



**Fisheries Department
Ministry of Fisheries and Trade
Government of Tuvalu**



CORPORATE PLAN

2020/2022



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Acronyms used in this report

AFO	Assistant Fisheries Officer	OFCF	Overseas Fisheries Cooperation Foundation (of Japan)
CP	Corporate Plan	PFO	Principal Fisheries Officer
EEZ	Exclusive Economic Zone	PNA	Parties to the Nauru Agreement
EU	European Union	PNAO	PNA Office
FAD	Fish Aggregating Device	PROP	Pacific Regional Oceanscape Project (World Bank funded)
FFA	Pacific Islands Forum Fisheries Agency	R2R	Ridge to Reef
FO	Fisheries Officer	SFO	Senior Fisheries Officer
GEF	Global Environment Facility	SPC	Pacific Community
GRP	Glass Reinforced Plastic (Fibreglass)	TFD	Tuvalu Fisheries Department
GTx	Gambierdiscus toxicus (causative organism of Ciguatera poisoning)	TFSP	Tuvalu Fisheries Support Programme (New Zealand funded)
IT	Information Technology	TK3	Te Kakeega III (Tuvalu's sustainable development strategy)
IUU	Illegal Unreported and Unregistered (fishing)	TNA	Training Needs Assessment
JICA	Japan International Cooperation Agency	UN	United Nations
KPI	Key Performance Indicator	VDS	Vessel Day Scheme (of the PNA)
LL	Longline	VHF	Very High Frequency (radio)
LMMA	Locally Managed Marine Area	WCPFC	Western and Central Pacific Fisheries Commission
MCS	Monitoring Control and Surveillance		

1. Background

1.1 Fisheries in Tuvalu

Fisheries have always been central in the lives and well-being of the population of Tuvalu. With a limited land area and poor soils, the first Polynesian settlers of these islands relied on fishing for their survival. Even today, with a range of imported foods available, per capita consumption of seafood is one of the highest in the world, and fisheries resources are essential for food security and health. Nearly all households engage in coastal fishing, and small scale commercial fishing supports the livelihoods of many who are not in formal employment. While much of the commercial effort targets sustainable resources of tuna, subsistence fishing of lagoon and reef fish is putting pressure on these resources – particularly in Funafuti where more than half of Tuvalu's population lives.

Tuvalu's Exclusive Economic Zone (EEZ) extends over more than three quarters of a million square kilometres and is more than three hundred times the land area. Located in the east of the main equatorial tuna fishing grounds, it supports substantial purse seine and longline fisheries. Access fees have formed an important part of Government revenue for many years, but with the advent of the Purse Seine Vessel Day Scheme (VDS) in 2010, these have risen sharply and now account for more than half of Government revenues. Other benefits from the oceanic fishery include employment – mainly of fisheries observers at present – and economic activity around transshipment in Funafuti lagoon. The Government, through the National Fishing Corporation of Tuvalu (NAFICOT) is also a partner in several joint venture fishing operations.

1.2 Legal and Policy Framework

The legal basis for this plan is Tuvalu's *Marine Resources Act 2006*, as amended in 2012 and 2017, which states the objective 'to ensure the long-term conservation and sustainable use of the living marine resources for the benefit of the people of Tuvalu' (Part 1.3 (i)). Authority for the conservation, management, development and sustainable use of the living marine resources in the exclusive economic zone is vested in the Minister (Part 1.3(ii)), and the Act states the principles and measures which must be taken into account in the exercise of this authority. Regulations promulgated under the Act include the *Fisheries (Vessel Monitoring System) Regulations 2000* and the *Conservation and Management Measures (PNA third implementing arrangement) Regulations 2009* which regulate industrial tuna fisheries. More recent regulations include the *Shark Conservation and Management Regulation* and the *Fishing Crew Regulations*, both promulgated in 2019. Tuvalu's maritime zones are established under the *Maritime Zones Act 2012* and include archipelagic waters (around Nukufetau, Funafuti and Nukulaelae), territorial sea, EEZ and an extended continental shelf. The fast changing regulatory environment requires frequent review and updating of fisheries legislation, regulations, policies and agreements.

Management of coastal fisheries is, to a large extent, devolved to the Kaupule (or Island Councils) of each island under the *Falekaupule Act of 1997*, as amended in 2000. This requires the Kaupule to 'provide for the improvement and control of fishing and related industries in accordance with the Fisheries Act' and to regulate exploitation in accordance with the Wildlife Conservation Act. Marine protected areas may be established under the *Conservation Areas Act of 1999*. Tuvalu Fisheries Department (TFD) therefore works closely with the Kaupule on coastal fisheries management and development.

Tuvalu's oceanic fisheries resources mainly comprise the four main species of tropical tuna, which are highly migratory species. Tuvalu is a party to a number of global and regional treaties and arrangements for cooperation in the management of these shared resources, notably the United Nations Convention on the Law of the Sea, the UN Fish Stocks Agreement, the Nauru Agreement, the Palau Arrangement, and the Western and Central Pacific Fisheries Convention. Tuvalu is an active member of the Western and Central Pacific Fisheries Commission (WCPFC); the Pacific Island Forum Fisheries Agency (FFA); and the Parties to the Nauru Agreement (PNA); as well as participating in the fisheries programmes of the Pacific Community (SPC).

Tuvalu's overarching development policy is the National Strategy for Sustainable Development 2016-2020 *Te Kakeega III (TK3)*. This plan is generally consistent with the fisheries related goals and aspirations of TK3, which are covered mainly in the sections dealing with private sector development, natural resources, environment and oceans. A new Strategy will be developed in the early part of this corporate plan period, however, under the auspices of the new Government formed in the last quarter of 2019. This, together with the need to respond to rapidly changing regional and international circumstances in the fisheries sector, make it necessary to remain flexible and responsive in this planning framework.

1.3 Corporate Planning

This is the third corporate plan (CP) for the Fisheries Department. The first, covering the period 2014-16 followed a major review and re-think of the Department's structure and functions; however the goals and objectives proved over-ambitious. The second corporate plan covering 2017-19 has had a better record of achievement, partly due better definition of the objectives and performance indicators, and partly due to better resourcing as a major World Bank project was added to support from the Government of New Zealand. Of the 46 key performance indicators for 20 objectives, more than half were fully achieved; around ¼ were still in progress; and only 12 were not achieved during the plan period.

The current plan aims to build on this approach, with a mixture of: further development of activities under those objectives that remain relevant; completion of unfinished business under the second plan; and a number of new initiatives and activities.

1.4 TFD Priorities

Reflecting the importance of fisheries for the economic and social development of Tuvalu, and in line with the requirements of the Marine Resources Act and other legislation, the work of the Department falls under seven main objectives.

- i. Sustainable management of oceanic fisheries resources through regional cooperation and compliance with regional commitments; a strong and innovative Monitoring Control and Surveillance (MCS) programme; and effective systems for collection and analysis of data.
- ii. Maintaining and where possible increasing economic benefits from the tuna fishery by maximising a sustainable and consistent flow of access fee revenue, while developing other economic opportunities including employment.
- iii. Improved management of coastal fisheries, for sustainable inshore resources, through comprehensive data collection and analysis, and working closely with island communities to improve management of the resources and the broader ecosystem.
- iv. Supporting sustainable development of small-scale fisheries for livelihoods, food security and healthier diets through training, FAD deployment, safety at sea initiatives and building a larger class of vessel for offshore fishing.

- v. Improvement and maintenance of TFD infrastructure and facilities through improved asset management and maintenance; further building on the fisheries site; and upgrading facilities.
- vi. Development of staff capacity and systems to ensure that training and staff management meet the requirements for the work; efficient implementation of development projects; and exploring the transition to a Fisheries Authority.
- vii. Promoting public awareness and education on fisheries issues including materials for schools and recording traditional knowledge.

1.5 New areas of work

While many of the priorities listed above are a continuation or development of existing programmes, the new plan introduces some changes of emphasis and several completely new activities. In Oceanic Fisheries there will be more emphasis on 'smart' technology and systems. It is expected that Tuvalu will help to implement region-wide tracking of FADs; and explore new technology to detect IUU fishing in the EEZ and in neighbouring high seas areas. MCS activities to date have focused entirely on operations in the EEZ, with very rare detection of non-compliance; whereas high seas operations are much less regulated, are rarely checked and have a direct impact on Tuvalu's resources.

More emphasis is placed on supporting and improving small scale fisheries, with an offshore fishing project set to build and trial a new 12 meter Glass Reinforced Plastic (GRP) vessel design, fishing on FADs deployed well offshore. An expected spin-off of this programme will be the capacity to build other fishing vessels in GRP, which are expected to have a much longer operating life than locally built plywood skiffs; also the new 12 meter design may also have other applications in Funafuti and the outer islands. Trials will also be carried out of fishing on offshore seamounts with a larger class of vessel to determine economic viability.

Although the potential for aquaculture in Tuvalu is limited, with capture fisheries providing a much better return on investment and labour, TFD will develop a small mariculture hatchery. While this will be mainly to trial re-seeding of species such as giant clam, which have been heavily exploited, there may be some potential to develop outgrowing of high value export species such as clam and sea-cucumbers as a small scale industry.

In both coastal and oceanic fisheries, there has been great progress in improving data collection – whether from logsheets and observers in the oceanic fishery; or from creel surveys and planned water quality monitoring by the coastal section. However, there is a need to strengthen analysis of this data, and where appropriate translate the findings of this analysis into practical advice – for negotiations or management measures. In the case of water quality, this will mean working with other agencies outside the Ministry responsible for Fisheries to address pollution.

Continued institutional development of TFD will be informed by a study early in the plan period to determine the feasibility and political support for a transition from a Government Department to a Fisheries Authority. If the decision is positive, a substantial process of institutional reform will follow. In any event, the Department will continue to use donor funding to improve and expand its facilities, while paying greater attention to the management and maintenance of assets. In some cases it is expected that efficient replacement and/or disposal of surplus assets will be the best approach. Another priority will be a review of training needs, and development of a programme of training for staff both in-country and overseas.

In the area of information and communications, there will be a new focus on young people, with fisheries introduced into the school curriculum, and some new materials designed to transmit traditional knowledge and skills to the younger generation.

2. Vision, Mission, Values and Cross-cutting Issues

2.1 Vision

The guiding vision of the Department remains very similar to the previous plan and can be stated as:

- Productive inshore fisheries supporting livelihoods and providing healthy local food;
- Sustainable oceanic fisheries providing sustainable and consistent revenue, jobs and other economic opportunities.

The physical and economic health of the Tuvalu population depends upon the health of both its inshore and oceanic fisheries. While inshore fisheries can be managed by Tuvalu, the oceanic fisheries cannot be managed by Tuvalu alone but require regional and sub-regional co-operation.

2.2 Mission

The Department's mission is unchanged from the previous plan:

- To maximise social and economic returns to the people of Tuvalu through the sustainable management and wise use of Tuvalu's living marine resources.

On behalf of the people of Tuvalu, the Government, through the Fisheries Department, will act as a responsible custodian of oceanic and designated inshore fishery resources and fisheries rights so that they generate national revenues and sustainable employment opportunities. The Department will also support Kaupule/ Falekaupule to manage inshore fisheries to support livelihoods and provide local food security.

2.3 Values

- **Teamwork and cooperation**

The Department will develop a strong internal culture of teamwork, taking advantage of the fact that all staff are now working together in one office. In dealing with external stakeholders TFD will strengthen cooperation between the Fisheries Department and Kaupule/ Falekaupule as well as Fishers' Associations. Management of shared tuna purse seine and longline fisheries will continue to require cooperation between the Fisheries Department and sister organisations from neighbouring coastal States as well as with regional and sub-regional organisations such as PNAO, FFA, SPC and WCPFC, while maintaining a focus on Tuvalu's national interest.

- **Integrity and ethics**

In its dealings with other parties the Department will deliver on undertakings, and will act fairly, consistently and courteously. The Department will be respected as a solid management partner, a firm but fair regulator and an organisation that provides good customer service to the public and other government agencies. TFD will take a principled approach in the management of regional organisations and initiatives.

- **Operational excellence and staff development**

The Mission of the Fisheries Department is of central importance to the well-being of Tuvaluans. Accordingly, everyone in the Department is expected to strive for high levels of performance by carrying out their responsibilities in a timely and efficient manner. This will be supported by a culture of valuing the staff of the TFD, and developing their skills and abilities through appropriate training and mentoring.

- **Innovation and creativity**

Scientific advances have changed the way we work and communicate, and the pace of change is increasing. TFD will explore the use of new systems and technology, and will be open to new ideas and new ways of working to deliver on our responsibilities.

2.4 Cross-cutting issues

In delivering on the priorities of this corporate plan, the Department will be mindful of a number of issues that cut across all of them, and the interests of the nation more generally. These include:

- **Climate change**

Climate change is an existential threat to Tuvalu, with impacts forecast in many areas including fisheries. Climate variability has always had an impact on oceanic fisheries, with better fishing in the Tuvalu EEZ during El Nino years as the fishery shifts east. However changes in the climate and ocean acidification are forecast to cause: shifting the centre of the fishery out of the EEZs; submersion of EEZ baselines; and a major decline in the productivity of coastal demersal fisheries. TFD must advocate for international agreement that will protect Tuvalu's interests, as well as developing management arrangements that build resilience to climate change. Infrastructure development will be planned to resist sea level rise; and while Tuvalu is not a significant emitter of greenhouse gases, projects will aim to reduce fossil fuel use in the sector.

- **Environment**

A healthy marine environment is essential for healthy fisheries resources. While the impact of fisheries management is expected to be positive, there is a need for wider action to protect the marine environment from pollution and other threats. This requires work outside the normal areas of responsibility of TFD, including through projects such as the Ridge to Reef (R2R) programme.

- **Women and youth**

Fisheries are important for the whole population of Tuvalu. The Department will be inclusive in its consultation on marine resources, respecting the rights of women, youth and vulnerable groups. Women are under-represented in the staffing of the Fisheries Department (and in formal employment more generally), and efforts will be made to address this. Work with young people will aim to raise awareness of fisheries issues, and encourage them to seek further studies and employment in the fisheries sector - both men and women.

- **Outer island communities**

Empowering island communities to manage their coastal fisheries resources has been an important theme of the work of the Department, but oceanic fisheries also contribute directly to the funding of the Kaupule through the community VDS. Fisheries can also provide economic opportunities for outer island communities, and this area will receive more attention in the current plan. Supporting these opportunities, and creating some formal employment, will be important if further depopulation of the outer islands is to be avoided.

- **Good governance**

The tuna fishery in the region is a multi-billion dollar industry, and such big money provides potential opportunities for dishonest practices at all levels – from fisheries observers to the nation's leaders. TFD will have zero tolerance of corruption, and will promote transparency in all matters that affect the national interest.

3. Objectives, Activities and Indicators

This section of the plan has been re-organised so as to answer the key question: “what is the Department going to do over the next three years?” Under seven broad objectives are listed the main areas of activity, which in turn will form the basis for annual work plans. Progress will be measured against a number of Key Performance Indicators (KPIs). Wherever possible, KPIs have been set so that they are within the control of TFD, as this has been a weakness of previous plans. While they have been selected to provide relevant measures of achievement, they are only indicators. There may be further work required even when these KPIs have been achieved; and conversely there may be important progress which is not measured by a KPI.

Activities	Key Performance Indicators
Objective 1: Sustainable management of Tuvalu’s Oceanic Fisheries Resources	
Regional cooperation in the various fishery management arrangements while promoting Tuvalu’s national interests	Full implementation of the Longline (LL) VDS by Tuvalu in 2021 – all LL vessels on PNA Register and buying days FAD tracking agreed in 2020 and implemented in 2021
Ensuring compliance with international fisheries treaties and arrangements to which Tuvalu is a party, including through regular review and updating of legislation and policies.	No major non-compliance recorded in WCPFC Access agreements assessed as fully compliant with FFA MTCs No censure of Tuvalu in PNA Compliance Committee Tuvalu ready to accede to the FAO Port State Measures agreement
Monitoring Control and Surveillance (MCS), to regulate fishing by licensed foreign and domestic vessels and combat Illegal, Unreported and Unregulated (IUU) fishing, continues to be expanded and improved	100% monitoring of transshipment in Funafuti Electronic reporting by observers introduced for Purse Seine Timely submission of logsheet reports by longliners with electronic reporting introduced
Exploring and, where appropriate, implementing new systems and technology to monitor the fishery and detect IUU fishing in territorial waters the EEZ and adjacent high seas areas	At least 1 patrol boat trip per year includes high seas boarding and inspection At least 3 x 1 week aerial surveillance patrols with surface support on stand-by Radarsat or another new surveillance tool tested System for detecting/reporting fishing inside 12 n.m. limit is developed.
Strengthened systems for collection and analysis of data from the oceanic fishery	WCPFC part 1 report submitted on schedule each year Analysis and briefing provided for access negotiations with major bilateral partners
Objective 2: Maintaining and, where possible, increasing economic benefits from the tuna fishery	
Maximising and sustaining government revenue from the sale of access rights to the resource by optimising arrangements and systems	Fisheries revenue maintained at AUD\$30 million/yr Sale of fishing days by tender trialled and expanded if successful
Supporting the environmentally sustainable development of Funafuti as a transshipment port to provide revenue and other economic benefits including new vessel support facilities.	At least 150 purse seine transshipments per year At least one new economic activity – net repair, bycatch utilisation, etc – introduced. Environmental mitigation plan developed.

Maintaining the employment of Tuvaluans as fisheries observers, and developing opportunities for jobs as fishing crew where appropriate, and developing skills that may allow migration in the longer term	Observer program maintains 80 active observers with required ratio of debriefers At least one Tuvaluan Observer Trainer is qualified At least 30 trained crew deployed on Australian longliners and Korean and JV Purse seiners
Strengthening NAFICOT to closely monitor the performance of Tuvalu's joint venture fishing companies and place Tuvaluan crew on JV vessels	Friendly Tuna JV is wound up NAFICOT board members participate on boards of all JV fishing companies All JV companies provide quarterly accounts and annual dividend (subject to audited performance)
Developing systems needed for export of fisheries products from Tuvalu flagged fishing vessels	Tuvalu is listed as competent for EU sanitary and IUU regulations and certifies export of Tuvalu flag vessels
Objective 3: Improved management of coastal fisheries for sustainable inshore resources	
Continuing and improving fishery resource monitoring and analysis to identify trends and problems, to provide reliable information on the status of the resources and feedback on the effectiveness of management measures	Creel and artisanal tuna surveys continued on all islands with databases available for analysis in Tuvalu Backlog of creel survey data is entered, results analysed and distributed to inform management Annual estimates of total catch of tuna and reef fish for each island available Analysis of catch trends for tuna and reef species prepared
Fisheries-related research and monitoring of the environment (e.g. water quality and seafood toxicology) and development of proposals to mitigate the environmental impacts of waste and coastal development as needed for effective fisheries management	Research completed on size at maturity and recommended size limits Regular assessments of water quality prepared Monitoring of the algae that cause ciguatera and ciguatera cases in humans continued and reported Proposal for reducing nutrient loading in Funafuti lagoon developed and submitted to Government
Implement projects identified for the fisheries sector in the community plans developed under the R2R process	At least one substantive priority project is completed in each island
Working closely with the Kaupule, fishers associations, and other stakeholders develop and/or implement coastal fishery management plans and by-laws to optimise resources and regulate harvesting of key species in each of the outer islands	Detailed fishery management plan and/or by-laws developed in each island
Continue implementation of Funafuti Reef Fisheries Stewardship Plan	Improved protection of Funafuti Conservation Area Size limits for key species introduced, in an appropriate way Work on improving access to more pelagic species to relieve the pressure on stressed resources
Objective 4: Supporting sustainable development of small-scale fisheries for livelihoods, food security and healthier diets	
Provision of training and support for small scale fishers and processors, including fishing skills, sea safety, fish processing and outboard motor maintenance	At least 4 courses delivered per year. Training in all areas listed delivered to all islands over plan period.

Deployment and maintenance of Fish Aggregation Devices (FADs) at all islands	At least 3 FADs at Funafuti and 1 at each outer island in place throughout period Offshore FADs (>5 n.mi. from land) tested at Funafuti
Expanding the safety at sea programme to ensure all fishers have access to well- maintained safety equipment (grab bags) and VHF radio communication	300 grab bags distributed nationwide – each bag checked/maintained at least once every year VHF repeater stations installed in Nukufetau and Funafuti
Developing skills of local boatbuilding businesses to produce larger and more durable fishing boats	At least 2 local boatbuilding businesses competent and equipped to build GRP boats
Trials of larger (12 m) vessels for offshore tuna fishing (Offshore Fishing Project), and exploring the option of stationing these vessels in outer islands for search and rescue and other functions	One 12 m catamaran built and operated for at least 12 months to determine tuna catch rates and economic viability. Seamount fishing trials using MV Manaua completed and analysed.
Supporting fishing opportunities for people who do not own fishing boats.	At least one initiative is developed: sale of fishing gear to public, development of improved low-cost canoe design, or other option.
Improving opportunities for marketing fish and fish products from the outer islands – may include subsidy for Fisheries Centres, repair/replacement of icemakers, and developing links with sellers in Funafuti.	Supply of fish from outer islands to Funafuti is monitored and increases Kaupule agree to use CVDS funding to contribute to costs of this service.
TFD vessels operating efficiently and providing a service to Department and the wider community	At least 20 trips per vessel per year Charter revenue meets operating costs of Tala Moana Operational plan developed for vessels when Manaua 2 is delivered
Objective 5: Improvement and maintenance of TFD infrastructure and facilities	
Strengthening systems for asset management and maintenance (of buildings, vessels and equipment)	Asset register completed and checked Costed maintenance and replacement plan for TFD equipment is developed
Construction of new buildings for fisheries training, storage of equipment and supplies, and a boatshed	Training Centre, Store and Boatshed built and in use.
Strengthening laboratory services and the Fisheries workshop, by providing additional equipment and training	Laboratory capable of undertaking micro-biology work Fisheries workshop can maintain all types and models of Yamaha outboard
Commissioning of a small mariculture hatchery for aquaculture research	Hatchery operational and producing clams for re-stocking conservation areas
Objective 6: Development of staff capacity and systems	
Carrying out a training needs assessment and providing appropriate staff training in-country and overseas	Training needs assessment report available 3 in-country training programmes delivered 20 staff benefit from short (4-8 week) courses overseas
Continuing to refine the staff structure, while strengthening coordination, work planning and performance management	Each staff member has an agreed annual workplan and performance assessment.

Efficient implementation of development projects in line with the objectives of this plan, and with timely reporting to donors	PROP project expends 95% of budget by Sept 2022 and Phase 2 Project agreed. TFSP2 reports submitted on schedule
Exploring the option of transition from a Government Department to a Fisheries Authority	Report of consultants available and considered by Cabinet
Objective 7: Promoting public awareness and education on fisheries issues	
Continuing to inform stakeholders and the public on TFD activities and fisheries issues through radio, website, social media and printed reports	At least 12 radio programmes per year At least 12 media/new releases on website and Facebook Annual work plan and annual report printed and circulated each year
Developing and rolling out materials on fisheries in the school curriculum, and promoting careers in fisheries to school leavers	Appropriate materials developed for primary and secondary schools and in use by 2022 Fisheries career talks/brochures developed and delivered to Secondary school leavers
Documenting traditional fishing knowledge and fisheries life skills through print media and/or short videos	Report on traditional fishing knowledge prepared and printed At least 4 short videos on traditional fishing skills prepared from face to face training sessions with local experts.

4. Fisheries Department Resources

4.1 Organisation

The Department comprises four sections, with different areas of responsibility.

- The Administration Section, which is led by the Director, includes the Deputy Director, Legal Officer, Economist, Information Officer and IT Manager, as well as administrative staff. The group is responsible for fisheries access agreements, fisheries policy including regional initiatives, management of development projects, as well as planning and administration of the Division.
- The Oceanic Fisheries Section, led by a Principal Fisheries Officer (PFO), is responsible for Monitoring, Control and Surveillance of the tuna fishery. Main work areas include vessel licensing, reporting and data collection, VMS and VDS monitoring, coordinating aerial surveillance and patrol boat operations, transshipment monitoring and the observer programme.
- The Coastal Fisheries Division, also led by a PFO, is responsible for inshore fisheries resource assessment and management, as well as monitoring of the marine environment. The Division works closely with the Kaupule and other stakeholders in the community. Three teams, each led by a Senior Fisheries Officer, are responsible for work: in Funafuti; the outer islands; and on resource monitoring and assessment (including aquaculture).
- The Operation and Development Division is responsible for operation of the Department's two vessels – Manau and Tala Moana – including managing charters. The Division also has responsibility for the FAD programme, promoting sea safety, and training in fishing and fish processing. The development of boatbuilding and the new offshore fishing project will be led by this Division, working closely with local fishermen and their associations.

4.2 Staffing

The staffing structure at the end of 2019 largely reflects a re-structure that was approved in 2014. While this has worked well, the growing importance and complexity of systems for the oceanic fishery and the growth of the observer programme and transshipment monitoring have shown the need for strengthening of this programme. Similarly, the need to provide more support for small-scale fisheries development and the management of two inter-island vessels has increased the workload of the Operation & Development group. The new structure, which will be partly implemented in 2020, is shown in Figure 1. Further changes will be needed in subsequent years as the work programme develops in areas such as laboratory services, mariculture, compliance and enforcement, and support for fish marketing from the outer islands. Pay grades may also need review and greater consistency.

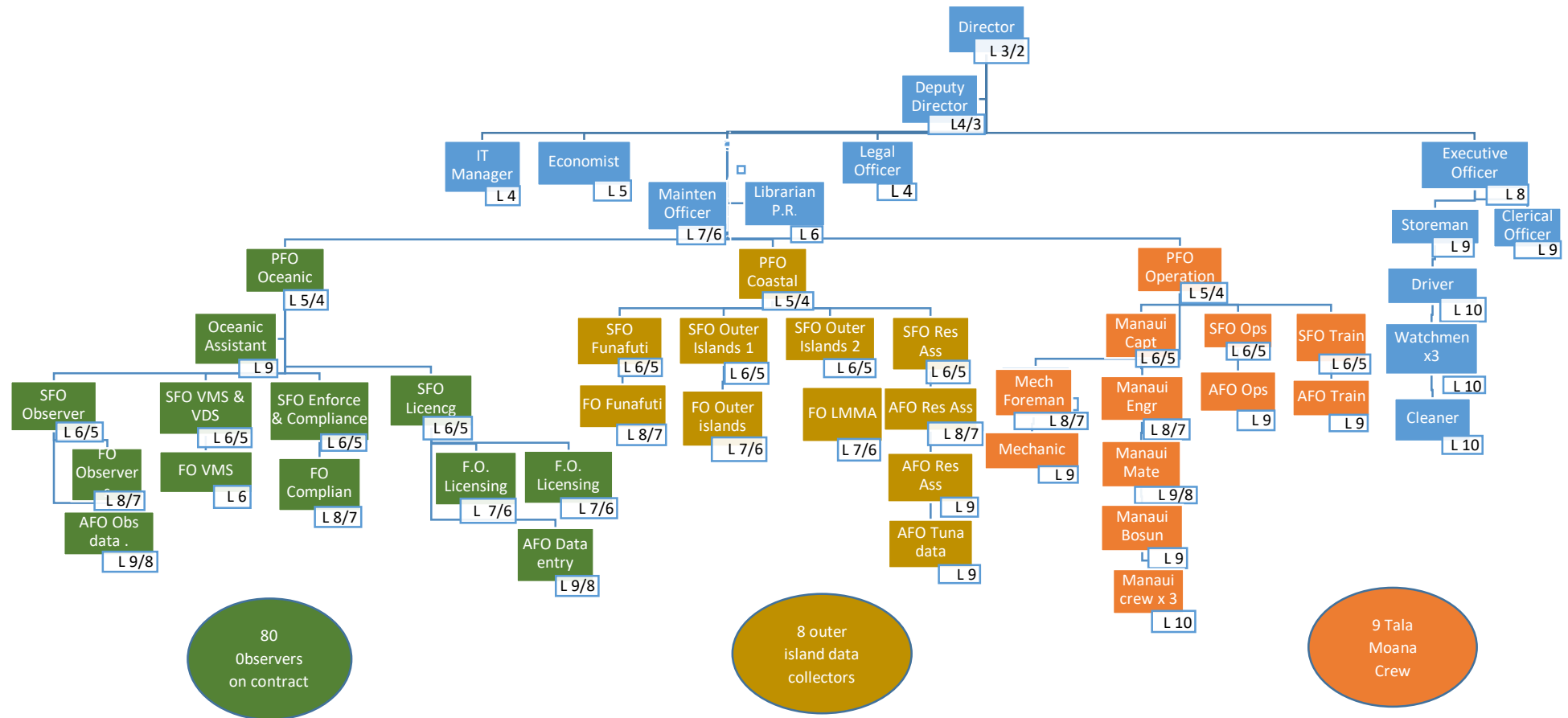
In addition to the established staff positions, there are three important groups of contract workers:

- ✓ The 80 qualified fisheries observers and debriefers, who work in the national and regional observer programmes, and also undertake transshipment monitoring;
- ✓ The crew of the Talamoana; and
- ✓ Outer island data collectors.

The first two groups are funded through cost recovery (charter fees for the Talamoana, and an observer levy paid at the same time as licence fees). The data collectors have been funded by the PROP project, but will be absorbed into the Department's recurrent budget.

Figure 1: TFD Organisational Structure (as proposed in 2019)

(note that the Government Vision and Policy published in September 2019 calls for L10 posts to be upgraded to L9)



4.3 Staff training

The Department's human resources are its most valuable asset, and will be developed during the plan period. A training needs assessment (TNA) will be undertaken early in the plan period. This will reflect both the current needs of the staff, and planning for new activities and some future staff turnover.

In the Tuvalu Government system, many senior positions require a university degree and this has encouraged staff to seek long-term scholarships overseas. While a small number of staff can be released in this way, it will be important to budget for study leave relief so that the posts are not left vacant for three years or more. It may also be possible to arrange more scholarships in Fisheries related subjects for school leavers, and to revise job descriptions so that promotion in technical areas relies more on skills and competence than formal qualifications.

The Department will take advantage of a number of opportunities apart from long-term study overseas, including:

- Participation in short training courses, workshops and meetings organised by regional organisations;
- Engagement of consultants and personnel of regional agencies to deliver short training courses in-country;
- Attachments with regional agencies and other institutions overseas;
- Specialised short courses delivered by academic institutions overseas.

Without pre-empting the TNA, it is expected that the focus of much of this training will reflect priorities of the plan, and will include improving the skills of relevant staff in areas such as:

- Asset management and maintenance;
- Human resource management and staff appraisal;
- Mechanic training, particularly to repair the increasingly sophisticated outboard motors now in use;
- Database management, data analysis and reporting;
- Laboratory techniques and skills;
- Mariculture hatchery operations;
- Practical aspects of Monitoring, Control and Surveillance, including the use of new techniques and equipment;
- Fisheries products hygiene and sanitary controls.

4.4 Assets and facilities

Since 2018, TFD has benefited from a new and well-furnished office complex (provided under the New Zealand Aid Programme) which has brought all staff under one roof for the first time in many years. By the start of this plan period, the roof will have been fitted with an array of solar panels, which should meet most if not all of the building's electricity needs. While there are still some further improvements to IT systems and security in progress, this is an excellent facility that, if properly maintained, will serve the Department well into the future. Other infrastructure on the site includes a large workshop, the NAFICOT fish market (which requires extensive maintenance and repair), and a slipway capable of handling vessels up to 20 meters in length. During the plan period a new training centre, store and boatshed will be constructed in the Fisheries area (funded by the World Bank PROP project), as well as a small mariculture hatchery.

The Department currently operates two vessels with inter-island capability. The *Manau* is an 18 meter GRP vessel provided by the Japanese International Cooperation Agency (JICA). While the hull

of the vessel is still sound, the machinery is nearing the end of its useful life and a replacement vessel, *Manai 2*, will be provided by JICA in 2021. The second vessel, *Tala Moana*, is a 32 meter steel vessel provided under a Global Environment Facility (GEF) project in 2015. While the *Tala Moana* has much greater capacity for transporting passengers for work in the outer islands, it is an old vessel (built in 1980) and has proven difficult to maintain. The best option for rationalising this fleet will need to be determined during the plan period, but this may include a major re-fit of *Manai*, and disposal of *Tala Moana* when *Manai 2* comes into service.

The Department also has four outboard powered boats for use in the lagoon, a compressor and multiple sets of diving equipment, a range of laboratory and workshop equipment, and a large number of computers, printers and other IT equipment. Again it will be important to rationalise some of these assets (for example printers), to keep an accurate asset register of valuable items, and develop a plan for asset maintenance and replacement.

4.5 Budget

Fisheries access and related fees currently contribute around 60% of all revenue collected by the Tuvalu Government, while the Department receives around 2% of Government recurrent expenditure for its annual budget. While it is natural that health and education dominate Government priorities for expenditure, there has been a growing understanding of the need to invest in the staff and systems that collect such an important share of the Government's income. However, although annual budgets have increased in recent years, TFD is still a long way short of receiving the funding from Government that would meet its requirements.

The shortfall has essentially been made up through support from development partners, notably the World Bank Pacific Regional Oceanscape Programme (PROP) and the New Zealand Tuvalu Fisheries Support Programme (TFSP). At the time this plan was prepared, World Bank had agreed a 23 month extension of the PROP project, ensuring that it will provide inputs throughout nearly all of the plan period. The TFSP project ended on 30th September 2019, although some expenditure committed before that date will continue. A new project, TFSP2, providing funding for a range of activities and technical assistance, will be developed in late 2019 or early 2020.

Two Global Environment Facility (GEF) projects have also provided significant inputs for the Department, including the *Tala Moana*, although these projects have broader objectives. Other donors that support the Department's work by providing equipment and technical assistance include JICA and the Overseas Fisheries Cooperation Foundation (OFCF) of Japan; and both Government and Fishing Industry bodies in Korea.

In short, the Department will need to work closely with donor partners throughout this plan period. This means developing realistic project workplans and budgets, as well as meeting donor requirements for procurement and reporting. While both New Zealand and World Bank have indicated a relatively long term commitment, their support will not continue indefinitely and both are keen to see the Tuvalu Government absorb activities that may be project funded at first into their recurrent budget.