips. Albacore tuna was the highest catch species with 915mt (57% of primary species catch) followed by yellowfin (476mt) and bigeye (109mt). For non-target species, catch was dominated by blue sharks (45mt) followed by wahoo (41mt) with a lesser portion of other species described in Table 4.

Table 26: Catches (metric tonnes) for non-target species for the Foreign Fishing Vessels for the period of July 2015 – June 2016.

Non-Target species	2015						2016						TOTAL
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Great Barracuda	1.1	1.0	1.4	0.1		0.1	0.1	0.2	0.2	0.1		0.0	4
Mahimahi	0.7	1.0	2.2	1.1	0.6	2.1	3.7	1.0	0.7	0.8	0.2	0.1	14
Mako sharks	1.4	1.8	1.3	1.8	1.0	1.0	0.1	0.0	0.6	0.3	1.3	1.2	12
Blue sharks	2.7	3.0	2.4	1.5	0.4	3.1	5.8	4.9	4.1	5.9	6.0	5.2	45
Moonfish	1.4	1.5	2.0	2.2	0.3	0.2			0.1	0.2	0.5		8
Sailfish	0.9	1.0	1.0	0.4	0.7	0.9	1.0	1.1	0.3	0.7	0.8	1.2	10
Spearfish	0.3	0.4	0.6	0.4	0.3	0.1							2
Wahoo	1.2	1.7	2.3	1.8	2.8	8.1	7.2	5.3	2.2	1.2	2.3	4.8	41
Oilfish/Escolar	0.6	1.2	1.6	2.2	1.3	4.3	3.8	2.1	2.4	2.4	1.7	2.0	26
TOTAL	10	12	15	12	7	20	22	15	11	12	13	15	162

7.3.5.2 OVERALL CATCHES FOR PRIMARY SPECIES

The total catch for the primary species obtained from tuna longline vessels operating entirely within Tonga's EEZ for the period July 2015 – June 2016 was 2,051mt. There was an increase in catches of primary species due to an increase in fishing effort in terms of the number of local fishing vessels, and the total number of hooks set.

7.3.5.3 OVERALL CATCHES FOR NON-TARGET SPECIES

The total catch for the non-target species from all tuna longline vessels operated in the Tongan waters for the period of July 2015– June 2016 was 345mt.

7.3.5.4 **CATCH BY FLAGGED VESSELS**

The catch by flagged vessels was dominated by foreign flagged vessels at 73%, with local vessels catching 27%.

7.3.5.5 **FISHING EFFORT – NUMBER OF HOOKS**

The total number of hooks set in Tongan waters for the period of July 2015 – June 2016 was 5,024,300, dominated by FFV with 77% and 23% by local vessels.

7.3.5.6 **DEEP WATER SNAPPER FISHERY**

The total catch by weight (kg) for all species of the deep water snapper fishery for the period of July 2015 – June 2016 increased by 34% to 160,561 kg (Table 5) compared to total catch during the same period last year. The catch was dominated by Palu Tavake (*Etelis coruscans*) with 32%, followed by Palu mutumutu (*Paracaesio kusakarii*) with 11%, then Palu hina (*Pristipomoides filamentosus*) and Palu Polosi (*Aphareus rutilans*) with 10% and 7% respectively. Palu Tavake is still the main target species for commercial fisheries with lesser catches of Palu Malau and Palu hina. There is potential for other species, including Palu Mutumutu, Palu Polosi and other species once markets for these species are identified.

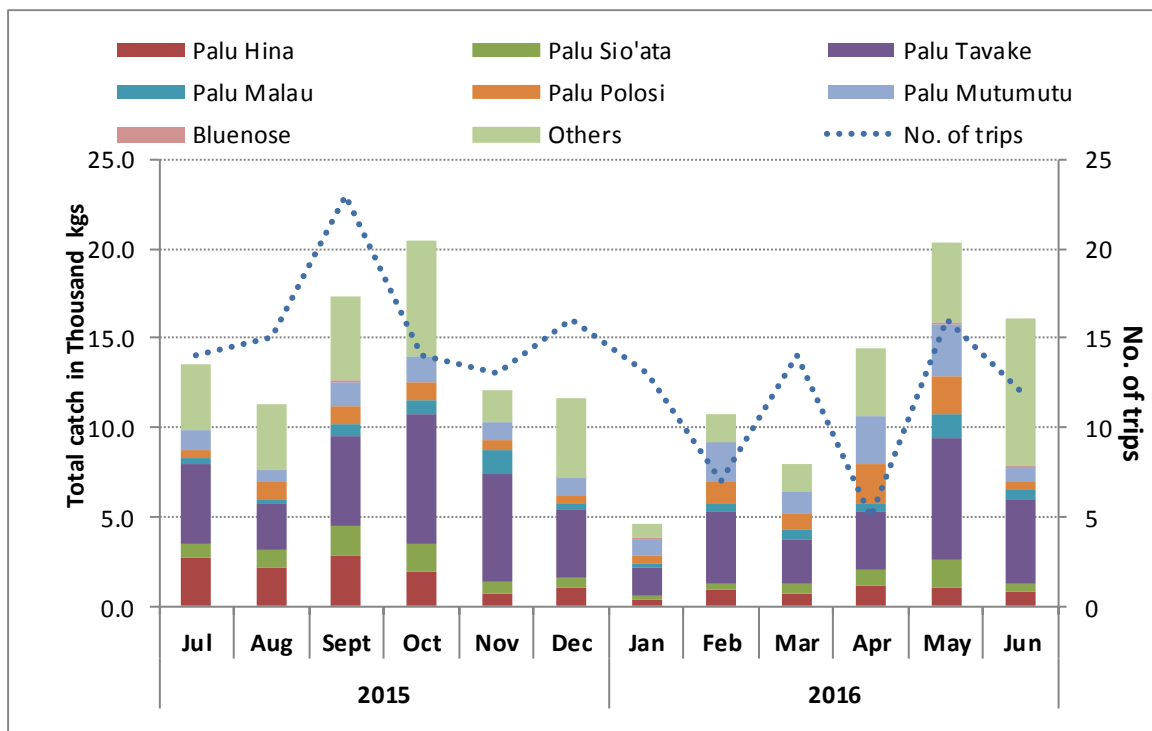
7.3.5.7 **BLUENOSE TRIAL**

A fishing trials under NIWA project continues on Blunose species (*Hyperoglyphye antarctica*) to determine its abundance in the southern area of Tonga EEZ and also it's potential for commercial markets. A total of 162 trips (Figure 1) made by 20 vessels during the period of July 2015 – June 2016, compared to 127 trips made by 12 boats for the same period in 2015/16.

Table 27: Monthly catches for Tonga deep water snapper fishery, for the main snapper species, for the period of July 2015 – June 2016. Other species were included in 'Others'.

Year	Month	No. of trips	Palu Hina	Palu Sio'ata	Palu Tavake	Palu Malau	Palu Polosi	Palu Mutumutu	Bluenose	Others	Total
2015	Jul	14	2,697.1	788.7	4,535.1	317.8	440.8	1,032.2	0.0	3,784.6	13596.3
	Aug	15	2,184.9	1,039.6	2,513.2	263.3	937.7	648.7	0.0	3,701.9	11289.3
	Sept	23	2,790.7	1,716.7	4,996.5	664.7	995.7	1,418.4	14.7	4,759.5	17356.9
	Oct	14	1,941.2	1,592.3	7,173.5	788.1	1,003.3	1,508.7	0.0	6,485.9	20493.0
	Nov	13	698.0	742.0	5,944.2	1,416.2	478.0	1,015.1	0.0	1,805.0	12098.5
	Dec	16	1,003.7	611.4	3,819.9	307.1	449.4	1,023.2	21.2	4,366.5	11602.4
2016	Jan	13	403.7	170.8	1601.9	226.8	492.15	878.7	17	845.9	4637.0
	Feb	7	893.0	431.4	3,986.6	479.8	1,127.3	2,271.6	37.2	1,485.7	10712.5
	Mar	14	748.7	503.3	2,463.6	531.7	905.5	1,259.0	0.0	1,582.7	7994.5
	Apr	5	1162.4	863	3310.2	452.8	2215.7	2617.2	0	3,812.4	14433.7
	May	16	1088.2	1515.7	6850.3	1255.1	2213.5	2880.4	74.6	4,415.5	20293.3
	Jun	12	878	408	4697.42	496	482.2	810.7	117.6	8,163.9	16053.8
Total by species			16,489.6	10,382.9	51,892.5	7,199.4	11,741.2	17,363.9	282.3	45,209.5	160561.1

Figure 1. Monthly total catches (in thousand kgs) for main deep water snapper species and number of trips per month for the periods from July 2015 to June 2016.



7.3.6 WAY FORWARD

- Continuation of scientific data collection both for tuna and snapper fisheries with high percentage of data coverage
- Collect data on artisanal fisheries
- Collect biological samples (gonads and otoliths) from snapper species to enhance stock assessments
- Enhance the required knowledge and skills of staff at national, regional and International trainings and workshops
- Surveys at seamounts within Tonga EEZ to update fishing positions and collect relevant information for the development of deep water snapper fisheries.

7.4 OUTER ISLANDS

7.4.1 VAVA'U FISHERIES

The Vava'u Fisheries office is supported by the staff members listed in Table 28 below.

Table 28: Vava'u Fisheries office, FY 2015/16

Name	Post
Mrs Silika Ngahe	Senior Technical Officer
Mrs Silia Soakai	Technical Officer Grade I
Mr 'Otinili Fisi'ikava	Technical Officer grade II

Mr Akosita Leakona	Computer Assistant
Mr Peni Lolohea	Labour
Mr 'Aisea Vailea	Labour

There are six employees at Vava'u fisheries, four of which are established and two are employed as daily labor. During the 2015-16 financial year, the branch managed to support or undertake various activities including aquaculture, research, compliance, offshore fisheries, and the Special Management Area program

7.4.1.1 **AQUACULTURE AND RESEARCH**

The two main activities here are pearl oyster and seaweed farming.

7.4.1.2 **PEARL OYSTER:**

There are 11 pearl oyster farmers operating in Vava'u and they have established a National Pearl Farming Association (NPFA) with help from the Fisheries Department and Ministry of Labour and Commerce. The purpose of the association is to assist farmers in producing good products for a better market. In May 2016 a Mabe Pearl training program on traditional Tongan design and pattern was conducted to help the farmers in value adding their products. The importance of the knowledge of traditional Tongan pattern is for developing authentic Tongan designs for international tourist market. This was a very successful training which brings all members together in sharing their ideas.

Table 29: Number of pearl farmers and numbers of oyster they have at the end of the year. There are eleven (11) members are still in the waiting list for the next financial year.

NAMES	Small size	Medium size	Large size	Total
'Alamoti Fa'uvao	694	122	134	950
Dian Clarke	530	330	212	999
'Esitimoa Hubb	245	147		604
Fonokalafi Vailea			18	18
Havea Lolohea	423	628	249	1300
Leonati Fakatava	85			85
Pimi Malungahu	240			240
Sailosi Hemaloto	468	38	336	842
Semisi Fa'uvao	180			180
Sioeli Mafi	602	244	141	987
Siokivaha Lolesio	230			230

7.4.1.3 **SEAWEED FARMING:**

Seaweed farming was first started at Vaipua with initial results very promising. Late in seaweed farming was damaged by Cyclone Ula. As a result, a new site named 'Umuna was

established using a raft farming technique. In early 2016 Cyclone Winston damaged these rafts and only a few seedlings were left. Seaweed farming was revived with a focus on re-establishing and increasing seedling production, and by June 2016, there were 540 seaweed seedlings (18 rows x 30 pcs) available.

7.4.1.4 **BOTTOM FISHING VESSELS:**

There were two bottom fishing vessels licensed during the year. These vessels supplied fish both for export and domestic markets. Other bottom fishing vessels were under repair.

Table 30: Licensed Fishing Vessels in Vava’u 2015 – 2016

Name of Vessel	Owner	Registration No.	License No.	Expiry date
Malo’i	‘Ulaiasi Vaisima	FV02VV	BT093NK	17/11/2015
Lesina	Pafilio Tangitau	FV03VV	BT018NK15	08/03/2016

7.4.1.5 **SPORT FISHING**

Licenses were also issued to vessels engaged in sports fishing. Some of these boats are still in process of renewing their licenses. The list of vessels with valid licenses appears below.

Table 31: Sport Fishing Vessel

Name of vessel	Owner	Registration No.	License No.	Expiry date
Target 1	Henk Gross	LFV098	CSFV024/VV	26/06/2016
Blue Marlin Magic	Steve Cambell	FV05VV	CSFV029VV	30/06/2016
Ashlee G	Andrew Jones	FV04VV	CSFV 028NK15	16/05/2016
Lupo	Kurt Carlson	LFV102	CSFV026NK16	17/01/2017
Kiwi Magic	Keith Mckee	FV07VV	CSFV013/VV	17/01/2017

7.4.1.6 **DUTY FREE DIESEL FUEL:**

The fuel exemption scheme is where fishing operators received duty free fuel. Only one fishing vessel benefits from this assistance.

7.4.1.7 **FISH FENCES 2009.**

Among the licenses issued by Vava’u fisheries is the fish fence licence. There were five fish fence licenses issued during this period.

Table 32: Fish Fence operating during this period (2015-2016)

Name	Address	Location	No. of Fish Fence	Expiring Date
Talanoa To’ia	Leimatu’a	Leimatu’a	1	31/05/2016
Papani Penisoni	Tu’anuku	Teleki	1	31/05/2016
Siaosi Takau	Kolofo’ou	‘Umuna	1	31/05/2016

Paea Fifita	Vaimalo	Vaimalo	1	31/05/2016
Ve'a Tupou	Ha'akio	Makave	1	31/05/2016

7.4.1.8 **SPECIAL MANAGEMENT AREA (SMAS) PROGRAM:**

There are two coastal communities in Vava'u with an SMA established, Taunga and Ovaka. The main activities under this program are the monitoring of the two SMA management plans. In addition, there are a number of interested communities including Hunga, Lape, Falevai, Talihau, 'Utungake, 'Utulei and Ofu. The Climate Resilient Sector Project (CRSP) assists these communities with their SMA activities including the completion of a biological base line survey in all 7 communities.

7.4.1.9 **DATA COLLECTION (OFFSHORE AND COASTAL)**

Data from two deep water fishing vessels collected and transferred to Tongatapu for analysis. In addition, market surveys were conducted weekly.

7.4.1.10 **AGRICULTURAL SHOW:**

The Royal Agricultural Show was successfully completed in Vava'u with participants from various part of the fisheries sector in Vava'u, including five communities, and nineteen individual fishers.



7.4.2 **HA'APAI FISHERIES**

The Ha'apai Fisheries office was supported by the staff members listed in Table 33 below.

Table 33: Fisheries Ha'apai office: FY 2012/13

Name	Post
Mrs Sosefina Vili	Technical Officer Grade II
Mr Sailosi 'Alofi	Technical Officer Grade II

Mr Tu'atalatau Tonga'onevai	Senior Fisheries Assistant
Mr Mosese Moala	Fisheries Assistant
Mr 'Ofa Napa'a	Fisheries Trainee
Mr Siaosi Vi	Labour

There are six staff at Ha'apai fisheries, five of whom are based at Pangai and one at Nomuka. During the 2015-16 financial year, the branch managed to undertake various activities including the Aquaculture and research, Compliance, and Special Management Area program

7.4.2.1 ***AQUACULTURE ACTIVITIES***

The two main activities here are pearl oyster and seaweed farming. These activities are still trial activities.

7.4.2.2 ***PEARL OYSTER:***

There are two farms in Ha'apai, one at fisheries and the other at the Felemea community.

7.4.2.3 ***SEAWEED FARMING:***

Seaweed farming was trialled at Ha'apai with very good results; however, Cyclone Ian damaged the farm.

7.4.2.4 ***SPECIAL MANAGEMENT AREA (SMAS) PROGRAM:***

There are five coastal communities in Ha'apai with SMAs established at 'O'ua, Ha'afeva, Felemea, Nomuka and Kotu. The main activities under this program are the monitoring of the five SMA management plans as well as working with the two communities. In addition, there are numbers of interested communities considering an SMA, including 'Uiha, Lofanga, Matuku, Mango, Fono, Mo'unga'one and Kauvai island.

7.4.2.5 ***DATA COLLECTION (MARKET SURVEY)***

Fisheries data are collected weekly at the Taufa'ahau wharf.

7.4.2.6 ***AGRICULTURAL SHOW:***

Royal Agricultural Show was successfully completed in Ha'apai with participants from various parts of the fisheries sector in Ha'apai including seven communities, three SMAs and sixteen individual fishers.



7.4.2.7 **OTHER ACTIVITIES:**

Fish poisoning (ciguatera) has been reported regularly in Ha’apai and is a concern.

7.4.2.8 **WAY FORWARD**

- Continue consultation meeting with the new SMA communities.
- Continue with the pearl oyster farming development.
- Plant more seaweed for seedling and promote commercial farming of seaweed.
- Recruitment of staff.
- Training for fishers regarding better fisheries management including business management.
- Continue collects fisheries data including fish poisoning incidents.
- Enhance extension services including boat and engine repair.

7.4.3 **NIUATOPUTAPU FISHERIES**

Niuatoputapu Fisheries is managed by one staff member listed in Table 34 below.

Table 34: Noutatoputapu fisheries office, FY 2015/16

Name	Post
Mr Ioane Finau	Senior Fisheries Assistant

There is only one staff at Niuatoputapu fisheries office. During the 2015-16 financial year, the branch managed to undertake various activities including aquaculture and research (seaweed trial), compliance activities, and artisanal fisheries and fish market data collection/.

7.4.3.1 **AGRICULTURAL SHOW:**

The Royal Agricultural Show was successfully completed in Niuatoputau with participants from varies parts of the fisheries sector in Niuatoputapu, with most communities engaged in various events.



7.4.3.2 **WAY FORWARD**

- Planting more seaweed for seedling and promoting commercial farming of seaweed.
- Continue with data collection activities.
- Strengthen compliance with and enforcement of fisheries laws.
- Enhance extension services including boat and engine repair.

7.4.4 **'EUA FISHERIES**

'Eua Fisheries office is managed by only one staff member listed in Table 35 below.

Table 35: 'Eua Fisheries office, FY 2015/16

Name	Post
Mr Siosuia Vaiangina	Fisheries Assistant

There is only one staff member at 'Eua fisheries. During the 2015-16 financial year, the branch managed to undertake various activities including support for FAD fishing, compliance activities, artisanal fisheries, and fish market data collection; as well as collaboration with 'Eua fishermen's association.

7.4.4.1 **FAD FISHERY:**

FAD fishing is one of the main fisheries in 'Eua. This fishery has been promoted and developed to assist with 'Eua fisheries development. A number of FADs have been deployed and fishers are benefit from this program.

7.4.4.2 **'EUA FISH MARKET:**

The 'Eua fish market has been upgraded with an ice machine established with the assistance of the New Zealand High Commission, Ministry of Fisheries, and the 'Eua fishermen's association. This development is supporting the development of 'Eua's fisheries.

Agricultural Show:

The Royal Agricultural Show was successfully completed at ‘Eua with participants from various part of the fisheries sector in ‘Eua, and with most communities engaged in various events.



7.4.4.3 **WAY FORWARD**

- Continue with the FAD fishery development.
- Continue collects fisheries data.
- Enhance extension services including boat and engine repair.

8 FISHERIES COMPLIANCE DIVISION (FCD)

The Fisheries Compliance Division is supported by the staff members listed in Table 36 below.

Table 36: Fisheries Compliance office, FY 2015/16

Name	Post
Mrs Losilini Loto’ahea	Fisheries Officer
Uanoa Ahoafi	Fisheries Officer
Tevita Ahoafi	Fisheries Officer
Miss Kalolaine Manuopangai	Technical Officer Grade II
‘Amanaki Paea	Technical Officer Grade II
Veava Kava	Technical Officer Grade II
‘Ana Tapu Tavake	Senior Fisheries Assistant
Malakai Faletau	Fisheries Trainee
Frank Taufua	Labour

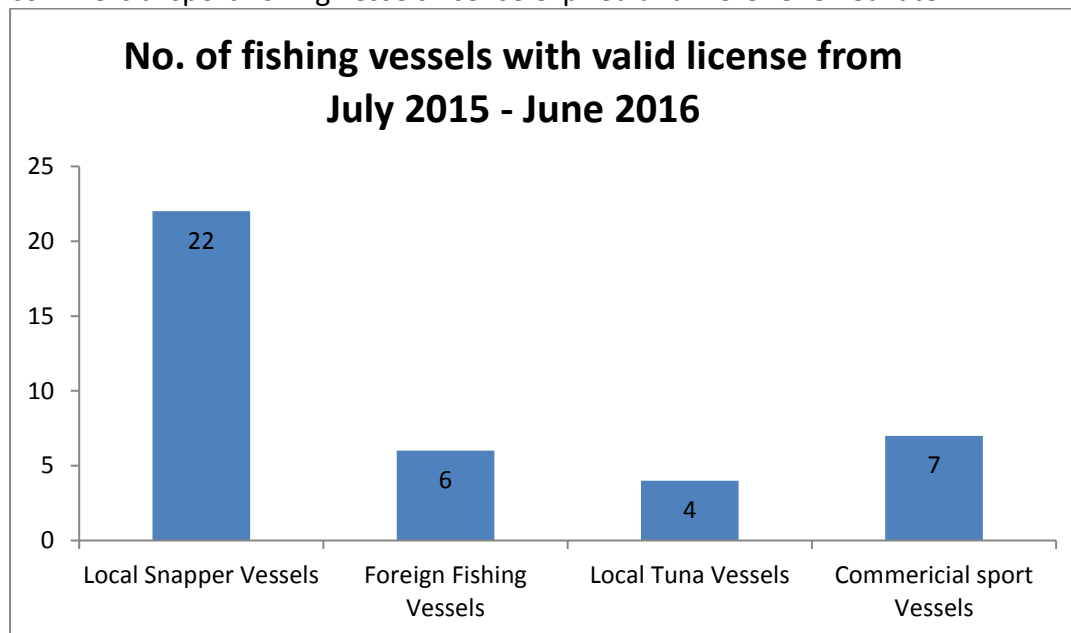
The Fisheries Compliance Division (FCD) aims to ensure the regulatory controls approved by the Government of Tonga, including those that give effect to regional and international obligations, are effectively enforced. It encompasses not only traditional enforcement activities but also the development and establishment of data collection systems, the enactment of legislative instruments, and the implementation of management plans through participatory techniques and strategies. There are four sections administered under the Fisheries Compliance Division, namely the: (i) License and Certification Section, (ii) Enforcement Section, (iii) Vessel Monitoring System (VMS), and (iv) the Observer Programme.

8.1 LICENSE AND CERTIFICATION SECTION

Licensing responsibilities include screening applications for licenses such as foreign fishing vessel, local fishing vessel for tuna fishing and snapper fishing, sports fishing, fish processing establishments, aquarium fishery, fish fences, and marine products, as well as collection of 0.5%, 1% and 5% resource rent of the local value of marine products commercially exported, and other license fees. Other miscellaneous tasks of the section included preparation of permit letters for export of all marine products designated by Fisheries Act or required under CITES (Convention on the International Trade of Endangered Species), and the processing and issue of exemption duties under the Fuel Concession Scheme.

8.1.1 ACHIEVEMENTS

A total of 39 fishing vessels with valid license to fish within Tonga EEZ during July 2015 to June 2016. There were six foreign fishing vessels, four local tuna fishing vessels, seven commercial sport fishing vessels, and 22 snapper fishing vessels. During the reporting period, two foreign fishing vessels, two local tuna vessels, twelve local snapper vessels, and three commercial sport fishing vessels license expired and were renewed later.



During July 2015 to June 2016, there were total seventy-seven licenses have been issued including four tuna vessels, fourteen snapper vessels, five commercial sport fishing, five foreign fishing vessel, six (6) export tuna /snapper/reef fish, two for export of other marine products, three aquarium fish and thirty eight fish fences.

There were 13 exporters with valid license, three export licenses for tuna/snapper/reef fish, four Aquarium fisheries, two licenses for giant clam shell and one seaweed export license, live fish, frozen lobster, Reef fish and dried shark fin. By the month of September three exporters' license had expired and had not been renewed.

The section issued a total of 12,602 permits during July 2015 – June 2016. Listed below are permits that were issued in the reporting period.

- 442 permits for export of tuna and snapper;
- 154 permits for export aquarium fishery;
- 14 permits for other marine products;
- 11,992 for home consumption and souvenir permits at airport and cargo value to \$110,326.40 (revenue collected).

The licensing section continues to support the development of the commercial fishing sector and to enhance exports by assisting them to receive fuel and fishing equipment free of duty, and port and services tax.

During the reporting, period a total of seventy-seven fishing trips received fuel under the Scheme. It should be noted that the number of vessels participating in 2015-2016 is lower than the total number of vessels registered with the Ministry of Fisheries. Those that were not participating were either under service or were just not fishing during this period and hence they did not receive any fuel.

Table 37: Details of fuel issued in Tongatapu for fishing vessels under the Fuel Concession Scheme from July 2015 to June 2016

Type of Fishery	Volume of fuel issued (liters)
Deep sea bottom fishing	176800
Deep sea long line	736000
Foreign fishing vessel	1175400
Total	2088200

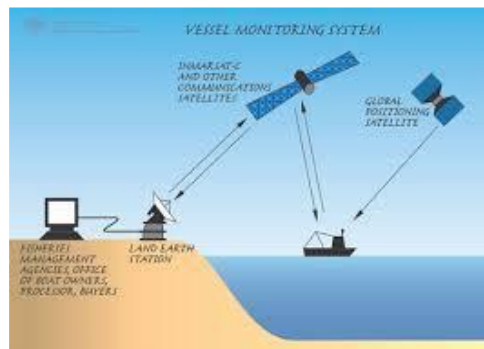
8.2 VESSEL MONITORING SYSTEM (VMS) SECTION

VMS is a satellite based technology providing near real time position tracking to monitor the location of vessels equipped with a Mobile Transmitting Unit (MTU). The main function of VMS is to monitor movements and activities of tuna fishing vessels in Tonga’s EEZ to ensure compliance with Fisheries Regulations. VMS reports can support enforcement through the monitoring of potentially illegal fishing. The role and function of the VMS is clearly defined in the Fisheries (Vessel Monitoring System) Regulation 2009. Under the regulation all tuna vessels must carry FFA approved MTU’s.

8.2.1 ACHIEVEMENTS

- The Hon Cabinet approved Tonga’s participation in the Polynesian Leaders Group Fisheries Initiative Pilot Scheme to be conducted by the PEW Charitable Trust and Satellite Applications Catapult Limited (Catapult) under their “Eyes on the Seas” partnership to provide surveillance and monitoring of fisheries activity in the PLG region, including Tonga EEZ, for a trial period of six months.

- The Department of Fisheries, on behalf of the Government of Tonga has been signed a memorandum of understanding with PEW, in relation to non-public information to be provided to Catapult.
- Three VMS systems focusing on separate fishing grounds are currently operating side by side at the Fisheries headquarters. The Forum Fisheries Agency (FFA) VMS, RIMF and Surveillance Picture (Google Earth), and WCPFC VMS systems. They track foreign fishing vessels licensed to fish in the region, allowing Tonga to monitor foreign fishing vessels within the EEZ.



- During July 2015 – June 2016, there were 12 tuna fishing vessels licensed to fish in Tonga’s EEZ. These vessels listed below are tracked via the FFA VMS.
 1. Fu Ying
 2. Jui Hsiang Jie
 3. Yu shun
 4. De Sheng Fa No3
 5. Yu Shun No 2
 6. Yu Shun No 668
 7. Pacific Sunrise
 8. Pacific Moon
 9. Pacific Breeze
 10. Pacific Dawn
 11. Kerry Elle
 12. Odyssey
- VMS Section continued to provide VMS information to relevant agencies such as His Majesty Armed Forces, and providers of aerial surveillance for their routine patrol and surveillance activity.
- The FFA Surveillance Google Earth Picture continued to provide another effective tool in monitoring non-compliant fishing vessels through the use of AIS as alternative tool to monitor fishing vessels in the region.
- VMS Section was issued with an access by the Western and central Pacific Fisheries Commission (WCPFC) to view commission register fishing vessels in the 100nm buffer zone in the high seas adjacent to the 200nm boundary line of Tonga to view commission vessels.
- Tonga received of US\$5,000 as a supporting fund from FFA for our national VMS operation.
- VMS section continues to monitor the ongoing movements and operations of fishing vessels within our EEZ.

- Daily record of VMS positions for all fishing vessels, and report to boat owners if VMS turned off.
- Provide VMS monthly tracking when required by Tonga Defence Services.
- Operation Kurukuru was conducted successfully on 7th – 16th October, 2015 with the help of the Tonga Defence Services (TDS).

8.3 OBSERVER PROGRAM SECTION

The section's function is to deploy observers on board licensed fishing vessels to collect information on fish catch, to observe onboard fish handling techniques, to monitor fishing technology, to deter illegal fishing by monitoring compliance of the vessel with fisheries regulations and licence terms and conditions, and to record by-catch and discards for stock assessment and management purposes.

8.3.1 ACHIEVEMENT

- During the reporting period Tonga's National Observer Program contracted 12 fisheries observers and 3 certified debriefers.
- Tonga received of US\$24,045 from the Japan Trust Fund to provide financial support for PIRFO sub regional observer training in Santos, Vanuatu, Chain of Custody Observer Training, and also funded local debriefer fees.
- Tonga Leadership Management and Observer Mentor Training was conducted by the FFA. as from 25th – 29th July 2016.
- Longline Observer training was conducted by the Secretariat of the Pacific Community (SPC) and FFA. Seven trainees passed this training and were certified and authorized as observer under Tonga National Observer Programme.
- Debriefers training was conducted. Four observers passed this training and have been approved as certified debriefers.

8.3.2 CHALLENGES FOR OBSERVER PROGRAM SECTION

- No sufficient certified observer to accommodate domestic and foreign fishing vessels license in Tonga waters.
- SPC TUBs system and OPM system down for a significant period resulting in the late update of observer data into the system.

8.3.3 WAY FORWARD

- To recruit and train more certified observers to accommodate all license fishing vessels in Tonga's waters.
- Pursue Observer MOU with the Cook Islands.
- Develop a contract agreement between the Ministry and Observers.
- Implement Observer Code of Conduct.
- Pursue observer refresher training.
- Train observers to be eligible to operate on PNA purse seine vessels.

8.4 ENFORCEMENT SECTION

Enforcing the Acts and related regulations is critical to sustainable fisheries management and development therefore the functions of the enforcement section is to monitor compliance with Acts and related regulations through land and sea surveillance and patrols. Tasks involve physical inspections of fish landing sites, processing and packing premises, boarder inspections at point of departure for exports, and compliance of license holders with terms and conditions.

8.4.1 ACHIEVEMENTS

- Tonga signed the Niue Treaty Subsidiary Agreement (NTSA), and has appropriate domestic legal authorisation to access the information held on the Niue Treaty Information System (NTIS).
- Tonga ratified and implemented the Port State Measures Agreement, in collaboration with FAO.
- Tonga Defence Services apprehend FV De Sheng Fa.No.3 for non compliance with Terms and Conditions.
- Suspension of Fu Ying fishing license. Reinstated with conditions.
- Submitted Tonga Part 2 Report on Tonga's obligations under commission CMMs.
- Compliance and Enforcement visit from Auckland, NZ for in-house training.
- During the TCC 11th meeting Tonga placed one nominated vessel on to the provisional IUU list. The Chinese flag vessel RONG DA YANG No.28 alleged IUU fishing activity in Tongan EEZ, in contravention of the Fisheries Management Act 2002. During the Tuna Commission meeting in Bali, Tonga withdrew and continued to pursue bilateral negotiations with China.
- Developed MCS Compliance/Operational Strategic Plan as a tool for Port State Measure implemented.
- Developed compliance forms for reporting in-field.
- 10 sea patrol conducted by Tonga Defence Services (Navy), and 3 aerial surveillance conducted with assistance from RNZAF.
- Increase the level of spot check during boarding and inspection of FV to ensure they comply with TC.
- Issued warning letter for domestic fishing vessel for not holding current license to fish in Tonga .
- Confiscated lobster taken during illegal fishing operations with case settled out of court with fines of \$700.
- Marine products confiscated following inspection of seafood exports at the airport. These cases were issued warning letter and the catch seized and disposed of.
 - 4 cases of mullet species approximately 12kg confiscated during the close season
 - 1 case of undersize lobsters of about 12 pcs.

Inspection conducted during reporting period with no illegal fishing identified:

- 89 boarding and inspection.
- 72 inspections on Aquarium Fishing Company,
- 60 inspections on export processing (tuna and snapper export)
- 11 fish fence survey and inspection conducted in Tongatapu

9 CHALLENGES FOR THE MINISTRY OF FISHERIES

The major emerging challenges for the Ministry at the end of the reporting period were the establishment of the new Ministry, and the implementation of the Tonga Fisheries Sector Plan. This plan represents the most significant step forward in fisheries management for over a decade and will place Tonga as a leader in fisheries management in the region.

9.1 MAJOR CHALLENGES IN THE SECTOR PLAN INCLUDE:

- Improving the fishery management planning framework with the consideration of rights based management.
- Consideration of proposed fishery support subsidies and grants.
- Implementing effective coastal fishery management.
- Development of the aquaculture industry.
- Encouraging appropriate foreign investment
- Supporting stakeholders to be effectively involved through co-management arrangements.
- Supporting SMA development and implementation towards increased levels of self-management.

9.2 FOR THE MINISTRY, KEY CHALLENGES INCLUDE:

- Implementing a new structure for the new Ministry, including recruitment of a new Chief Executive and a range of new or revised positions.
- Development and implementation of a new corporate plan and new internal policies and procedures.
- Ensuring effective collaboration with other Ministries.
- Maintaining effective legislation for SMAs, and commercial fisheries.
- Improving hatchery facilities to accommodate two species per hatchery run at a time.
- Improving live algae production for better larval survival rate.
- Increasing production for giant clams to accommodate demand from aquarium markets.
- Monitoring the progress of SMA communities with regular meetings.
- Continue committed to the establishment of new SMAs.
- Ensure quality of fisheries data collected.
- Expand the FAD network.
- Ongoing support for pearl oyster production, development, and marketing.
- Ongoing support for seaweed aquaculture including for seedlings.
- Recruitment of staff.
- Identify potential for training and capacity building for stakeholders in co-management, fish handling, fisheries management, and business management.
- Seeking public support for reporting of illegal fishing activities.
- Ensuring authorised officers have capacity in enforcement and prosecution

- Increasing capacity in the compliance team
- Implementing the Port State Measures Agreement.
- Enforcement of licensing terms and conditions for fishing vessels, fish fences, exporter tuna and snapper and aquarium.
- Vessel and vehicle logistics for compliance activities.
- Expanding the VMS network to more vessels.
- Ensuring standard operating procedures are reviewed and up to date.

10 ANNEX 1: STAFF LISTS FOR FY2015/2016

No	Title	First Name	Last Name	Division	Posts
1	Dr	Tu'ikolongahau	HALAFIHI	CEO's Office	Chief Executive Officer
2	Ms	Salote	KOLOAMATANGI	CEO's Office	Legal Officer
3	Mrs	Pelenaise	TIMANI	CEO's Office	TOGr.II
4	Mrs	Siosi'ani	MATANGI	CEO's Office	Fisheries Trainee
5	Mr	Vilimo	FAKALOLO	Corporate Services Division	Deputy CEO
6	Mr	Tevita	TALAKAI	Corporate Services Division	Principal Accounting Officer
7	Mrs	Katalina	FIFITA	Corporate Services Division	TOGr.II
8	Mrs	Mele	HOLO'IA	Corporate Services Division	TOGr.II
9	Mrs	Makeleta	MAHE	Corporate Services Division	TOGr.II
10	Mrs	Ruby	ONESI	Corporate Services Division	Fisheries Trainee
11	Mrs	Ana	AKAU'OLA	Corporate Services Division	Fisheries Trainee
12	Mr	Uluaki	VAIPUNA	Corporate Services Division	Driver
13	Mrs	Lavinia	VAIPUNA	Corporate Services Division	Computer Programmer
14	Mr	Ofa	FALETAU	Corporate Services Division	Fisheries Officer
15	Mr	Sioeli	PASIKALA	Corporate Services Division	Fisheries Officer
16	Mr	Pala'a	MAUSIA	Corporate Services Division	Senior Fisheries Assistant
17	Mrs	Mele	ATUEKAHO	Fisheries Management & Development Division	Senior Fisheries Officer
18	Mr	Samuela	POHIVA	Fisheries Management & Development Division	Fisheries Officer
19	Dr	Siola'a	MALIMALI	Fisheries Science Division	Deputy CEO
20	Mr	Martin	FINAU	Fisheries Science Division	Fisheries Officer
21	Mr	Mafi	HAVEA	Fisheries Science Division	Fisheries Assistant
22	Mr	Sione	UASIKE	Fisheries Science Division	Fisheries Assistant
23	Mr	Penisimani	FALEAKO	Fisheries Science Division	Fisheries Trainee

24	Mr	Latu	AISEA	Fisheries Science Division	Fisheries Officer
25	Mr	Sione	MAILAU	Fisheries Science Division	Assistant Research Officer
26	Mr	Viliami	FATONGIATAU	Fisheries Science Division	Fisheries Trainee
27	Mr	Poasi	NGALUAFE	Fisheries Science Division	Principal Fisheries Officer
28	Mrs	Tracey	AISEA	Fisheries Science Division	Fisheries Officer
29	Mr	Tonga	TUIANO	Fisheries Science Division	Senior Fisheries Assistant
30	Mr	Siaosi	FONUA	Fisheries Science Division	Fisheries Trainee
31	Mrs	Losilini	Loto'ahea	Fisheries Compliance Division	Fisheries Officer
32	Mr	Tevita	AHOAFI	Fisheries Compliance Division	Licensing and Certification
33	Mr	Amanaki	PAEA	Fisheries Compliance Division	TOGr.II
34	Mrs	Ana	TAVAKE	Fisheries Compliance Division	Senior Fisheries Assistant
35	Mr	Uanoa	AHOAFI	Fisheries Compliance Division	Fisheries Officer
36	Ms	Kalolaine	MANUOPANGAI	Fisheries Compliance Division	TOGr.II
37	Mr	Malakai	FALETAU	Fisheries Compliance Division	Fisheries Trainee
38	Mrs	Silika	NGAHE	Vava'u	Senior Technical Officer
39	Mrs	Silia	SOAKAI	Vava'u	TOGr.I
40	Mr	Otinili	FISI'IKAVA	Vava'u	TOGr.II
41	Ms	Akosita	LEAKONA	Vava'u	Computer Assistant
42	Mrs	Sosefina	VILI	Ha'apai	TOGr.II
43	Mr	Sailosi	ALOFI	Ha'apai	TOGr.II
44	Mr	Tu'atalatau	TONGA'ONEVAI	Ha'apai	Senior Fisheries Assistant
45	Mr	Mosese	MOALA	Ha'apai	Fisheries Assistant
46	Mr	Ofa	NAPA'A	Nmk/Ha'apai	Fisheries Trainee
47	Mr	Siosuia	VAIANGINA	Eua	Fisheries Assistant
48	Mr	Ioane	FINAU	NTT	Fisheries Assistant

11 ANNEX 2: ACRONYMS AND ABBREVIATIONS

- ACIAR Australian Centre for International Agricultural Research
- ADB Asian Development Bank
- CSD Corporate Service Division
- CITES Convention on International Trade in Endangered Species
- CRSP Climate Resilience Sector Project
- CMM Convention Management Measures
- DWFMP Deep Water Fisheries Management Plan
- EPA Economic Partnership Agreement
- EEZ Exclusive Economic Zone
- FMDD Fisheries Management and Development Division
- FSD Fisheries Science Division
- FCD Fisheries Compliance Division
- FAD Fish Aggregate Device
- FFC Forum Fisheries Committee
- FAO Food Agriculture Organization of the United Nations
- FFA Forum Fisheries Agencies
- FFV Foreign Fishing Vessel
- FY Financial Year
- HACCP Hazard Analysis Critical Control Point
- IUCN International Union for Conservation of Nature
- IUU Illegal, Unregulated and Unreported (fishing)
- JICA Japan International Cooperation Agency
- MCS Monitoring Control and Surveillance
- MTU Mobile Transmitting Unit
- NPOA National Plan of Action
- RIMF Regional Information Management Framework
- RNZAF Royal New Zealand Air Force
- SMA Special Management Area
- NPFA National Pearl Farming Association
- NTSA Niue Treaty Subsidiary Agreement
- NTIS Niue Treaty Information System
- NZ New Zealand
- NCD Non-Communicable Disease
- PC Pacific Community (formerly Secretariat to the Pacific Community (SPC))
- PDF Project Development Fund
- SPC (See PC)
- SOP Standard Operation Procedure
- TFSP Tonga Fisheries Sector Plan
- TSDF Tonga Strategic Development Framework
- TVM Te Vaka Moana
- TMDP Tuna Management Development Plan
- TCC Technical Compliance Committee
- TC Terms and Conditions
- UN United Nations
- US United States
- VMS Vessel Monitoring Device
- WCPFC Western and Central Pacific Fisheries Commission