

Indigenous Fishing User [Tenure] Rights and Traditional Marine Management: Namena Marine Reserve

Alisi Rabukawaqa

Coral Reef Alliance, Suva, Fiji

Abstract

The Namena Marine Reserve (*tabu*) was founded in 1998 to ensure the conservation of marine resources that are in the customary fishing grounds (*qoliqoli*) of the Indigenous People of Kubulau district, in the province of Bua, Fiji. Villagers adjacent to the marine protected area (MPA) have traditional fishing user rights of the Namena Barrier Reef, and they are dependent on these rights for their livelihoods (mainly subsistence fishing). An increase in commercial fishing in the 1980s and 1990s posed a serious threat to Namena's reefs. Leaders of the ten villages in the district responded by placing a total ban on fishing. Through their own traditional governance structure and processes, the creation of the Namena Marine Reserve was possible. It represents a significant portion of the overall *qoliqoli* area. The Kubulau Resource Management Committee was then established to oversee the management of the area. It not only addressed the growing problems of poaching in the *qoliqoli* and depleting fisheries but offered an alternative means of economic development for villagers who were mainly reliant on fishing. This was undertaken through various means to tap into tourism's potential, including the establishment of a voluntary contribution charge to individuals diving in the Reserve portion of the *qoliqoli*. The Namena Marine Reserve has become a great example of indigenous peoples with tenure rights in Fiji, as it spearheads solution-based approaches to the growing problem of poaching in the *qoliqoli*, as well as the issue of depleting fisheries. The Reserve continues to be Fiji's largest no-take, locally managed marine area and serves as a top global dive site. However, the journey has not been without its issues. A particular challenge is for the Reserve to continue to prioritize the health of its ecosystem and continue to rate as a "premium destination" while leveraging the Marine Reserve to facilitate positive, community-driven economic development using traditional Fijian governance management and processes sometimes not in tandem with fisheries regulations and laws.

1. INTRODUCTION

1.1 Description of the fishery

Surrounding the tiny island of Namenalala and stretching between the two main Fiji islands of Viti Levu and Vanua Levu is the Namena Marine Reserve (NMR). Its geographical coordinates are Latitude: -17 08' 00" and Longitude: 179 08' 00". Eleven villages from the district of Kubulau, in the province of Bua, have customary user rights in the Reserve. NMR was established through a *tabu* by the traditional leaders of the district, and this was supported by local dive tour operators as well as two NGOs - Wildlife Conservation Society (WCS) and Coral Reef Alliance (CORAL). The villagers set up the Reserve to address the threat of overfishing, particularly from tuna pole and line vessels in the 1990s (Sykes *et al.* 2018), and to invest in alternative livelihoods, i.e. increasing community benefits from tourism.

NMR encompasses both Namena Island and the surrounding horseshoe-shaped barrier reef. It is home to more than 1 000 species of invertebrates, 400 known corals, and 445 documented marine plants and over 1 100 fish species. It is an incredibly unique and diverse place that carries a reputation worldwide as a biodiversity hotspot.

In Fiji, it has been estimated that 50 percent of all rural households are involved in some form of subsistence fishing (Fiji Fisheries Dept. 2008). Reef fish in Fiji are graded into three main categories: A, B and C. The grade A fish, which are most valued and targeted, include emperors (*Lethrinidae*), groupers (*Epinephelidae*), trevallies (*Carangidae*), and reef snappers (*Lutjanidae*). The grading also

distinguishes the commercial importance of these fishes, making them valued target species. A study conducted in Bua in 2001 estimated the total amount of fish coming from Bua and sold in the Suva market at seven to eight tons per week (Yeeting *et al.* 2001). Since this time, there is no further study or data detailing landed catches from the district.

Nationally, there have never been any stock assessments for groupers. According to the Fiji Fisheries Resource Profile (Lee *et al.* 2018), several studies and analyses over the past 15 years indicate “decline in catches per unit effort, reduced market sizes, shifts in dominant species marketed and a general erosion of spawning potential in more heavily fished areas.” This has led the Ministry of Fisheries to seasonally ban groupers, locally called *kawakawa* and *donu* (Susu 2018), in order to buffer food security, economic benefits and protect local extinction of some species.

There are a wide variety of fishing techniques used in coastal fisheries. The most common commercial methods are gillnetting, hook-and-line fishing and spearfishing, involving about 1 300 mainly small outboard motor vessels (Fiji Fisheries Dept. 2008). Subsistence fishing revolves around reef gleaning, hook-and-line fishing and spearfishing. The local landing sites in Fiji for most coastal commercial fisheries are at the urban population centers; Suva, Lautoka, and Labasa, while subsistence fisheries landings occur throughout the coastal parts of the country.

1.2 Economic contribution and social implications of the fishing activity

The estimated total catch for the artisanal and subsistence fisheries for reef associated species is 17 777 metric tonnes (mt), worth USD 51 million (FJD 94 million) to fishers (Gillet 2009). Artisanal and offshore-commercial fishing activities accounted for 3.16 percent of Fiji’s GDP in 2009 and, while it is not officially recorded as GDP, some estimates suggest that subsistence fishing activities produce as much as 4 percent of Fiji’s annual GDP, employing approximately 3 000 people in 2003 (ADB 2005). Subsistence fisheries employed approximately 3 000 people in 2003; in the same year, the fishing industry as a whole employed 9 144 people (3.8% of the country’s workforce) (ADB 2005).

Coastal fishing is carried out primarily for subsistence purposes; however, in recent years the distinction between subsistence and commercial fishing has become distorted. This is particularly true in the larger, less isolated islands due to the increased monetization of fishing. For Kubulau, the reliance on the fishery was shifted more towards tourism. In 1998, through a verbal agreement with local land-based tourism operators in the northern island, like Moody’s Namena Island, Jean-Michel Cousteau Resort Fiji, Koro Sun, Namale Resorts, and dive operators including Sea Fiji and liveaboard operators NAI’A Cruises and Sere ni Wai (Fiji Aggressor), and later with Namena Divers and the Fiji Siren liveaboard ship, divers were given the option of making a voluntary contribution (currently FJD 30 per diver) in return for an annual dive tag.

Contributions are collected by the tourism/dive operators and are paid into a trust fund. This is used to cover management costs for the Reserve, to provide tertiary education scholarships to selected youth from the district, and to carry out other development activities for the benefit of the district. The board of trustees comprise members of the community and representatives from the tourism industry. The dive tag, which is produced and paid for by CORAL, has provided at least 160 scholarships to children from Kubulau district, three bus shelters, maintenance of moorings, and supported Fish Warden Trainings. Upwards of 1 500 dive tags were sold annually in recent years, indicating the economic success of shifting toward dive tourism overfishing. However, after Cyclone Winston in 2016, damages sustained by the coral reef ecosystem lowered the income generated from the Reserve drastically, as fewer visitors arrived. Anecdotal commentary from communities suggest that there was also more pressure on the fisheries due to families trying to provide basic necessities and keep up with social obligations.

2. MANAGEMENT OF THE FISHERY AND RIGHTS-BASED APPROACH

2.1 Management of the fishery

At a national level, the mission statement of the Ministry of Fisheries is “to drive sustainable resource management, economic growth and improve livelihoods through SMART fisheries and forest policies that is based on applied research and development.” Broadly this can be taken as the management plan for the fisheries. In coastal commercial fisheries, the aim is to gain maximum economic return allowable without collapsing the industry or negatively affecting subsistence fisheries. For subsistence fisheries, there are 406 traditional management areas/fishing grounds, where management is generally for food protection for villagers. NGOs such as CORAL come in to assist as biodiversity conservation becomes a more prominent management objective, while Marine Protected Areas (MPAs) are the most popular tool to achieve this, as they are grounded in traditional methods of resource management.

CORAL has worked to improve management capacity in Fiji for over 15 years in NMR. In addition to engaging directly with the local community and the KRMC, it has worked closely with Fiji’s Ministry of Fisheries and private businesses to train local fish wardens in community enforcement and marine patrol protocols. In addition to building capacity, it has also trained all marine tourism providers conducting business within the marine reserve in sustainable marine recreation protocols and helped install moorings throughout the protected area, creating Fiji’s first anchor-free MPA.

There is no single, global definition of an MPA, nor has Fiji adopted one in national legislation (FELA, 2017). Fiji is still currently reviewing its marine and law policy. The existing MPA mechanisms in Fiji are divided into two groups:

- i. Statutory law mechanisms (referred to as ‘formal’ mechanisms)
- ii. Customary law mechanisms (referred to as ‘informal’ mechanisms).

The vast majority of existing MPAs in Fiji, like the NMR, are established using informal mechanisms with customary users, to establish *tabu* areas in their respective traditional fishing grounds. In the Policy and Law Discussion Paper prepared by Fiji Environment Law Association, “Towards an Effective Legal Framework for Marine Protected Areas in Fiji,” the systems for recognizing customary rights to access resources within fishing grounds under the Fisheries Act are clearly explained in detail. The first system is essentially hereditary: each indigenous person is born into a *mataqali* or clan (landowning unit), which is part of a larger *Yavusa* or tribe, each of which has their own fishing grounds. Once the person is registered with the administrative body, the iTaukei Land and Fisheries Commission, a formal recognition of said person’s right to access and use the resources in the fishing ground connected to their tribe is established, affording them customary fishing rights in that particular traditional fishing ground. Such customary fishing rights are dependent on land ownership. The other system requires individuals to obtain permits in order to fish in registered traditional fishing grounds. The permit provisions are very complicated to navigate.

While *tabu* areas are not established by legislation, they may be created by the customary fishing rights owner by declaring a *tabu* on a strictly customary basis, e.g. the death of a Chief, or establishing a locally managed marine area (LMMA) as is the case with Namena. Fishing restrictions may be recognized in the fishing ground in this way and may be a condition to a fishing license.

The management of NMR is currently carried out by the Kubulau Resource Management Committee (KRMC), a body established in 2005 to oversee the implementation of the Kubulau District Ecosystem-Based Management Plan. The KRMC has fish wardens that are trained by the Ministry of Fisheries, whose duties are the prevention and detection of offences under the Fisheries Act and the

enforcement of the provisions thereof. This gives KRMC more powers in policing and enforcement. The Minister has powers to appoint these honorary fish wardens under the Fisheries Act.

Being located around 7.5 nautical miles offshore offers NMR a natural buffer from local subsistence fishing, but the distance makes it difficult for the KRMC to regularly and effectively police the waters. Additionally, the Reserve is still vulnerable to larger fishing vessels in the area. From the time NMR was established, monitoring and policing of the waters was done primarily by the staff and owners of Namena Eco Resort on Namenalala Island. In 2013, the resort changed ownership and closed indefinitely, following extensive damage from the category 5 Cyclone Winston in February, 2016.

2.2 Brief history of the former rights-based approaches used in the fishery

Fiji's fisheries law and governance arrangements are complex, as a dual governance system incorporates traditional indigenous governance systems with western legal governance. All of Fiji's land and inshore waters were held under customary communal tenure and governed by customary law until Fiji's Cession to Great Britain in 1874. This resulted in the introduction of the common law doctrine of public trust, and subsequently the Crown (State) ownership of the seas and shore, and resources within. The recognition of customary rights over foreshore and seabed then became limited only to customary fishing rights. This disrupted traditional integrated governance, as well as land and marine resource management systems (FELA 2017).

The Constitution of the Republic of Fiji 2013 continues to recognize the customary right of access to marine resources (i.e. customary fishing rights) but does not recognize resource ownership. Customary fishing rights are established and recognized formally under the (Fiji) Fisheries Act (CAP 158).

2.3 Rights-based approach: allocation and characteristics

Fishing licenses for all areas of Fiji's fisheries waters are granted and regulated by the Ministry of Fisheries. It functions under the Offshore Fisheries Management Decree 2012 and Offshore Fisheries Management Decree Regulations, 2014. This is different for traditional fishing grounds, where commercial fishing licenses are given under the Fisheries Act 1942 and its regulations, as amended. Under the Fisheries Act, permits are issued by the Commissioner of the Division in which a registered fishing ground is located, with provisions that the relevant customary users and Fisheries Officers be consulted before the permit is granted. The final decision is eventually at the discretion of the Commissioner. For commercial fishing licenses outside these customary fishing grounds, this is not required.

Certain fishing activities require a license under the Fisheries Act. Customary users do require a fishing license to fish, even in their registered *qoliqoli* if they take fish for trade or business purposes, and non-customary users generally do require a permit to fish in a registered *qoliqoli*. Customary fisheries resource users can fish in their own registered fishing grounds (*iqoliqoli*) without a permit for subsistence use by any fishing method, except those prohibited under the Fisheries Act, e.g. the use of explosives. They can even fish for trade or business in their registered fishing ground without a license as long as they only fish with a line from the shore or spear, or have been granted an exemption by the Minister. Non-customary fisheries resource users do not require a permit either, if, they fish by hook and line, or spear, or a portable trap which can be handled by an individual, and, the fish is not taken by way of trade or business.

Generally, customary user rights for individuals registered in their traditional fishing grounds is for life. There are circumstances though when there is planned development that may impact on a fishing ground, and the customary users may waiver their fishing rights to the area and are compensated for this. Any fishing license or permit issued by the Ministry of Fisheries is valid for a year. The relationship between the permit conditions and the license conditions are not addressed in the Fisheries Act.

However, if a license applicant also needs a permit, then under the terms of the Act, the permit conditions will be attached to the license conditions. So, a breach of a customary *tabu*, such as the Namena Marine Reserve, becomes an enforceable offence under the Fisheries Act. At this point, it is important to highlight that because of the complexities of the provisions in the Fisheries Act, it makes room for multiple, inconsistent interpretations. This, in turn, leads to compliance and enforcement challenges, among other things.

A practice by the (then) Department of Fisheries to insist on fishing license applicants to first obtain a permit, even if they were applying for commercial fishing licenses outside of traditional fishing grounds, has affected management by the customary users because a fishing license is now connected to their fishing grounds. This does not seem to align with the objective of the Act, which was to allow applications for fishing licenses solely outside of traditional fishing grounds. There was also a practice of permit applicants making “goodwill payments” to the customary users of the fishing grounds in exchange for permission to fish there. The Government recently prohibited this practice mainly because it was unregulated. The Ministry of Fisheries is still in the process of conducting consultations to establish a new permit fee system that it will manage.

3. CONTRIBUTION OF THE RIGHTS-BASED APPROACH TO ACHIEVING SUSTAINABILITY

3.1 Sustainable use of the resources

Over the years, CORAL has helped the Kubulau community strengthen its resource management committee and establish a sustainable financing mechanism to fund implementation of the Kubulau Ecosystem-based Management Plan, which includes Namena Marine Reserve management. In 2015, the community raised more than USD 20 000 from voluntary user fees. CORALs work in Kubulau has created a model for building an effective local management system with the financial means and staff capacity to achieve independence. This approach to management is has measurable ecological impacts. For example, a study published in the journal *Coral Reefs* in 2013 found that sharks were two to four times more plentiful in the Reserve than in surrounding unprotected areas (Goetze and Fullwood 2013).

Coral reef monitoring, conducted by WCS that works primarily on conservation and research, and currently oversees the long-term biological monitoring on the Reserve has shown that coral cover has remained fairly stable, with a 17.3 percent decline following Cyclone Tomas in 2010, and 20.6 percent decline following Cyclone Winston in 2016, and fish biomass has been consistently above 1 000 kg/ha in the Reserve from 2009–2016 (WCS unpublished data), indicative of healthy fish communities (Sykes *et al.* 2018), and a positive outlook for the Reserve in continuing to be a world-class dive spot.

3.2 Economic viability of the fishery

NMR has been a no-take area since the implementation of the *tabu* in 1998. If adhered to, the *tabu* would lead to significant decreases in length of travel to the fishery and duration of fishing in the area. There are also no fishing vessels, no fishing devices, or fish aggregating devices used in this area as per the *tabu*. However, the *tabu* is not necessarily adhered to explicitly. Only tour dive operators’ vessels brought in increasing levels of guests over the years, but this trend waned after TC Winston in 2016. In turn, this has negatively affected employment and economic returns from NMR via voluntary contributions. This is only now beginning to build back up to a regular level.

3.3 Social equality

Social equality at a policy level is quite clear, particularly for indigenous rights access to marine resources as stipulated in the Fisheries Act. The 2014 National Gender Policy for Fiji focuses on the commitment to gender equality (Fiji Ministry of Women 2014). Its mission is the elimination of gender inequalities in all sectors of national life, in order to achieve the nation’s goal of sustainable development. The Green Growth Framework for Fiji is a tool developed to accelerate integrated and

inclusive sustainable development which will inspire action at all levels - to strengthen environmental resilience, drive social improvement and reduce poverty, enhance economic growth and also build capacity to withstand and manage the anticipated adverse effects of climate change (Fiji Ministry of Strategic Planning 2015)

The direct positive implications of these policies at the community level in terms of gender equality, sustainable use, and ensuring access for a new generation of users is difficult to determine. This is especially true when trying to directly link to evaluating the social impacts of fishing rights: TC Winston 2016, a Post Disaster Needs Assessment (Fuller 2016) - conducted by the Government of Fiji. It identified environment, gender, and culture and heritage as cross-cutting issues pegging recovery and reconstruction needs at FJD 99.7 million. The PDNA projected production losses of fisheries at FJD 200 million, and Estimated Value of Per Capita Disaster Effects per Province had Bua at FJD 9 990.00 per person. This data would then help to distribute aid to fisheries participants post hazardous event. At district and village level, depending on the NGOs who work in the area, there were also assessments conducted to determine what aid was needed by communities. CORAL assisted in conducting one such assessment¹ in partnership with WCS and other partners at the request of the (then) Department of Fisheries. This was across 154 villages, 36 districts and six provinces that were directly along the path of the cyclone in Fiji. The only province that was not surveyed was Lau, due to inaccessibility and challenges conducting the assessment.

The eventual distribution of aid was led by the (then) Department of Fisheries based on information gathered by the needs assessment.

4. MAIN CHALLENGES AND WAY FORWARD

4.1 Challenges for the fishery

As detailed in 2.3, the greatest challenge stems from the complexities of the provisions of the Fisheries Act, which can cause many inconsistent interpretations. The Fisheries office at an operational level has an advisory role to play to the 410 customary fishing grounds resource users. The dual governance system also requires communities and the Fisheries office to work in sync. Their management consists of the issuing of licenses, restrictions on exports, usage of proper fishing gears, banning of extracting certain species, and restrictions on destructive fishing and areas. Poor documentation of this may point to a lack of communication. This, in turn, has led to compliance and enforcement challenges, as well as difficulty in prosecuting poachers caught in tabu areas. Additionally, it has affected the management of traditional fishing grounds by the customary users. Another challenge in regulating marine areas is the dual governance system in Fiji. Customary law continues to play an important role in many communities, whilst its integration with western law locally continues to be at the forefront of discussions.

At NMR, even with the commitment shown by the customary resource users over the last two decades, there are still issues with monitoring and policing of the area. Being some 14km offshore, the Reserve has a buffer from the local community in terms of subsistence fishing. However, it is still vulnerable to large fishing boats from the mainland, both Viti Levu and Vanua Levu. Until 2013, main enforcement agency at NMR was the staff of Moody's Namena EcoResort on Namenalala Island. Since 2016, when the EcoResort changed hands and then closed down, the policing of the area has not been as consistent. Although a local day-boat dive operation has technically taken over enforcement and monitoring of the park, taking on associated costs themselves, informal reports suggest that without a constant and diligent presence on the island, poaching continues to increase (Sykes 2018).

¹ Online link to report:

<https://global.wcs.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=33407&PortalId=82&DownloadMethod=attachment&test=1>

4.2 Improving fishery sustainability in the future

There are several things that could be done within the existing legal framework to improve the fishery's sustainability:

- i. Improve management, by ensuring the protection of tabu areas within traditional fishing grounds in fishing license conditions given to successful applicants.
- ii. Have stricter approval processes by non-renewal of licenses to vessels that deliberately breach community rules, in particular, and also national laws.
- iii. Ensure that trained and appointed fish wardens have operational funding - to assist in their monitoring and enforcement of fishing grounds, to increase patrols of tabu areas, and to report breaches to the relevant authorities.
- iv. For MPAs, locally managed marine areas (LMMAs) are a way of bridging customary and modern management techniques. Recognition of LMMAs under formal law may aid in effective implementation.
- v. Legal and institutional reform in the Fiji fisheries sector in order to: improve training for community fish wardens; conduct fisheries enforcement training for the police and magistrates; increase penalties for offences under the Fisheries Act, and formalize management powers for community resource management committees.

In addition, replication of CORALs model of work, which is explicitly designed to allow for a reduction in external involvement over time and allows resource users to move towards independent management, is a positive step in improving fisheries sustainability.

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