

Kingdom of Tonga



MINISTRY OF FISHERIES

TONGA NATIONAL FISHERIES POLICY

Parts 1, 2, and 3

The Ministry's vision: Economically, socially and environmentally sustainable fisheries that contribute to better living standards for all Tongans.

The Tonga Fisheries Sector Plan aim: Maximising the sustainable contribution of the fisheries sector to food security and economic growth.

March 2018

Message from the Hon Minister for Agriculture, Food, Forests, and Fisheries.



Tonga does not have the vast fisheries resources of other countries or regions. In fact, our fisheries are modest when compared to others in the world and they need to be protected and conserved carefully. Our fisheries are vitally important to both our traditional social fabric, and our national economy. Fish is a key part of our Kingdom's traditional healthy diet.

To help ensure we manage and develop our fisheries carefully, the Cabinet of the Tongan Government has approved the Tonga Fisheries Sector Plan. This plan was developed with support from the World Bank and the International Fund for Agricultural Development with the aim to maximise the sustainable contribution of the fisheries sector to food security and economic growth. When implemented, the sector plan has the potential to place Tonga at the forefront of fishery management in the region.

The sector plan includes over 120 actions. Cabinet decided that a number of these actions required further discussion with stakeholders before deciding on a course of action. Once discussions on these policy issues have been completed, Cabinet will be asked to make a decision so that implementation can proceed.

I am grateful to the New Zealand Ministry for Foreign Affairs and Trade for providing funding support for a consultancy project to look specifically at rights-based fisheries management options; and foreign investment; transparency, pricing, and charging for Tonga's commercial fisheries. These comprise parts 2 and 3 of this discussion paper.

As the Minister for Agriculture, Food, Forests, and Fisheries I have a very clear vision for our fisheries. That vision is included in the Corporate Plan for the Ministry of Fisheries.

Our vision is to achieve economically, socially and environmentally sustainable fisheries that contribute to better living standards for all Tongans

We want our industries to be profitable and rewarding for those who take the risks involved in commercial fishing and aquaculture, we want the national economy to benefit from our fisheries, and we want the social and cultural importance of our fisheries to be recognised through programs like the development of community based special management areas. Consistent with our vision we want the environment upon which our fisheries ecosystems rely to be sustainably managed, and we want our fisheries to contribute to better living standards for all Tongans.

I believe we can improve living standards for Tongans by encouraging everyone to regularly eat fresh fish. If we are to combat the scourge of non-communicable disease such as diabetes and heart conditions we must improve our diet and try to replace white rice and fried chicken, with our traditional healthy local vegetables and fresh fish.

This discussion paper is for all Tongans and we welcome your views.

Honourable Semisi Fakahau
Minister for Agriculture, Food, Forests and Fisheries

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Introduction by the Chief Executive Officer, Ministry of Fisheries



The Tonga Fisheries Sector Plan was developed with support from the World Bank and was approved by Cabinet in 2016. As part of that approval, Cabinet required the Ministry to consult with stakeholders on a range of policy issues for which there was currently no clearly stated government position.

This document provides an opportunity to consult on those issues, and to get feedback from stakeholders, before they are considered by Cabinet.

The discussion paper comprises three parts.

Part 1 discusses a range of policy issues raised in the Tonga Fisheries Sector Plan.

Part 2 discusses the specific potential for rights based management in Tonga.

Part 3 discusses specific issues around foreign investment; transparency, pricing, and charging.

The implementation of the Tonga Fisheries Sector Plan is already underway. We continue to implement the community-based Special Management Area program at an increasing rate, to review fishery management and development plans, to have an increased focus on the science necessary to support fishery management decisions, and to strive to implement an effective compliance program that creates a deterrent to illegal fishing.

We have management plans for deepwater fisheries and tuna, but we must now place a greater focus on managing our inshore coastal fisheries, building on the work already done to help fishers to act as stewards of our fishery resources, and by regulating fishing so we only harvest what can be taken sustainably.

We will continue to identify new aquaculture opportunities. We will work with communities and investors to identify those with the greatest potential and to commercialise those that offer the best opportunities to create new industries and new livelihoods.

The Ministry will strive to use its staff and financial resources strategically and effectively to achieve our goals.

We welcome any comment you may have on any of the policies proposed in this document.

Dr. Tu'ikolongahau Halafihi
Chief Executive Officer, Ministry of Fisheries

POLICY DISCUSSION PAPER PART 1 - TONGA FISHERIES SECTOR PLAN

1. Fishery management in Tonga

Tonga has a good fishery management framework, with strong supporting legislation. We have a Fisheries Management Act with associated regulations, and we have fishery management and development plans. Our aim is to sustainably manage fisheries to support our communities with healthy food, and to generate economic activity and exports.

Our fisheries exports, mainly tuna and snapper, are worth over TOP\$10 million a year to our economy. The management plans for the tuna fishery and the deepwater fishery limit the numbers of vessels that can be licensed to ensure these fisheries are managed sustainably. A total allowable catch is set for the snapper fishery. However, the beche-de-mer (sea cucumber) fishery has been closed due to over fishing. This once profitable export fishery is being rebuilt for the future.

Tonga has a small fleet of foreign flagged longline vessels from China and Taiwan that fish in Tonga's 700,000 km² exclusive economic zone.

Our coastal fisheries cover intertidal areas and coastal waters and are hugely diverse. They range from net fishing, trolling, and the use of baited lines, for reef and pelagic fish, to spear fishing and gathering by hand. Fishers work from the shore and from small boats. Migratory species such as mahi-mahi, Spanish mackerel, trevallies, yellowfin tuna, and skipjack tuna are key target species for coastal commercial fishing, and along with other species like spiny rock lobster and some snappers are considered part of broader regional stocks. Other reef species such as sea cucumbers, parrot fish, groupers, octopus, giant clams, mud crabs, and aquarium fish, are considered as local stocks.



Mahi-mahi



Skipjack tuna

Coastal communities are being given the opportunity to set up Special Management Areas (SMAs). These areas give local community committees the power to control fishing, and to determine who can fish, with the support of the Ministry. A significant expansion of the SMA network is planned with a target of 28 by the end of 2017, to more than 100 by 2025.

There are great hopes that aquaculture development will result in new jobs and investment. Small scale aquaculture has the potential to create alternate livelihoods for coastal fishermen as fishing is restricted. Currently, the Ministry is involved in aquaculture trials for seaweed, pearls, milkfish, sea cucumbers, and clams. Small markets have already been established for

pearls and clams, and strong interest has been shown by overseas investors in both sea cucumber and seaweed.

2. The Ministry of Fisheries

The Ministry of Fisheries has an organisation structure designed to deliver on the Government's agenda and policies. The structure is based around the Ministry's major functions, with divisions for fishery management, fishery science, fishery compliance, and corporate services.

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- *Tuna fisheries are being harvested sustainably under a management plan, supported by a regional stock assessment.*
 - *Deepwater (snapper) fisheries are being harvested sustainably under a management plan, with a national stock assessment.*
 - *Coastal fisheries are under significant pressure but are not currently under management.*
 - *Community fisheries are being managed through the Special Management Area program which places responsibility for management with coastal communities.*
 - *Aquaculture has the potential to create investment and economic development, and to create new jobs.*
-

Tonga takes an active role in managing regional fisheries. This is done through membership of:

- the Western and Central Pacific Fisheries Commission (WCPFC) based in Pohnpei in the Federated States of Micronesia
- the Pacific Islands Forum Fisheries Agency (FFA) based in Honiara in the Solomon Islands, and
- the Pacific Community (SPC) based in Noumea in New Caledonia.

3. Tonga Fisheries Sector Plan

The Tonga Fisheries Sector Plan was developed with support from the World Bank. The plan lays out an ambitious agenda that will place Tonga amongst the forefront of fisheries management in the region. The plan does not propose any radical departure from current fisheries management practice but rather it builds on current activities, giving them focus, direction, and support. The plan includes more than 120 actions for improving fisheries management with the aim to maximise the sustainable contribution of the fisheries sector to food security and economic growth.

The plan has three implementation phases. We are currently in phase 1, the preparatory phase. Phase 2 is the primary implementation phase and extends over an initial period of 3 years. Phase 3 would be based on an evaluation of progress during phase 2.

The TFSP has four components:

Component 1.	Sustainable community fisheries
Component 2.	Profitable commercial fisheries and aquaculture
Component 3.	Public and private investment
Component 4.	Governance and capacity building

The implementation of these four components will result in:

- a) A significant and accelerated expansion of the community based Special Management Area (SMA) program.
- b) A program of fishery management involving coastal and commercial fisheries, with management plan development and reviews that will result in better outcomes.
- c) Master planning for improved fisheries infrastructure to support the industry, such as fish markets, and port and airport access.
- d) Improved governance through legislation and policy reform, and training and capacity building for both Ministry staff and stakeholders.

The capacity to fully implement the TFSP is beyond current the resources of the Ministry of Fisheries. Accordingly, funding and support is being identified through discussions with development partners and regional agencies, to support implementation. A proposal is being developed for significant implementation funding from the World Bank through the Pacific Islands Regional Oceanscape Program (PROP).

4. Territorial waters and the exclusive economic zone

Tonga's territorial waters and exclusive economic zone are defined by the 1982 United Nations Convention on the Law of the Sea.

Territorial waters extend to 12 nautical miles (around 22.2 km) from the coast, measured from agreed coastal baselines. In these waters Tonga has sovereignty which means we can have control over the activities that occur in these waters – even though foreign ships are allowed innocent passage.

The exclusive economic zone (EEZ) extends out to 200 nautical miles (around 370 km) from the coastline. In these waters Tonga has control over all economic resources including fish, minerals, and oil. However, Tonga cannot prohibit vessel passage or stop other activities above, on, or under the surface of the sea that are consistent with international law.

Worldwide there has been a long history of conflict between fishing vessels operating in different fisheries, using different methods, and targeting different fish. Whilst this has not been a significant problem in recent years, it has started to emerge as a potential conflict issue, and as a barrier to domestic fleet development. It is likely to continue to emerge as a problem as resources become scarcer, more valuable, and are harvested in an increasingly competitive way.

Proposed policies - for discussion

Tonga has well developed fishery legislation and policy settings. This paper does not attempt to restate current policies and approaches which can be found through the Ministry's website.

The following specific policy topics have been drawn from the Tonga Fisheries Sector Plan and from recent discussions with stakeholders, and within government. They relate to specific areas of responsibility held by the Ministry of Fisheries. The policies attempt to avoid overlap with other Ministries with environment and natural resource related portfolios. The Ministry is however happy to discuss other policies or policy topics that stakeholders consider important.

It is a given that our fish stocks are at risk of being overfished, and that our coastal environments risk being modified from coastal development and climate change. A key focus of all the proposed policies is to help ensure our fishery resources are accessible to all Tongans, but that they are also harvested and shared in a fair and sustainable way.

Some of these policies are already in place and are working well. Others will require a change.

5. Traditional, cultural, and lifestyle fishing

Tonga is predominantly a society of coastal communities and all Tongans have a right to enjoy public areas of our coastline for recreation and leisure. Most Tongans live and work close to the sea and are enthusiastic consumers of fish. Fish is an integral part of our island culture. To promote good health, we should all eat fish as often as possible. This means ensuring our fishery regulations encourage fish to be available to the public that is fresh and good quality.

Proposed policy:

All Tongans have a right to catch and collect fish for their families. This is not an unlimited right. We all must use sustainable and lawful fishing methods, and only take fish in accordance with the laws, regulations, and local rules that have been developed to ensure sustainability.

All Tongans should be able to access affordable fresh fish. To encourage this:

- All foreign licensed tuna vessels are required to land all their catches into Tonga and all non-target catch of these vessels shall be retained for sale onto the local market at an agreed rate.
- All fin fish, crustaceans, and shellfish caught for food from our coastal fisheries will only be used either for personal consumption or for sale in local markets, with the aim of ensuring consistent supplies of fresh fish to our communities¹.

¹ This would not apply to licensed export of non-food fish such as aquarium fish, sea cucumber, and aquaculture commodities.

6. Special Management Area Reforms

SMA are a community based fishery management system. They provide local communities with control over defined areas of the coastline. In these areas the community determines the areas to be protected, the types of fishing and other fishery activities that can occur, the level of catch, and who can fish.

SMA support fishery management at a fine scale, with local community participation and decision making. They aim to directly benefit habitat conservation, encourage conservation of local fish stocks, and the broader marine ecosystem. The system effectively rewards those who take responsibility (the local community) for protecting habitats and fishing responsibly.

SMA can directly benefit fishery-dependent coastal communities, can increase the income of artisanal fishermen, and can support broader food security goals.

SMA involve a cooperative management approach where managers and the community meet at a community level and share management responsibility. Managers are responsible for performance standards and ensuring effective and supportive regulations are in place, whilst communities have day-to-day management responsibilities, implement a compliance program, and record and report on fisheries data.

Proposed SMA policy:

The Government strongly supports the implementation of SMA and will continue to implement them for any area where the community is supportive, and the area is appropriate. The target for SMA is to implement a total of more than 100 SMA by the year 2025.

A review of the SMA program was undertaken by the Food and Agriculture Organisation of the United Nations (FAO). Following that review and in line with the TFSP, a series of reforms include:

- Increasing the level of delegated authority over SMA decision making to communities as a means of increasing stakeholder empowerment and reducing the requirement for central or ministerial approval for minor changes to SMA management arrangements.
- Streamlining the establishment of SMA:
 - Through increasing the number of SMA staff, and the placement of staff dedicated to SMA work in Vava'u and Ha'apai.
 - Through working with non-government organisations (NGOs) to create streamlined SMA processes. NGO's will should be actively engaged.
 - By removing the requirement for a baseline survey before an SMA is established².

² Baseline surveys will still be conducted where resources permit.

- To focus the efforts of Ministry of Fisheries staff on fishery issues rather than on non-fisheries livelihood work associated with SMA implementation³.
 - By elevating SMA implementation to a stand-alone unit.
- Improving the SMA establishment process:
 - By reviewing procedures, and adding a further step to explicitly cover ongoing monitoring, engagement with community, and the periodic review of each SMA.
 - By monitoring SMA establishment costs so this can be more accurately reported.
 - By modifying the template for the Coastal Community Management Plan to include a summary of the rules of the SMA, and details about plan modification (version control).
 - By modifying the process for joining the SMA waiting list to include agreement to a standard letter specifying the obligations of that community and those of the Ministry in the SMA process.
- Modify the current SMA monitoring:
 - The future SMA monitoring strategy would have the theme of simplicity whereby data collection and reporting requirements will focus on general trends in each SMA. Catch monitoring would be site-specific and tailored to each community, aimed at obtaining the trend of over-all catch rate, and where practical trends for important species and gear, as well as the collection of perception information on trends in catch rates, outsider presence in the SMA, and SMA-related benefits; with regular analysis of this information, and presentation of the results back to communities.
 - The Ministry will provide training and capacity building for SMA monitoring and compliance, and will seek funds for minor capital items to support SMA implementation such as small vessels and fish aggregating devices (FADs).
- The Ministry of Fisheries will gain a greater understanding of the effects of SMAs on the food supply and livelihoods of landlocked communities, and develop options for providing a mechanism for landlocked communities (i.e. those without a sea-boundary) to access adjacent coastal community fisheries without impacting sustainability.
- A standardised template approach to SMA planning will be developed to ensure consistency and to simplify planning, as well as to support increasing level of delegated decision-making authority.

³ Alternate livelihood activity programs will still be supported, where resources permit, and especially where there are small scale aquaculture opportunities.

- The potential to group SMAs together under joint coastal community management. This has been sought by some communities, and may present efficiencies in the future.

The Act and the regulations will be reviewed to fully implement new SMA policies.

7. Commercial fishery management

Commercial fisheries are fisheries that operate under statutory fishery management plans. This includes the deepwater snapper fishery, the tuna fishery, the sea cucumber fishery, and the aquarium fishery.

Proposed policy:

The management planning process would be compared with others in the region to ensure best practices are being followed.

A new management plan is proposed for the coastal commercial fishery to regulate the numbers of licences issued, areas worked, species and amounts taken, and methods used.

Existing commercial fishery management plans will be reviewed over the next five years. A common vision will be established with the involvement of fishery participants. Management plan objectives and strategies will be reviewed for each plan, including of methods, areas, species, catch, effort, sustainability indicators, fishing rights, licensing periods, and access fees.

A medium-term goal (within ten years) will be that all licensed tuna fishing vessels operating in Tonga be registered and licensed in Tonga, and be home-ported in Tonga.

Tonga will support potential bi-lateral access agreements with respect to access to South Pacific albacore stocks in Tongan waters.

A further target will be that a majority of all vessels be owned and operated by Tongan nationals.

8. Coastal fishery management

Coastal fisheries are important to large numbers of Tongans who catch or collect fish either for personal consumption, trade, or sale. Coastal fisheries are currently open access. This means anyone can fish and there are few rules to control the fishing that occurs. These fisheries are under significant pressure and some species are already overfished.

Coastal fishing is defined by the area where fishing occurs, and the activities that occur within that area. These activities include net fishing, trolling, line fishing, spear fishing, and gathering by hand from the intertidal zone, to fringing reefs and in coastal waters. Some fishers only harvest for personal consumption, whilst others sell all or part of their catch. Fishers work from the shore, and from small boats.

All these fishing activities need to progressively come under management to ensure they are sustainable. Management will mean new regulations to control numbers of fishers, the amount of fishing, the gear used, the species caught, fishing times, and fishing areas.

The implementation of SMAs will increase pressure on remaining coastal fisheries because there will be fewer fishing grounds available for coastal fishermen. The result of SMA implementation will be an increase in the risk of over-fishing in areas not under SMA management as fishing pressure increases.

The sector plan specifically proposes consideration of:

- The development of a cooperative tasked to establish product grades and standards, establish standard prices and working conditions, along with reviewing potential for enhancement of stocks of high value species.
- The development of rules on new entrants; the gradual introduction of limits on the number of participants, and introduction of complementary regulation.
- The development of rules on harvesting and sale (closed seasons, areas, size limits, rotation of gleaning areas, bag limits to maintain market prices and share catches, and catch reporting).

These proposals will be given effect through the progressive regulation of coastal fishery management.

The sector plan proposal to develop associations of fishers has been responded to through a review of stakeholder engagement which is discussed below.

Proposed Coastal Fisheries policy:

To ensure sustainability and promote the increased availability of affordable fresh fish in a sustainable way, by 2022 coastal fisheries will come under fishery management arrangements.

It is proposed that Tonga's coastal fisheries be regulated and restricted to control fishing operations within 6 nautical miles of coastal baselines. Coastal fisheries will be managed in various ways.

- For those fishers who sell their catch, a commercial fishery will be established under a management plan. The management plan will consider area (spatial) controls, gear controls, species controls and catch limits, and vessel controls.
- In certain cases, species-specific commercial fishery management plans will be supported (e.g. beche de mer, and aquarium fish)
- For those fishers wishing to catch fish either for personal and family use, or sport (i.e. artisanal and recreational fishing) current regulations will be reviewed to ensure the amount of fish that can be taken is within sustainable limits; and the amount of fishing gear that can be used. Fish taken in the artisanal fishery cannot be sold.

- Sea cucumber will be managed with community based fishery harvest and processing, with arrangements developed to ensure marketing power does not become concentrated with a small number of buyers and exporters.

The proposed coastal fisheries policy will be implemented having regard to the following points:

- Coastal fishing will be defined as all fishing in or on intertidal zones, lagoons, coastal reefs and in coastal waters out to 6 nautical miles offshore, measured from coastal baselines.
- Coastal commercial fishing may be further defined under the management plan by area, species, or fishing method, or any other category defined by the regulations.
- All vessels involved in taking fish for sale will be registered or licensed.
- Individuals involved in taking fish for sale (commercial fishers) may be required to be licensed.
- A catch return (catch log) will be completed that provides details of species caught, amount of key species caught, fishing methods used, and areas and times worked.
- Gear regulation including mesh sizes, net lengths, hook and trap limits, will be implemented as necessary.
- Catch regulation including catch quantity and size limits will be implemented for key species, including for personal consumption.
- Effort management including limiting the number of vessels or fishers that can operate in the commercial fishery will be implemented as necessary.
- Seasonal closures will be implemented as necessary.

It is likely there will be a need to review both the Act and the regulations to fully implement the proposed coastal fisheries policies.

9. Aquaculture

Aquaculture in Tonga is considered to have strong prospects both to create new livelihoods for coastal communities, and to generate foreign investment. Potential new industries based on strong research results include seaweed, pearls, sea cucumber, sea cucumbers, and clams.

Proposed policy:

- Prepare an aquaculture development and investment policy, with specific attention to foreign investment.
- Undertake spatial planning for aquaculture including dialogue with coastal communities.
- Facilitate local participants entering aquaculture using credit schemes to assist with establishment and production costs.
- Provide training and capacity building for potential participants.

- Develop incentives for aquaculture investment approvals with efficient approval processes, providing tax and other incentives, and help for investors.
- Provide specific support to facilitate land and water lease areas, and work with relevant government agencies on broader infrastructure requirements such as provision of energy and access routes.
- Ensure effective engagement with local communities, particularly with a view to facilitating outgrower farming systems.
- Ensure effective biosecurity, disease, infection, and pollution controls are in place to protect Tonga's marine environment, with veterinary and disease and water quality testing services available to the industry.

10. Support for our industries

During the development of the sector plan the industry proposed several specific items they felt would be supportive in support of industry development. The consultants preparing the sector plan included several proposals items for further consideration:

- A review of the fisheries concessional loan scheme to expand its use to the acquisition of vessels and capital items.
- The development of arrangements for a \$ for \$ matching grant scheme.
- A proposal to facilitate a reasonable size snapper boat, with fishing gear, for 'Eua fishermen.
- Providing a working capital float for purchase of bait.
- Providing a subsidy for air freight for up to 18 months to support the establishment of markets.
- Reviewing the potential for public private partnership models to assist with industry development, especially for the acquisition of expensive assets and infrastructure.

In general terms the Government has been supportive of several industry development schemes that (in effect) represent industry subsidies. Whilst these are useful in supporting short term industry growth, they are not sustainable. The use of subsidies for fishing industries is recognised across the world as being counter-productive to the challenge of achieving sustainable fishing. In short, the argument is that if a fishery is not profitable because of overfishing, subsidies will increase the level of overfishing. The short-term effect of subsidies is to make profitable fishermen more profitable, and keep unprofitable businesses in the industry when otherwise they would have left. The long-term effect is to make all businesses unprofitable as catch rates continue to decline.

That does not mean that all subsidies or financial support schemes are bad. Schemes that seek to improve fish handling and quality, and hence improve the value of the catch can actually be

used to improve returns to fishermen, and take pressure of fish stocks. Schemes that are designed to help fishermen ride out a poor season caused by adverse weather or a temporary decline in the availability of fish – that can happen occasionally in some fisheries - can prevent businesses collapsing so they can quickly return when stocks recover.

Proposed policy:

The government will continue to be supportive of industry support schemes that include criteria that demonstrate equitable support for industry, and that all participants can generally access.

Such schemes will be favoured where they do not undermine competition between fishermen, or create an unreasonable advantage for one fisherman over another. The goal will be to maintain a level playing field.

Any such scheme will be subject to an assessment of its potential impact on target fish stocks, having regard to the precautionary principle.

11. Stakeholder engagement

The fishing industry in Tonga has a well organised framework for engaging with the Ministry and Government. The National Fisheries Council (NFC) relies on voluntary membership and comprises fishers involved in the deepwater and tuna fisheries. There has been discussion about broadening the NFC's mandate to involve small scale fishers but that has not occurred to date. The NFC has no permanent staff and whilst there has been discussion about this it has not progressed. The Ministry of Fisheries has a constructive relationship with the industry and supports consultation, engagement, and a co-operative approach to fishery management. There is detailed consultation on fishery management planning and the industry participated in a constructive way. There is no indication of the kinds of combative relationship with recreational fishers that sometimes exists in other countries.

The sector plan proposed consideration of a more significant role for the NFC in coordinating the delivery of training and capacity building, and the organisation of small scale fishers. Early discussions with the NFC suggest they are comfortable with the existing arrangements, whilst being keen to engage with the Ministry, perhaps through a partnership arrangement, in service delivery in these areas.

The sector plan contained more than thirty suggestions for, or references to, new or enhanced consultation between the Ministry of Fisheries and various stakeholders. To rationalise these proposals a review of stakeholder engagement was undertaken by the FFA. The main thrust of the recommendations of the review can be summarised as follows:

- streamline current mechanisms for consultation with industry so that they are more functional, to support development and co-management
- continue to work with the NFC

- encourage the development of small scale fishing associations
- develop stronger relationships with key Government agencies
- re-assert the important role of the FMAC
- build on existing work to strengthen national outreach and information services.

Stakeholders were generally supportive of the review recommendations. The Minister has approved a response that to the recommendations for implementation, providing a sound footing to address the issues identified in the TFSP, with a realistic and effective programme of consultation between the Ministry and its stakeholders.

Proposed policy:

In response to the FFA review recommendation that the Ministry should prioritise a few of the key relationships with other Government agencies and take a proactive approach. Key relationships are Environment, Marine Department (Maritime and Ports), Navy, and Police. The key strategy will be to cooperate with these key line agencies through regular meetings, joint training events, and memorandums of understanding.

In response to the FFA review recommendation that the Ministry should prioritise participation in regional fisheries meetings over events that are outside its mandate, whilst this is an infrequent occurrence, the CEO of the Ministry of Fisheries will review all applications for overseas travel and for conference attendance to ensure they are relevant to the objectives of the Ministry's Corporate Plan.

In response to the FFA review recommendation that there needs to be a discussion about developing a more 'industry-friendly' attitude if fisheries are to develop to their full potential and contribute to economic growth, the Ministry believes it has a good relationship with its stakeholders but in future will focus on ensuring licence applications are processed in a timely way, that requests from industry for information are dealt with promptly, and that communications with all stakeholders is done in a respectful, helpful, and courteous manner.

In response to the FFA review recommendation that consideration be given to re-establishing the Fisheries Growth Committee (FGC) for a limited period, and subject to funding being available this was supported by industry. The Ministry of Fisheries will confirm proposed arrangements with the Minister, including frequency of meetings, membership, and secretariat arrangements.

In response to the FFA review recommendation that the Fishery Management Committees (FMCs) established under each fishery management plan be reviewed, the industry generally agreed that Management Committees should be more active. It is proposed that each MC should meet at least once each year, and more frequently when a plan is under review. Either the Ministry or the industry should be given the opportunity to call special meetings when the need arises. Membership of each FMC should be determined by the CEO with industry

membership based on nominations from the NFC (in accordance with the management plan) which shall be from amongst licence holders participating in the fishery.

In response to the FFA review recommendation that the Ministry recruit a new 'Industry Liaison Officer' to have responsibility for coordination of MC meetings and to act as a point of contact between the Ministry and the Industry, the industry agreed there was a need for effective communication between stakeholders and the Ministry. The Ministry is supportive of such a position being in the Fisheries Management Division.

In response to the FFA review recommendation that support for the NFC should continue as an umbrella organisation which is open to all but that it not have a monopoly on representing fishing interests. The industry was supportive and agreed this is consistent with the current approach.

In response to the FFA review recommendation that efforts to establish local associations of small scale fishers should be increased, industry acknowledged the complexities of this proposal given the wide range of individuals, groups, locations, and competing interests. It was however acknowledged that effective communication and engagement is essential. The Ministry supports the need to consult with groups, rather than individual fishermen, noting there are limited funds available to establish associations. There is cautious support for the recommendation, subject to available resources and funding.

In response to the FFA review recommendation that the current structure of Coastal Community Management Committees (CCMCs) be maintained, this approach was supported. These structures will be kept under review to ensure they are appropriate and representative.

In response to the FFA review recommendation to re-activate the Fisheries Management Advisory Committee (FMAC), as an important source of external advice to the CEO and Minister, industry supported this recommendation. The Minister has approved a review of the Ministries involved, with specific consideration of the involvement of the Ministry of Environment, and the Tonga Defence Force. The industry representation should also be reviewed to include the NFC, and to remove the Tonga Fish Export Association which is no longer active.

In response to the FFA review recommendation to strengthen the Ministry's communications and outreach programmes this was supported.

12. Monitoring and research

The Ministry has a small group of officers engaged in monitoring and research. They aim to monitor the health of fish stocks, to support the development of aquaculture, and to support effective decision making. Data collected from the monitoring program is used to support regional stock assessments for tuna fisheries, but in general decisions on other fisheries are made in a data poor environment.

Proposed policy:

It is proposed to develop a research and monitoring strategy that identifies critical data collection requirements, provides a framework for a rolling series of fisheries assessments in a data poor environment, has an initial focus on the collection of baseline data, with a future focus on the collection of key data in a cycle that reflects the available resources of the Ministry, and focuses on information that will support management decision making.

13. Collaboration with other Ministries

The sector plan refers to collaboration with other Ministries. Whilst these have been discussed in the section on stakeholder engagement, there is one reference of note, to the possibility of developing a comprehensive oceans policy to take advantage of synergies with other ministries (e.g., tourism, transport, energy, environment) with a long-term vision for engagement with stakeholders and development partners.

The development of an oceans policy falls beyond the mandate of the Ministry of Fisheries although this is something which both stakeholders, and the Ministry, would support and in which they would take part.

Proposed policy:

The Ministry of Fisheries will actively participate in the development of any oceans policy undertaken by the Government of Tonga.

14. Legislation reform

Tonga's primary fisheries legislation comprises the following:

- Fisheries Management Act 2002
- Aquaculture Management Act 2003
- Fisheries Management (Conservation) Regulation 2008
- Fisheries (Coastal Communities) Regulation 2009
- Fisheries Management (Processing and Export) Regulation 2008
- Fisheries (Vessel Monitoring System) Regulation 2009
- Fisheries (Local Fishing) Regulation 2009
- Fisheries (Limu Tanga'u) Regulation 2009
- Aquaculture Management Regulation 2008

Legislation has been regularly updated in response to emerging policies.

A review of the Fisheries Management Act 2002 has been underway, supported by FFA.

Proposed legislative reform:

A range of legislative amendments are required to give effect to elements of the sector plan, and elements of this policy paper, if approved. All such amendments will be subject to the usual consultation with potentially affected stakeholders.

A line-by-line review of all legislation is proposed to ensure it is able to fully deliver the sector plan.

15. Regional agencies and development partners

The Ministry of Fisheries has a long association with regional agencies and other development partners. These include ACIAR, the ADB, AusAID, FAO, FFA, NZ DPI, NZ MFAT, SPC, and the World Bank.

To support the implementation of the sector plan it will be critical to develop and maintain strong relationships with these agencies.

Proposed policy:

To ensure effective coordination with development partners, and of development partner programs and projects, a Development Partner Working Group (DPWG) will be established.

The DPWG will be an important mechanism to discuss priorities and collaborations, to avoid overlap and duplication, and to keep development partners up to date with projects and progress.

The DPWG would primarily function through email and teleconference, with any face-to-face meetings perhaps held opportunistically in the margins of other events.

TONGA NATIONAL FISHERIES POLICY

POLICY DISCUSSION PAPER PART 2 - RIGHTS BASED FISHERIES MANAGEMENT

1. Definitions

A right to do something, in general terms, is the freedom, legal entitlement, privilege, or authority to do it.

A fishing right can be a general right to go fishing.

A property right is a right that has the nature of property. Property rights are quantifiable, and can be defined and described - for example by type, quantity, size, activity, area and time. They can be used as security for a mortgage or loan, and they bring with them a bundle of characteristics including a use right, a right to earn income, a right of transfer to others, and a right of enforcement for any breach of the right by another person or entity.

A fishing property right, or rights-based management is a well-established concept used across the world as a fishery management tool.

2. Introduction

Tonga's marine resources have been greatly impacted and threatened by both human harvest activities, and by other factors such as increasing population, climate change, and coastal development. Evidence of depleted and overfished fisheries are being felt by communities globally. Concerns about the health of our marine resources will in turn translate into adverse effects on the livelihood and the economies of many countries, particularly Pacific Island Countries (PICs) that are heavily reliant on fish. In recent decades, attempts have then been made to address this problem using various management schemes such as input controls (e.g. vessel and gear restrictions) and output controls (e.g. catch quotas). However, resources continue to deplete and some fishers suffer financially due to high costs of operation and diminishing financial returns from many fisheries.

One particular group of management tools that have seen success elsewhere in the world in helping to manage fisheries are those captured under the heading Rights Based Management (RBM). RBM management tools are generally considered to be helpful in the battle to improve the sustainability of marine resources. RBM aims to increase the economic returns from the use of fishery resources by creating a framework of ownership, with collaborative and co-operative management decision-making supported by a common interest in sustainability. Although the usual framework of licences and permits are already a form of fishing right, they are weak because they do not have the accepted characteristics of property; of duration, exclusivity and transferability; something you own and can sell; something you can take to the bank to use as collateral for a loan; something fishers have an abiding interest in looking after.

The Pacific Islands Forum Leaders have called for the establishment of RBM in the Pacific Islands as a means of managing limited marine resources. The aim of Leaders is that RBM would lead to better economic outcomes by assigning private property rights over resources, with fishing controls that enhance the sustainability and value of those resources.

That is to say, our fisheries resources should be managed with the dual aims of long term sustainability and long term economic benefits – both for the industries that take the risks, as well as the nation as a whole.

3. What is Rights Based Management?

General overview/definitions/discussion

Rights based management (RBM) in fisheries, sometimes called fishing property rights, is a well-established concept used across the world as a fisheries management tool. The potential benefits of rights-based fishery management are based on the argument that a group of fishermen who have a long-term stake (property right) in the fishery will make better decisions than the same fishermen who have short-term licences - issued for say just one year. Fishermen with security are more likely to support long terms decisions that will lead to long term benefits as well as making better investment decisions which can make fishing safer and more efficient. Because the right can be used as security, banks are more likely to lend money and accept them as security – because if you default, the right can be sold to recover their money.

Fishing property rights are normally allocated to individual or companies proportionally, as some form of share, of a total number of shares. In the simplest form this can be one licence as a share of the total number of licences in a fishery, i.e. where one licence is one share. By allocating participants a secure long term share, RBM gives participants a long-term stake in the fishery and ties their current behaviour to future outcomes.

But rights can also be given out as fishing gear shares (i.e. a proportion of the total metres of net or numbers of hooks or traps); or catch quota shares (i.e. a proportion of a total allowable catch for a species), or time shares (a proportion of the total number of days to be fished in a fishery). Anything that can be divided, can be used as the basis of an allocation of fishing rights.

The use of shares can be used to control fishing effort or catch, or they can be used to help to restructure a fishery if that is required. For example, if the number of boats needed to be reduced either the government could acquire shares from the fishery, or the industry could be required to set a minimum shareholding and be required to buy share from themselves.

A simple example would be if there were ten fishermen and they each had ten shares, and a decision was made to reduce the number of fishermen to nine, the minimum shareholding could be increased to eleven as a mechanism to achieve that goal. One fisherman could then sell his shares to the remaining fishermen one share at a time.

The allocation of rights – who gets what share?

The decision to use rights-based management may seem logical, but the allocation of fishing property rights is usually the most difficult part of the implementation of rights-based management. Whenever rights are allocated there are always those who feel they have lost something, so allocations always involve some compromise by everyone. The options for allocation include:

- an equal allocation to all recognised participants
- allocations based on the level of historic participation (such as days fished, or catch)
- some mix of the above (the usual approach)
- a tender or auction for all part of the allocation

Depending on the circumstances, allocations can be made to the person who caught the fish, to the owners of the boats, or to buyers or processors. The design of a secure fishing rights programmes is highly customisable. There is no “one-size-fits-all” approach. This is important because secure fishing rights programmes have been designed to work in different fisheries all over the world. Secure fishing rights programmes can be used in both industrial and artisanal fisheries, and they can be adapted to fit the social norms and values of local communities, as well as the ecology and biology of diverse target species.

Secure fishing property rights empower fishermen to be stewards of the resource, and to accept the responsibilities that go along with those rights. RBM dictates that fishers are responsible for ensuring their harvest is sustainable and complying with rules aimed at controlling the catch. With RBM fishers are encouraged to do so willingly because their secure rights ensure they will be the ones who are rewarded in the future for sustainable harvest today. So, fishers are incentivised to fish sustainably and to help maintain and in some cases grow fish stocks.

4. Where does RBM come from?

Tragedy of the commons

The ‘tragedy of the commons’ is an economic problem where individuals try to maximize their benefits from a given resource. The name comes from the “commons”, areas of grassland where cattle could be grazed by residents of English villages. In fisheries, the tragedy of the commons occurs in an open access regime where the ‘race to fish’ occurs due to the absence of property rights over the fish. Marine resources are considered a common property where the appropriate incentives and institutions that encourage fishers to behave in a sustainable manner are lacking. Fishers’ harvests are rivalrous; if I do not catch the fish now, someone else will take it; while fishes are fugitive – difficult to own and manage. These reasons, coupled with fisheries being subject to uncertainty, means fisheries are exploited to commercial extinction. Due to the common property nature of fisheries it is difficult to prevent or exclude others from using the resource and therefore becoming an all too common tragedy.

To avoid this, societies have attempted to manage their fisheries by regulating and managing the effort and levels of harvests to ensure that resources are available for generations to come. Fisheries management progresses along a path. The path starts with laissez faire open access fishing with no regulations. Simple regulations are then introduced about catch and gear but this does not resolve the problem. The next evolution is to limit the number of licences that are issued, and this further evolves to control the amount of fish caught, and the areas and times that can be fished, usually under a management plan. The final step is the introduction of RBM, represented by the use of a suite of tools that can be used to improve the management of fisheries by creating a tangible asset that is worth looking after.

5. Types of Rights Based Management

There are many different types of RBM that have been widely used and achieved different levels of success. These are discussed below.

Property rights have the following characteristics:

- **Security** – refers to the ability of the holder of the right to hold onto their property right and to not have it challenged or revoked by other individuals, institutions or the government.
- **Durability** – refers to the time span of the entitlement and can range from virtually nothing or one season or one year, to perpetuity.
- **Transferability** – refers to the ability of the right holder to reassign the entitlement to other entities and is important economically – because this is what allows for efficiency gains – and socially – because it can have implications in terms of the composition of participants in a fishery.
- **Exclusivity** – refers to the extent to which the property rights holder to use and manage their entitlement – such as a share of a fish stock – without outside interference such as other regulatory restrictions (on methods of harvesting, seasons etc).

Types of property rights

RBM can be built around input controls on fishing effort, or output controls on fishing catch.

Examples of input control rights include the following:

- **Territorial Use Rights for Fishing (TURF)**
 - Area-based fisheries management approaches in which groups (usually), are granted secure, exclusive privileges to fish in a specified area. A good example is Tonga's Special Management Area (SMA) program. Aquaculture leases could be considered a type of TURF (farming instead of harvesting). Leasing public land requires robust legal and planning systems to support investment.
- **Individual Transferable Effort (ITE)**
 - A percentage (share) of the total allowable effort is allocated to individuals, often in the form of days-at-sea or a set amount of gear. It is tradable between

eligible participants. An example of ITE is the Parties to the Nauru Agreement (PNA) Vessel Day Scheme (VDS), although that effort is only allocated for one year, only transferable in limited circumstances, and there is no long-term certainty for participants.

Examples of output control rights include the following:

- **Individual Quota (IQ)**
 - Shares to a portion of either the catch or effort are allocated to individuals or individual entities and are non-transferable.
- **Individual Vessel Quota (IVQ)**
 - Shares are allocated to an individual vessel. Shares are attached to the vessel rather than the vessel owner and may or may not be transferable.
- **Individual Transferable Quota (ITQ)**
 - Shares are allocated to individuals or individual entities and are transferable.
- **Community Development Quotas (CDQ) or Community Fishing Quotas (CFQ)**
 - Catch share programme in which shares are allocated to a specific community with certain rules and stipulations that tie the share, or the proceeds of the share, to that community.
- **Cooperative Quotas**
 - A type of catch share in which one or more groups of fishery participants are allocated a secure share of the catch limit or a secure area, and accept certain fishery management responsibilities, including ensuring compliance with controls on fishing mortality.

6. Costs and Benefits

Costs

There are generally two direct cost related issues to consider for RBM. They are the costs in transitioning to RBM; and the costs of running the system continuously.

Transitioning to RBM is a costly exercise. There are costs involved in the preparation for the transition where it involves research into the different relevant frameworks such as legal and institutional framework, that will allow for RBM to take place and make recommendations on how RBM can be implemented. Like any policy change, consultation with the stakeholders is very important.

RBM is a highly sensitive issue, and some fishers will be excluded. Transparency is therefore key for effective implementation of RBM by ensuring that stakeholders are involved in the process through consultations. The necessary in-depth consultation will carry costs. Once consultation is completed, an approval from government through Cabinet will be sought. If RBM is approved, the design for RBM is developed for implementation and once those designs are ready, it is then time to set up RBM, all of which can be costly.

RBM requires financial and human resources to ensure that the system is running smoothly. The process has several stages which include planning, analysing, monitoring and evaluating.

Implementing RBM will require administration which will carry administrative costs to ensure that human, financial and technical resources are made available for the day-to-day running of RBM.

RBM monitoring is costly. Monitoring requires data collection to ensure that controls system (catch or effort) is kept at or below the agreed level. Data will be used to monitor the performance of the fishers to make sure they comply with the terms and conditions of their shares in the fishery.

Another costly activity in RBM can be the science costs which are used to support decision making on limits. Information gathered from research and analysis will contribute to the understanding of the biological of the targeted populations, their relationship with the environment, and the impacts of fishing. It should also provide an understanding on the human dimension that would produce sustainable use practices. Obtaining this information is not easy and requires considerable skill and effort.

Administration of the property rights registry which records owners of rights, vessels and their details will generate costs.

Certain tools used for monitoring are costly to acquire, operate and monitor. A good example is the PNA Fisheries Information Management System (FIMS) that tracks all vessels and fishing days under the VDS. FIMS development and maintenance costs have run well into the millions.

RBM systems can place a high demand on enforcement with vessel and catch monitoring, offloading inspections, and gear inspections all necessary if the RBM system is to have integrity.

Benefits

RBM is regarded as an appropriate management tool because its benefits are beyond the conservation of the stock. It is seen as a tool that can also improve the economic performance of the fishery, and the socio-economic status of the industry.

Sustainability and conservation benefits

Conventional fisheries management rarely provides fishermen with the incentive to take a longer-term perspective. However, RBM can. When the duration of the right to fish or the share is long-term, fishermen tend to act more responsibly. They know they will be the ones who will be affected when resources are depleted and the rights are losing their value. They are incentivised to conserve and manage resources for long-term sustainability – to maximise the value of their transferable fishing right.

Economic benefits

Another potential benefit of RBM is the broader economic benefit. Owning a right to fish, a share in the fishery, creates a value chain both within the fishery (fish increase in value because

they are harvested at consistent levels, and they are handled better; and costs of production reduce as fisher's fish economically), and outside the fishery as shares increase in value as the fishery becomes more profitable. Fish can be harvested to match the best market opportunities. Fishing fleets can be restructured to ensure there is better use of assets. Often it is future investors who make the better decisions because they are investing for the future. RBM is exclusive, creating value and economic activity, and providing options for finance and borrowing.

Socio-economic benefits

When fishing fleets are operating efficiently and sustainably, fishing operators make more profit. Profitable fishing operators generate stable employment opportunities as they are able to have longer and more stable fishing seasons. Profitable fisheries create new investment opportunities which can increase the overall benefits to the country.

As businesses and catches improves, the opportunity for processing and value-adding increase. This provides more employment opportunities. Well managed fisheries present opportunities for sustainability certification such as by the Marine Stewardship Council (MSC) which can create greater market access with greater value.

It is suggested that fishers under RBM behave more responsibly because they have a long-term stake in the fishery. RBM can make the fishery sector more transparent and accountable.

7. Case studies

NZ ITQ

The quota management system (QMS) in New Zealand was established in 1986 to address problems of unmanaged risk of overcapitalized commercial fisheries that have become unprofitable and uncompetitive due to stocks being overfished. There was little onshore processing and recreational fishing catches declined. The introduction of the QMS prompted many companies to invest in fishing vessels and fish the available catch, with onshore factories to process the catch. The fishing industry was propelled from being a predominantly domestic supplier to one of the nation's leading export industries where more than 90 percent of all fish landed are exported.

The QMS has evolved to use shares to better manage the total allowable catch (TAC) rather than using tonnes which were initially used. Shares make it easier to implement TAC variations and the sustainability risks and benefits are transferred to the quota holders. The setting of TAC is a responsibility of the Minister. The total harvest from commercial, recreational and customary fishing is considered under the scheme along with other sources of fishing related mortality.

The NZ QMS has exclusive use rights which has generated asset security that provides incentives for long-term investment, thus generating long-term benefits. QMS encourages the participants to be more responsible and holds them accountable for their actions. The QMS

provide flexibility for specific management needs, for instance, if there is a need to reduce capacity, shares can be bought back by the government. The delivery of some of the QMS services can be outsourced thus streamlining the process.

To address the issue of by-catch, annual catch entitlements (ACE) were introduced where harvest rights give the holder the right to take a certain weight of a fish stock during the fishing year. The complexity of the approach is a challenge.

Like any other management system, the QMS has its challenges. Administering the QMS involves people from a range of disciplines. The need for continuous data collection and analysis, and the science necessary to support management decision making is costly, and administration is complex. To ensure that overfishing does not occur, the TAC must be set appropriately and must be adhered to. Administering compliance to ensure overfishing does not occur, is a tremendous responsibility. Different sectors are involved in the QMS and the task to prioritize the allocation of quota amongst them is a challenge.

The QMS is essentially a single species management system and ITQ shares are independent of other species. However, fishing gear catches non-target species which can result in large amounts of discards. Several methods have been employed to address the by-catch issue. One management approach that has gained popularity that is more holistic is Ecosystem Based Management (EBM) approach. However, EBM is in itself a complicated and costly approach.

Despite the challenges associated with QMS, it is believed that the positives outweigh the negatives. The NZ QMS is one of the most mature fishery management systems in the world and will continue to improve.

[New South Wales, Australia, Share Management Fisheries](#)

Property rights-based management was embraced by New South Wales in Australia in 1993. A property rights working group was established to develop a system suitable for NSW. The framework included a Share Management Fishery (SMF) approach. Eight fisheries were declared based on the traditional methods and species targeted. Two of these were identified as single species quota management fisheries (abalone and lobster), and the remainder as multi species method-based fisheries (such as trawling for prawns and fish; trap and line fishing for pelagic and demersal species; beach-based seine netting for migratory fin fish species; and estuary fisheries for prawns and fin fish).

Shares were allocated (mainly) on the basis of a process of validating commercial fisher catches over an agreed time period.

For output (quota) control fisheries a TAC is set each year by an independent panel of experts, based on the best available information, having regard to the precautionary approach - to remove the political element from this process. The TAC is allocated amongst shareholder based on their shareholding. Minimum and maximum shareholdings are used to avoid concentration of ownership (maximum) and to drive economic efficiencies (minimum).

For input (effort) control fisheries effort is used as a proxy for catch controls. Progressively increasing the minimum shareholding requirement has been used to ensure the numbers of fishers has progressively reduced. In some cases, the government has entered the market to compulsorily purchase shares for reallocation to conservation (new marine parks) and for fishing by the recreational sector (recreational fishing havens).

The SMF has all the characteristics necessary to underpin effective fishery management but with the exception of the abalone and rock lobster fisheries it is generally considered to be less than optimal in terms of achieving the economic objectives even though the fishery resources are not considered to be overfished. There are no doubt many reasons for this but leading amongst them has been an unwillingness by successive governments to make the hard decisions that would lead to the necessary structural reforms. The SMF system is implemented, it apparently requires a willing and able government to give it full effect.

[Transferable effort shares in the PNA VDS – transferable rights between countries.](#)

In 2006, eight Pacific Island nations formed an agreement to use an effort-sharing programme to manage common tuna resources within their 200-mile exclusive economic zones (EEZs). The countries collectively known as Parties to the Nauru Agreement (PNA), are the Federated States of Micronesia, Kiribati, the Marshall Islands, Nauru, Palau, Papua New Guinea, the Solomon Islands and Tuvalu. The Parties developed a RBM program with a limited transferable effort share program called the Vessel Day Scheme (VDS). The VDS restricts the total number of days that tuna purse seine vessels can fish within the PNA countries' waters. Each PNA country is allocated a share based on their EEZ productivity as well as effort and catch history. Once those days are allocated, the fishing days are transferable between PNA member countries, for the allocation period (one year).

To access PNA waters, foreign fleets must purchase vessel days equal to the amount of fishing they wish to conduct and must also carry a vessel monitoring system (VMS) automatic location communicator (ALC) to track their activity. Parties have used the allocation of access rights to their EEZ to significantly increase the price of fishing days. Payments for a single day typically exceed a benchmark agreed by the Parties of US\$8,000 - to as high as US\$12,000 per day - which has significantly increased the fishery related revenues generated by PNA countries. PNA countries have been able to negotiate high prices for their resources because they own the fishing rights in their EEZ.

The VDS program has been incredibly successful in generating tremendous revenue for the PNA members. However, it has its challenges and the program continues to be assessed and refined to better achieve fishery goals.

[8. How could it work in Tonga?](#)

The management of the Tonga fisheries is divided into two main branches; offshore and inshore resources. The Fisheries Management Act 2002, *Section 7* provides that a plan must be prepared for the conservation, management, sustainable utilisation and development of

fisheries in the fisheries waters. Each plan outlines how the fishery should be managed, developed and monitored.

Offshore resources

- Tuna Fishery
- Deepwater-snapper fishery
- Artisanal fishery
- Tonga sport fishing management and development plan (still in draft)

Inshore fisheries

- Seaweed fishery
- Aquarium fishery
- Aquaculture fishery
- Sea cucumber fishery

The nature of these fisheries is different from one fishery to another. When moving towards RBM, the scheme design would need to pay attention to the different nature of each fishery. The scheme has to strike a balance between managing a single or small group of species, and taking an ecosystem-based management approach.

RBM might work in the deepwater snapper fishery in a number of ways. The use of long term and transferable licences would create a greater sense of ownership amongst the participants and if issued as shares, would create a potential mechanism for adjusting the fishery. It would also be possible to allocate catch quotas amongst the participants based on catch history but the costs of the scheme could be prohibitive.

RBM would be essential in certain aquaculture industries where large capital investment is required. The issue of longer term leases would be required to allow investors to amortise their investment over up to 20 years.

Proposed policies - for discussion

9. Proposals

Proposed policy 1 - Certainty and security for the industry

To facilitate long term certainty and security for the industry, and to encourage investment, the following policies could be considered:

- Legislation will be proposed that creates a framework for rights-based fishery management.

- Any decision to apply the rights-based framework will only be made in consultation with the affected industry, after a statutory period of public notice and consultation, and with the approval of the Cabinet of Government.
- The legislation would provide for:
 - *any commercial fishery with a fishery management plan to be declared as a rights-based management fishery*
 - *fishing rights to be created in any such declared fishery, that have the characteristics of property*
 - *fishing rights to be issued as one or more shares of a total number of shares*
 - *for shares to have conditions attached to them when they are first issued, and after any management plan review*
 - *the creation of a statutory share register that would be public*
 - *shares to be issued as licence shares, catch quota shares, fishing gear shares, vessel shares, area shares, or fishing time shares, or any other kind of share defined by the regulations*
 - *only those fishers holding shares will be able to operate in any declared rights-based management fishery*
 - *shares to be allocated based on history of participation, history of catch, by tender, any mix of these, or by any other method prescribed by the regulations*
 - *allocations to be made to the person who caught the fish, to the owners of the boats, or buyers or processors*
 - *shares to be transferable*
 - *shares to be issued for 10 years with renewal every five years subject to a satisfactory review of the fishery management plan performance*
 - *shares are not to be reviewed if the Cabinet of Government determines that the fishery needs to be restructured or cancelled in which case the shares would expire at the end of the ten-year term*
 - *if the Cabinet of Government determines that shares are to be cancelled prior to their expiry, compensation is to be paid at the value of those rights immediately before the rights are cancelled*
 - *if no review is completed by the end of the first five-year term of any ten-year share period the shares are to be automatically renewed for a new ten-year term*
 - *fees and royalties to be collected by government in accordance with the fishery management plan.*
- All fishing rights will be subject to any national law, and any applicable regional or international fishery law, arrangement or treaty, including any regional and sub-regional fishery management access arrangement agreed to by Tonga from time to time.

- It is highly desirable that to the fullest extent possible, the provisions of any rights-based management scheme be implemented by legislation.

Proposed policy 2 – Economic case

Develop an economic case for implementation of a RBM system, including medium term industry funded structural adjustment, and recovery of those costs deemed attributable to industry.

Proposed policy 3 – Stakeholder involvement

The fisheries sector involves a large range of stakeholders and it is important to have good stakeholder representation throughout the RBM process. There is therefore a need to strike a balance on the stakeholders involved. The key is to have a quality and broad level representation.

Stakeholders can be expected to adopt RBM if they stand to gain a share in a greater stream of benefits. Those uncertain or likely to be disadvantaged by the change (usually part time or recent-entrant fishermen) may need an incentive to become involved.

Proposed policy 4 - Establishing and implementing RBM

The process for establishing and implementing RBM should not be rushed and consultations with stakeholders should be carried out to ensure a strong consensus is reached in any decision to move to RBM in a fishery.

Depending on the nature of the right, structural adjustment may be required to ensure sustainability of the fishery. A transparent mechanism for such change should be developed with affected stakeholder.

TONGA NATIONAL FISHERIES POLICY

POLICY DISCUSSION PAPER PART 3

FOREIGN INVESTMENT; TRANSPARENCY, PRICING, AND CHARGING

1. Introduction

Foreign investment

With a few exceptions, fisheries investment by local companies in Tonga (as a developing country) is usually small scale. If the industry (and the country) is going to reach its full potential it is therefore important to seek and permit foreign investment.

Suggestions for foreign investment are often received with a mixed reaction. Some people understand that without investment we will struggle to reach our full potential, whilst others fear we may lose control over some important parts of our economy. The reality is that in modern times such investment has always occurred, and in the main has been beneficial. Appropriate foreign investment can continue to bring benefits as long as it is undertaken in a measured and controlled way, with the potential benefits and risks clearly identified, with clear and transparent decision-making processes, and with implementation subject to proper governance controls.

In 2016, Cabinet approved the implementation of the Tonga Fisheries Sector Plan (TFSP), developed with the support of the World Bank. Cabinet's approval was subject to a review of certain policy issues, including those canvassed in this discussion paper.

With respect to foreign investment, the TFSP documents mention this topic in the following context:

- Analysis and national dialogue is proposed on a range of issues including foreign investment in fisheries and aquaculture.
- It is proposed to develop a fisheries investment framework and investment policy, including a review of current investment incentives and guidelines on foreign investment.
- It is proposed to prepare an aquaculture investment policy, with specific attention to foreign investment

Prior to undertaking these actions, a discussion about foreign investment is required.

Transparency

Transparency is an essential element of governance. Governance is about the act of governing, the exercise of power, and the frameworks we have in place to ensure good governance.

Transparency is about having decisions made and policies implemented in the daylight and not behind closed doors. Transparency means making information available to the public, providing clear rules and procedures for decision making, and having the work of government subject to scrutiny through public processes with predictable, balanced and fair decision-making. The public expect high levels of certainty in the way decisions are made and they do not like surprises. In fisheries terms this means transparent and open management planning, licensing, and decision-making processes about who can fish, when and where they can fish, what fishing methods can be used, and how aquaculture proposals are assessed and permits issued.

Pricing and charging

The government provides a range of fishery management services. These services come at a cost to the taxpayer. There is an argument that says those who benefit from services (the beneficiaries - such as licence holders) should pay for them, in the same way that they pay for other goods and services such as fuel. There is another argument that says the industry is providing a community service by providing fresh fish to Tongans, and that the costs of fishery management should be carried by all citizens. In all countries the actual amount paid by beneficiaries recognises a part of both.

Both arguments have merit, and a discussion is needed to decide on a policy that is fair, and that provides certainty to industries.

The third part of this discussion is about rent and royalties. Whilst it is accepted that businesses are entitled to a reasonable level of profit in return for their hard work and services, when publicly owned natural resources are involved, like fish, timber, minerals, or oil, it is argued that the community should receive some payment, to ensure that the community receives a benefit as well as the individual or company.

In economic terms rent and royalty are different but similar things:

- 'Rent' is the surplus value after all costs and normal returns (profits) have been accounted for. It is sometimes called super profits.
- Whereas a 'royalty' is a fee paid for a license or right to use a natural resource. A royalty is usually a percentage of either revenue or profit, which is paid to government.

2. Foreign investment in fisheries

Foreign investment in Tonga's fisheries is guided by the *Foreign Investment Act 2002* and the *Foreign Investment Regulation 2006*. A foreign investment business is described by the *Foreign Investment Act 2002* as "a foreign investor carrying on any activity for the purpose of generating revenue in trade, commerce or industry, and includes any trade, profession or calling".

Foreign investment is not allowed in a number of fisheries including:

- a. Reef fishing
- b. Inshore fishing within 12 nautical miles and in water less than 1000 metres
- c. Bottom fishing in water depth less than 500 metres

Foreign investment in commercial fishing such as tuna fishing, deep water bottom fishing (in water deeper than 500 metres), and other deep-water fishing (not less than 1000 metres) are subject to their respective management plans. Foreign investment in aquaculture is also subject to the requirements of the *Pesticide Act 2002*, and the Tonga Marine Aquaculture Fishery Management and Development Plan.

Current foreign investments in fisheries are in tuna fishing and game fishing, mainly for access to Tongan waters. There is very little foreign investment for onshore fisheries activities such as processing and value-added activities. This is in part because of the high cost of transport due to Tonga's isolation from international markets.

Foreign investment may present opportunities for onshore processing and value-adding of fisheries products to be vertically integrated with fishing and supply chain marketing to create new markets and

reduce the overall supply chain costs. There is also some discussion about hub and spoke processing and marketing amongst Pacific countries that could only realistically occur with foreign investment. In this model, fish would be processed in hub countries that had better access to international markets, reducing overall costs, and increasing economies of scale.

The sea cucumber fishery is a valuable fishery where foreign interests are often high. Although the fishery in Tonga is still under moratorium, there are some aspects that should be considered once the moratorium is lifted. Whilst the government's policy is to restrict harvesting to local communities, there are opportunities for foreign investment support for processing and marketing that could be provided under tight controls that ensure the market power remains with the producers.

Proposed policy

Current policies that preserve certain fisheries access for Tongan citizens should be retained.

Foreign investment in Tonga's fisheries should otherwise be encouraged, in particular where a fisheries resource would not otherwise be used effectively. Investment should not be limited to the issue of fishing licenses and wherever practical should require further investment such as for infrastructure, onshore processing, and value-adding activities. It should be a requirement that some part of the catch be retained in-country for local consumption at affordable prices.

The training and use of local labour, and the development of industry skills, should be a key goal for any investment. Foreign investment where companies have well established offshore markets should be preferred over speculative start-ups.

The establishment of an operating company in Tonga, with a local Director, and that holds key assets, should be a requirement - with clear rules established to prevent transfer pricing.

To attract and encourage foreign investments in Tonga fisheries, a foreign investment policy should be developed to provide a framework to foster foreign investment in both wild fisheries and aquaculture. The foreign investment policy framework should ensure investment proposals are handled sensitively, especially when proposing to allow a foreign investor to access community owned resources. The framework should be streamlined to encourage investors, whilst also building in safeguards for communities and stakeholder. Consideration should be given to:

- Requiring partnerships with Tongan nationals or companies.
- The ownership of the company - with a requirement for a local Director for accountability purposes.
- Proposed foreign investment activity over a certain threshold or with a potential impact on existing businesses should require cost benefit analysis, and involve a public consultation process, with targeted consultation with potentially directly impacted communities and stakeholders.
- If the foreign investment is in aquaculture and there is a significant potential for impact on the communities, then a process should take place to determine whether any compensation is appropriate.
- Providing a checklist of all the things a foreign investor must do when investing in aquaculture, including visas, business licenses, export licenses, and aquaculture development licenses.
- Providing an outline of the full costing of these activities.

- Clearly describing and streamlining the processes for acquiring a license and investing in aquaculture in Tonga, to create an investment-friendly environment.

3. Foreign Investment in aquaculture

There are currently few identified opportunities for foreign investment in aquaculture. The varieties of products that can be farmed is limited and the level of production is too small to be competitive on international markets. Tonga does not have the economies of scale, or the proximity to markets to offer significant opportunities at this time. However, for any large-scale aquaculture activity to be successful, it is likely that foreign investment would be necessary. The alignment of potential, with opportunity, and investment is therefore a significant challenge.

There is no restriction to foreign investment stipulated in the aquaculture management plan, however, any foreign investment in aquaculture is subject to the Pesticides Act. Biosecurity issues are of great importance to minimise the risk of disease or invasive species, and to ensure that waste is handled properly.

Species with potential include sea cucumbers, and pearl oysters. The wild-catch sea cucumber fishery will recover, and may then be subject to some kind of community/rights-based management approach under a catch-control/share system, the economic benefits from this fishery will improve. Overseas demand for sea cucumbers appear unlimited so aquaculture can contribute to this overall improvement.

Principles in smallholder outsourcing

The term 'smallholder' is often used interchangeably with 'small-scale', which is a good description of aquaculture activities in Tonga at this time. For aquaculture to be successful at a commercial level, foreign investment is critical to provide capital, technical skills, and market access. Small scale aquaculture farmers face various challenges including lack of assets, information and access to services, as well as high transaction costs, a lack of reliable markets, and lack of human capital. These constraints can at least in part be overcome through smallholder outsourcing. Smallholder outsourcing involves external investment, and the development of an agent network to enter into contracts with large numbers of smallholder producers.

A good example is seaweed production. The Ministry could help to secure a foreign investor with market access; to contract small-scale seaweed farmers to carry out farming; to act as an agent to provide materials such as seedlings, and lines; and then collect and market the dried product. The issue of infrastructure support such as for road access and wharves, as well as land and water leases also have to be addressed to ensure the supply chain is efficient and effective. The Ministry could assist in ensuring the amount to be produced and a fair price are negotiated.

Timescale & Transferability of aquaculture rights

Smallholder outsourcing may involve different authorities resulting in a long approval process. Authorities that may be involved include finance, labor and commerce, communities, land and environment. The timescale should be minimized by streamlining the approval process, preferably through a one-stop-shop approach.

The timescale for development of aquaculture species is important. The length of time spent at each development stage of production depends on different factors including how much information is

available, the existence of markets, and available capital. Therefore, planning the timescale is important and should factor in risks, lessons learned, and the potential for delays.

A provision for transferability of aquaculture rights is stipulated in the Aquaculture Management Act, however that transferability is for an event of death where the license can be transferred to the heir. However, to encourage investment, aquaculture licenses and aquaculture rights need to be fully transferable. This is in part overcome if the rights can be held by a company, so when company ownership changes the rights are effectively transferred.

Location of aquaculture

Aquaculture development is most likely to occur within the coastal zone. At this stage there are no proposals for inland or freshwater aquaculture.

It is important that the respective roles and responsibilities of authorities, communities, investors, farmers, and other stakeholders are clearly demarcated to minimize the risk of overlap and conflict.

Stakeholder engagement

Stakeholder engagement and consultation about proposed aquaculture activities is very important. The Ministry should make sure they have the right information available for consultation that addresses the likely issues to be raised especially when a foreign investor is involved in potentially larger scale industry development.

Proposed policy

Sea cucumbers are overfished, and the fishery is currently closed. The aquaculture of sea cucumber is therefore encouraged in the sea cucumber management plan. Because of the high capital investment required for sea cucumber aquaculture this will probably require overseas investment. Sea cucumber aquaculture should therefore be a priority when developing a foreign investment framework.

The smallholder outsourcing approach would work well in Tonga providing there is well-structured support for small-scale aquaculture. When developing smallholder outsourcing, the following approaches should be considered:

- Identify who is to act as an agent.
- If it is proposed the Ministry act as agent then they need to have the capacity and resources to carry out that task.
- Approval processes should be streamlined. A 'one-stop-shop' approach is preferable.
- Infrastructure support may be provided where feasible and affordable, but only where it is included in a formal partnership agreement that clarifies roles and responsibilities, and identifies sources of necessary funding.
- A framework for integration with communities and smallholder production should be developed.

When considering the timescale for aquaculture, the development stages of screening, research, pilot trial, and commercial trial should be taken into consideration with sufficient time and resources allocated to each stage to manage risks, and provide review and bail-out triggers, to avoid potentially costly investment failures.

Any form of aquaculture right such as licenses, permits and leases, should be transferable once the business is operational (subject to all original conditions and agreements), but should be able to be

terminated if the investment does not proceed to the agreed plan and timetable, and if conditions and agreements are not followed.

4. Improving transparency

Transparency is a key element of accountability. It is a major deterrent to corruption and encourages and supports efficient and effective administration. A key way to improve transparency is by making information available to the public and by providing clear rules and procedures for processes involving customers and stakeholders.

Proposed policy on transparency of public information

The following information should be made public to improve transparency and reduce political interference.

List of license and concession holders

Issuing licenses is the traditional fisheries management tool used to control effort. As resources become depleted, the control on effort becomes tighter by limiting the number of licenses issued. It is therefore important that a list of the license holders be made public.

Making the list public can be used as a monitoring tool where the public knows who hold the licenses and who may be fishing without a license. When there is a license cap, the public know how many licenses are not utilized if the list is published. The process for acquiring a license should also be public. Access to such information can also assist potential investors in developing their business plan if such information is readily available.

Fees, charges, and debt

Information on fees, charges, and fees paid or outstanding should be public. This should include the justification for fees and charges, and the basis of the levels at which the fees are set.

Making such information public provides an incentive to participants to pay their fees on time, and ensures rules about late payment of fees, forfeiture of licences, and not fishing when unlicensed, are enforced. Such information should be available to others as an indication of participants' trustworthiness for business credit.

List of offenders against fisheries legislation

The names of individuals or companies that have been successfully prosecuted should be made public. This information is already available through court records but should also be publicised as a deterrent against further infringements. Making the list of violators public can improve transparency and also deter participants from violating any participatory right assigned to them. Fisheries offences by a small minority can contribute to unsustainable fisheries and undermines the hard work of the majority of fishers who are law abiding.

5. Public-Private Partnerships

The use of public-private partnerships (PPP) can support the management and development of fisheries. PPPs have been identified as a key challenge and opportunity for sustainable fisheries management and development in Tonga. PPPs represent a three way partnership between government and the private sector, with the engagement of industries and civil society.

PPPs rely on:

1. government to facilitate, approve, and accept some of the risks of a development, and repay that part of the cost that reflects the benefits of the broader community
2. the private sector to provide funding and accept normal levels of commercial risk
3. and direct beneficiary stakeholders (users) to repay their share.

For example, PPPs have the potential to support infrastructure development, in particular where government has:

- the land and the approval role
- is prepared to provide related infrastructure and grant support, and
- is prepared to accept the risk

and where the private sector has:

- available funds for such investments, and
- a suitable risk appetite

and where the users have:

- the capacity to pay their share of the cost through a use fee or charges.

Such schemes are especially useful where there is an element of common good and shared benefit so that some of the burden of repayment falls on private individuals and companies, and some to government on behalf of the broader community.

Proposed policy

The Ministry would be supportive of PPPs for fisheries related infrastructure development subject to broader government policies in this area, and where users demonstrate both a willingness and ability to repay their share of the costs.

6. Pricing and Charging

The government provides a range of fishery management services to its customers and stakeholders. The majority of the costs of these services is shouldered by the tax payer. There have been discussions around having those that benefit from the services paying for some of these costs, through a cost recovery policy.

Rationale behind fees and charges

How fees and charges are currently set

Current fees and charges were set many years ago. There is no clear explanation or understanding about how the decisions were made about what fees would be charged or at what level they were to be set. Having said that, current fees are quite small and represent only a small part of the actual cost of providing the Ministry's services.

It is clear that this is not acceptable and the justification for setting the level of all fees and charges should be guided by a clear and publicly available policy, and any policy decision about charging less than the full cost of providing a service should be explained in the methodology used to set the fees.

However, it is virtually unheard of that a fisheries agency would fully recover all its costs. That is because there are always significant elements of its work where the community in general benefit – not just individuals or companies. But it is also clear that there are some individuals and companies that receive a direct benefit from the Ministry's work and that some consideration should be given to the amount they pay for these services.

The method used usually involves identifying those costs that are attributable (i.e. to be paid by those who benefit) to certain individuals or companies. The decision about what costs are attributable and whether to recover all or part of those costs is, however, ultimately a policy decision for government. A key factor in such a decision is whether the services are delivered efficiently. It is often argued that as government is the only provider of fisheries management services it is inefficient because there is no competition. It is argued that customers should only pay the efficient costs which in some cases is only around half of the actual cost.

It can also be extremely difficult to identify the true costs of providing a service, and to identify a narrow group of those who benefit and who could be charged. For example, the people who directly benefit from the tuna management plan is quite small, but the group of people who benefit from a well-managed tuna fishery is much larger and can be argued to include coastal fishermen catching skipjack and yellowfin, as well as game fishermen, restaurants and hotels, and the tourism industry, not to mention our neighbouring countries that share these highly migratory fish stocks. The administration of a cost recovery scheme always increases the overall cost.

To be more transparent, a clear explanation of the methodology used to set fees and charges, including any policy about what costs are attributable, and how efficiency is factored in, should be made public.

Why is cost recovery important?

Fishery agencies provide a range of services to the fishing industry that enable businesses to make profit. Businesses (e.g. vessel owners, processors, exporters) get a direct benefit from the services; that is to say they are the direct beneficiaries. Without those service they would not be able to run their businesses.

The costs of many services are not being recovered. This represents a subsidy by the tax payer to the industry. As levels of demand for services increase this is not sustainable. These services should be funded from fees and charges.

A fair approach to cost recovery means a fair distribution of the burden of these costs amongst industry participants, based on clear principles.

The work of fishery agencies

Fishery agencies undertake a range of activities that are related to the management and development of fisheries.

Some of these could be cost recovered where there is a clearly identifiable beneficiary, whilst others may be regarded as a community service obligation and not recovered and where the beneficiary is the broader community.

Some of the activities and services undertaken by agencies include:

- Directorate services including the executive, stakeholder advisory bodies, boards, secretariats, legal services, internal audit, and international fisheries liaison.
- Technical training relevant to fishing industries.
- Fisheries management including the development of plans, policies, strategies, and actions to ensure sustainable fisheries resources, including future policy development, fishery management plans, and fishery science.
- Aquaculture and inland fisheries management.
- Compliance and enforcement activity, administering observer programs, collecting fishery monitoring data, fisheries information management, and fish health and safety.
- Licensing and data management.
- Industry support and development.
- Economic research, policy, and strategic planning including the collection and analysis of economic data, the development of fisheries policy.

Cost recovery principles

When charging fees for public sector goods and services, three principles that guide the setting of fees should be applied:

1. Authority
2. Efficiency
3. Accountability

Authority

The public entity must have legal authority to charge a fee for the goods and services that it is legally able to provide. The authority will be in an Act and may relate either directly or generally to the activity being carried out. The legislation usually includes an empowering provision that authorizes the entity to set the amount of a fee through regulation, rather than specify the amount in the primary legislation. Some provisions contain specific rules about how fees are to be set.

Efficiency

Public entities have a responsibility to understand and monitor their costs in order to ensure that they are operating efficiently. A crucial factor in measuring efficiency is having an accurate understanding of the costs – both direct and indirect – of the services being provided, and a good understanding of the beneficiaries, and the level of attributable costs. The discipline of monitoring costs can also help to ensure that charges are being set lawfully and appropriately.

Because costs are not static, it is important that fees are reviewed regularly to ensure that they remain appropriate and that the assumptions on which they are based remain valid and relevant. The appropriate timing for the reviews will need to be determined by the Ministry, considering the particular circumstances and changes in costs and demand. The review should take place at least every three years.

Accountability

The Ministry is accountable to government, to stakeholders, and the broader public. To be accountable, the Ministry need to ensure that their processes for identifying costs and setting fees are transparent. Transparency and accountability are achieved in several ways, for example through:

- Consulting the public about new fee regimes before they are introduced. To ensure effective consultation, the public should be provided with enough information to understand the policies and the cost data from which the fees have been determined.
- Reviewing the use of the powers to set fees under regulation.
- Publishing fees and charges, and their justification.

Proposed policy

A cost recovery policy should be prepared. The purpose is to ensure that the fees and charges for services provided to the industry are recovered fairly and transparently from those who benefit from these services. A key driver for such policy is the need to fund fishery management programs, including the science and compliance required by government as the decision makers, and the broader community.

Aim of cost recovery

The aims of a cost recovery policy should include being transparent and assisting the Ministry to implement cost recovery to:

1. Recover the costs of the products and services provided,
 - in a fair way,
 - where it is efficient and effective to do so,
 - where the beneficiaries can be readily identified,
 - and in proportion to the benefits received.
2. Manage the costs of services provided, consistent with all expectations.
3. Make decisions on what services are to be provided, and the standard of those services, in a way that is efficient, and which meets the expectations of government, industry, and the broader community of stakeholders.
4. Plan capital investment (such as patrol vessels)
5. Manage potential evasion.

Proposed Principles

The following principles are proposed to apply:

1. All cost recovery fees and charges will be approved by the Chief Executive, after consultation with affected stakeholders.
2. Costs shall only be recovered when it is practical, efficient, and effective to do so.
3. Services shall be costed on the basis that they are provided efficiently.
4. This policy may apply to any service provided, but must be applied to a fishery designated for cost recovery under a fishery management plan.
5. The beneficiary of the service shall only pay the efficient costs of providing the service.

6. Costs shall only be recovered for those services that are deemed to be attributable, either to an individual, or a group, and only where an individual or group of beneficiaries can be identified.
7. Where the beneficiaries of a service are more than one person or company the charge shall generally be charged as a shared cost with each party paying an equal or variable amount depending on the level of benefit each party receives and whether it is practical in all the circumstances to charge a variable amount.
8. The test for beneficiary shall be whether or not, if the fishery did not exist, the activity or service would still be undertaken or provided by the Ministry.
9. Non-attributable costs are those that cannot be effectively recovered, or that are provided as a community service obligation, or where the beneficiaries are broad and not easily identified.
10. Partial cost recovery may be applied in some circumstances such as where there are government endorsed community service obligations, or where there are explicit government policy objectives from a program or activity, or where there are inherent inefficiencies in the service.
11. Where new cost recovery arrangements are being introduced, and where industry claim **and** can demonstrate hardship or other mitigating circumstances, there may be an argument for the agency, upon request, to determine that transitional arrangements apply and that cost recovery be phased in over an agreed period.
12. Industry should have a right to propose (but not to demand) that a service be delivered through a competitive tender process where the provision of the service does not conflict with statutory responsibilities and obligations, and where there are clear potential cost benefits from doing so, and where there is no identifiable conflict of interest.
13. Where a service is not to be subject to competitive tender, the costs charged for providing that service should take into account, wherever practical, the inefficiencies inherent in the provision of such a service by government, without competition.
14. It is envisaged that industry participants will pay for some services in part through a variable cost and in part through a fixed cost:
 - a. Where practical, costs for services shall be charged per unit of activity and on a fee for service basis, for the level of service provided to each party.
 - b. Where it is not practical to charge on a per unit of activity basis, a flat annual fee shall be charged either evenly across all beneficiaries, or in proportion to some known variable such as for example access days, vessel capacity, or catch.
 - c. Charges once due and levied may not be reduced, and are not refundable, other than in the event of a calculation error, or a change to this Policy.
15. Costs for any service may include both fixed and variable cost components.
16. Costs for any service shall include an overhead contribution charged as a percentage and based on the total attributable overheads of the agency.
17. Cost recovery should not be applied unless it is cost effective to do (i.e. the costs of administration do not exceed the amounts likely to be recovered), or in circumstances where it can be demonstrated that competition or innovation would be stifled.
18. Fees should be reviewed at least once every three years, and more frequently if there are exceptional circumstances.

19. Affected stakeholders should be consulted on any proposed fees or charges before they are established, and when they are changed.
20. For transparency the agency should, annually and publicly report on services, cost recovery revenue, and related expenditure.
21. Where the above principals are not able to be followed, the Chief Executive shall upon request issue a statement of explanation.
22. Where there is any doubt about the interpretation of any principle the Chief Executive's decision shall be final.
23. This policy shall be reviewed two years after introduction, and after that at maximum 5 year intervals.

Royalties

Businesses are entitled to a reasonable level of profit in return for their hard work and services. However, all fish are publicly owned resource and it is arguable that when higher than usual profits are involved the community should receive some payment, in the form of a royalty to ensure that the community receives a benefit as well as the individual or company.

Royalties should only be charged where, in the medium to long term, extraordinary profits are being realised by a majority of operators under a management plan or in an aquaculture industry. In such circumstances a charging scheme should be introduced that shares rent with the community.

Acronyms and abbreviations

ACE	Annual Catch Entitlement
ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
ALC	Automatic Location Communicator
AusAID	Australian Agency for International Development - now Australia's Aid Program - Department of Foreign Affairs and Trade
CCMC	Coastal Community Management Committees
CDQ	Community Development Quotas
CEO	Chief Executive Officer
CFQ	Community Fishing Quotas
DFAT	Australian Department of Foreign Affairs and Trade
DPWG	Development Partner Working Group
EBM	Ecosystem Based Management
EDF	Environmental Defence Fund
EEZ	Exclusive Economic Zone
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organisation of the United Nations
FCA	Fisheries Cooperative Association
FFA	Pacific Islands Forum Fisheries Agency
FGC	Fisheries Growth Committee
FIMS	Fisheries Information Management System
FMAC	Fisheries Management Advisory Committee
FMC	Fishery Management Committee
IQ	Individual Quota
ITE	Individual Transfer Effort
ITQ	Individual Transferable Quota
IVQ	Individual Vessel Quota
MFAT	New Zealand Ministry for Foreign Affairs and Trade
MPI	New Zealand Ministry for Primary Industries
MSC	Marine Stewardship Certificate
NFC	National Fisheries Council
NGOs	Non-Government Organisations
NSW	New South Wales, Australia
PICs	Pacific Island Countries
PNA	Parties to the Nauru Agreement
PROP	Pacific Islands Regional Oceanscape Program
QMS	Quota Management System
RBM	Rights-based management
SEASALT	Secure, Exclusive, All Sources, Scaled, Accountable, Limited, Transferable

SMA	Special Management Area
SMF	Share Management Fishery
SPC	Pacific Community (formerly Secretariat to the Pacific Community)
TAC	Total Allowable Catch
TFSP	Tonga Fisheries Sector Plan
TURF	Territorial Use Right for Fishing
VDS	Vessel Day Scheme
VMS	Vessel Monitoring System
WCPFC	Western and Central Pacific Fisheries Commission