

Resources, courses and coordinated forces: Tackling illegal, unreported and unregulated fishing in the Pacific Islands

One person taking one small fish for their breakfast might not seem like a problem, or a crime, but when that one person becomes many people doing the same thing, it becomes a major problem. From large-scale export companies operating without a licence, to individual subsistence fishers catching undersized fish, illegal, unreported and unregulated (IUU) fishing has many faces.



Monitoring Aitutaki lagoon, Cook Islands. Image: ©Aymeric Desurmont, SPC

Importance of small-scale fisheries in Pacific Island countries

Although offshore industrial fisheries harvest over 10 times more fish than small-scale coastal fisheries in the Pacific Islands (Gillett and Tauati 2018), coastal communities depend heavily on small-scale fisheries for their economies, food security, social well-being and livelihoods. Small-scale coastal fisheries are broadly divided into two main categories: 1) commercial fishing, which is generally subject to licencing and reporting obligations; and 2) subsistence fishing, for which no licencing or reporting is generally required.

Subsistence fishing, in particular, plays a significant role in the rural economies of Pacific Islands and accounts for around 70% of fisheries production from coastal areas (Gillett and Tauati 2018). Management of these fisheries is challenging, especially when population growth, pollution and more efficient fishing techniques are already increasing the pressure on local resources. Added to this is the increased burden on coastal resources resulting from the COVID-19 pandemic. As tourism and associated industries closed

down, people who were no longer able to support themselves in the urban environment returned to rural communities where they could fish and grow crops.

IUU fishing – What is it?

IUU fishing activities can have a huge negative impact on the livelihoods, food security and marine ecosystems of small fishing communities. IUU fishing is not the reserve of large-scale export merchants, but may include local fishers who exploit their own resources by fishing unsustainably; for example, using destructive fishing methods (such as poison or explosives), targeting prohibited species, or disregarding the legal size limit for each species.

Management plans and regulations to protect vulnerable marine resources can easily be undermined by someone exporting species that have been caught without a licence or permit if the legal framework and capacity to enforce regulations is not well supported. Coastal fisheries in the Pacific are often informal, either because they are unregulated (and,



A fisheries officer checks the catch of a fisher near Suva market in Fiji. Image: ©Ariella D'Andrea, SPC

therefore, unreported), or due to a lack of enforcement, such as when subsistence fishers, who are not subject to licensing requirements, sell their catch on the local market, although it is generally prohibited by law.

Impacts of IUU coastal fishing are largely unknown

In coastal areas, IUU fishing appears to impact Pacific Island communities by contributing to overexploitation of vulnerable marine resources and depriving (human) populations of associated benefits. Coastal fisheries, in particular, provide a wide range of tangible and intangible benefits, including key contributions to income, health, food security, culture and resilience (Béné et al., 2016; Petrossian et al., 2015). It is difficult, however, to assess the extent to which IUU fishing impacts economies in the Pacific Islands region because by their nature, these clandestine or informal activities go largely unseen. An update to a study conducted in 2020 (MRAG Asia Pacific 2021), which quantified IUU fishing in the Pacific, focused on offshore fisheries that target tuna and tuna-like species, and noted that there is a high level of uncertainty in catch estimates. Small-scale IUU fishing is even more difficult to evaluate in the coastal sphere because that sector is quite data-poor.

Coastal fisheries can be considered to be illegal fisheries if existing regulations are not implemented effectively, and sustainability is jeopardised. Coastal fisheries can also be considered as a form of unregulated fishing if traditional and customary rules are implemented in practice, but are not recognised by law. Understanding the specificities of IUU coastal fishing is crucial to avoiding the risk of criminalising small-scale fishers (Song et al. 2020).

Pacific context

In the Pacific Islands, IUU fishing is a significant issue because coastal communities are geographically spread out and often lack the resources for monitoring, control and surveillance. The Pacific coastal fisheries sector is typically small in scale and often informal in nature. Fisheries management in the coastal areas of Pacific Island countries and territories (PICTs) is largely based on traditional management, particularly around reef areas and in lagoons. In most PICTs, small-scale commercial fisheries are managed by fisheries agencies through licensing and registration, although difficulties may exist in controlling fishing activities in outer islands. Similarly, fisheries agencies may not have enough resources to monitor all subsistence fishing activities occurring in a country's or territory's waters. The

Pacific's response to IUU fishing in coastal fisheries relies heavily on local communities being involved in marine resource management, thus highlighting community members' role as stewards or guardians of marine resources.

What can be done?

Community-based fisheries management

Community-based fisheries management (CBFM) is an approach to managing fisheries in which communities take a leading role. Using local knowledge, the CBFM approach aims to empower stakeholders in coastal communities and ensure that fisheries are managed sustainably and in a way that is appropriate for the local or national context. Under the CBFM approach, local communities are actively involved in the process of planning, rule-setting and determining how these rules can be enforced.

CBFM has garnered strong support across the region. *A New Song for Coastal Fisheries – pathways to change: The Noumea Strategy* (SPC 2015) was developed by PICT representatives and endorsed by fisheries ministers in 2015. With this strategy, PICTs agreed to scale-up coastal fisheries management by incorporating a community-based ecosystem approach to meet domestic development aspirations. The resulting workshops and consultations in response to this strategy led to the Pacific Framework for Action on Scaling up Community-based Fisheries Management (SPC et al. 2021), which was endorsed by fisheries ministers in 2021.

Collective engagement in rule-setting

Engaging communities in establishing rules and determining how to enforce them can help with combating IUU fishing because awareness and a sense of ownership is increased, which ideally creates a feeling of collective responsibility among community members. How this is done, however, is crucial. Consider that for many communities, tackling IUU fishing could mean a community enforcement officer having to take a close relative to task for catching an undersized fish. The officer's job is even harder if the individual was unaware of the rules because they had not been involved in making them. Awareness needs to be a primary consideration before the enforcement stage, and getting everyone to agree on the regulations is one way of doing this.

Sharing successful models of management

Awareness also includes recognising good management practice, and where this has had a real benefit, in terms of resource abundance, and economic and ecological benefits. Tonga, for example, has used the special management area

(SMA) tool of fisheries management since 2006 (Smallhorn-West et al. 2020). In this arrangement, communities have preferential access to a specified marine area and have the responsibility of looking after it for their own use, as well as for future generations. This long-term vision has had some evidence of success as witnessed by the rapid expansion of the SMA programme as more Tongan communities have become involved. There needs to be, however, data to verify the tangible benefits (e.g. stock status improvements, economic growth), as well as be a monitoring programme. Coastal fisheries monitoring involves gathering data on species inside and outside of managed areas, which requires local knowledge, survey design capacity and resources.

Strengthening monitoring, control and surveillance

Effective monitoring, control and surveillance (MCS) needs capacity, capability and equipment, all of which require investment. A recent survey of 11 countries in the region¹ indicated that some lacked the basic equipment needed to conduct MCS (see Table 1 below). The equipment does not include boats and vehicles, which are also required, and in short supply, in these countries. If an adequate level of enforcement is not supported, then IUU will continue to occur and all other efforts to manage the fishery will have been undermined. Addressing this gap is of utmost importance and will require funding and cooperation from invested stakeholders in the region.

Table 1. Monitoring, control and surveillance capital assets required for coastal fisheries by number of countries out of 11 surveyed.

Equipment	Total countries in need
Safety equipment	9
ID badges or authorisation cards	7
Binoculars	7
Note taking for evidence collection	7
Camera	6
Official uniforms	5
Mobile phones	5
Coolers or freezers for evidence storage	5
Measuring devices	4
Tablets	2
Drone for effective surveillance	2
Vernier caliper	1
Torch	1
Exhibit tags and labels	1
Reef walking shoes or boots	1

¹ Conducted by SPC to provide baseline information on the capacity of fishery authorities to undertake effective deterrence of IUU fishing activity in coastal fisheries.

While considerable effort has gone into mitigating IUU fishing in Pacific tuna fisheries, coastal fisheries have historically lacked the investment for this. There is very little in the way of coordinated regional activity to address IUU fishing in coastal fisheries in the region. This is a critical area that requires more dialogue between countries, stronger coordination between CROP² agencies, and collaboration between supporting regional partners.

As the key CROP agency working in the coastal fisheries sector, the Pacific Community (SPC) has a significant role in supporting members to address IUU fishing in coastal fisheries, particularly through MCS capacity building. SPC works closely with the New Zealand Ministry for Primary Industries' Te Pātuitanga programme,³ the Pacific Islands Forum Fisheries Agency,⁴ the Australian Fisheries Management Authority,⁵ and other agencies to provide support for its members' national fisheries authorities. SPC, in cooperation with the Te Pātuitanga programme, has provided training and capability building in MCS concepts and skills in Kiribati, Marshall Islands, Solomon Islands and Vanuatu to enhance members' ability to address IUU fishing in coastal waters. These workshops have included practical market inspections, and in every country, some level of illegal activity has been discovered.

To support capacity building, SPC and partners have developed a series of online learning programmes to help its members improve MCS and address IUU fishing in coastal fisheries. These include:

- Certificate IV in Coastal Fisheries and Aquaculture Compliance, accredited by the University of the South Pacific at the regional level, and delivered online as a full year course;
- Professional Certificate for Community Compliance Officers, at the national and regional level, delivered online and face-to-face as a three-month course;
- National training workshops run in partnership with Te Pātuitanga, and tailored to each country's needs and delivered virtually, including several practical market inspections;
- Assistance with developing national compliance strategies and MCS policies for coastal fisheries; and
- Assistance with drafting of a set of standard operating procedures for routine MCS work.

To enhance members' capacity in policy and planning for effective coastal fisheries management, SPC has been providing support in three broad focus areas:

- 1) Development of anchored FAD Development and Management plans that are fundamental for developing sustainable national FAD programmes.
- 2) Review of existing, and development of new, management plans and policies that support members in implementing measures for the sustainable management and development of coastal fisheries.
- 3) Provision of advice to members on specific issues pertaining to coastal fisheries management and development.

SPC has also been exploring the potential to develop and deliver training through web streaming. As part of this work, an e-training workshop on fisheries management planning was developed, in partnership with New Zealand's Ministry of Primary Industries. The first e-training workshop – Developing Fisheries Management Plans – was successfully delivered to government officials from Polynesia and Melanesia. This effort is expected to improve members' capacities in sustainable and effective coastal fisheries management.

The United States Agency for International Development-funded Pacific Coastal Fisheries Management and Compliance project⁶ aims to strengthen governments' capacities to implement and improve MCS in 12 Pacific Island countries: Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Papua New Guinea, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. This USD 6 million, five-year project (2021–2026) will address some of these gaps for these countries and improve coastal fisheries management and data systems.

The larger-scale problem of IUU fishing is still a big issue

There are still instances of IUU fishing that are conducted knowingly and deliberately, such as the harvesting of illegal marine products (e.g. beche de mer) to export to foreign markets, or foreign fishing vessels operating illegally in coastal waters. This type of IUU fishing is particularly difficult to combat because the offenders often work for large companies with the wealth and power to influence decision-makers and fishers alike. The limited resources available for MCS in many Pacific Island countries makes coastal areas more attractive and more vulnerable to these kinds of operations.

² Council of Regional Organisations of the Pacific

³ <https://www.mpi.govt.nz/fishing-aquaculture/fishing-aquaculture-funding-support/te-patuitanga-ahumoana-a-kiwa/>

⁴ <https://www.ffa.int/>

⁵ <https://www.afma.gov.au/>

⁶ Pacific Coastal Fisheries Management and Compliance programme

A wider responsibility

While PICTs are working on these issues from their side, there needs to be recognition from the market states – where fish are exported to – in order to avoid imposing harsh trade restrictions on small-scale fishers. Market states that impose trade sanctions on countries that fail to comply with their flag state duties should consider the impact that such blanket bans would have on the livelihoods of small-scale fishers. Allowing such fishers to continue to trade in species and products that are considered to be sustainable (e.g. under formal CBFM arrangements) would not only be beneficial for those small operations, but could also work as an impetus for public participation in management and awareness.

The letter of the law

In order for local communities to have specific rights to manage coastal areas – in collaboration with the national fisheries agency and local authorities – the legal framework should be clear.

For example, in Solomon Islands, community fisheries management plans can be drafted by, or on behalf of, customary rights holders. The management measures, fines, penalties and sanctions, as well as the licensing and enforcement authorities, described in the plans are “deemed to have legal effect of a by-law” on adoption and publication (Fisheries Management Act 2015, Section 18⁷). In Samoa, village fisheries management areas, established by the government (Fisheries Division of the Ministry of Agriculture and Fisheries) in consultation with village *fono* (councils), are managed by village communities (Fisheries Management Act 2016⁸). Village *fono* can also make village fishery by-laws (Village Fono Act 1990⁹). In Tonga, the government (Ministry of Fisheries) can declare any area a special management area for the purpose of coastal community management, and the coastal community designated for the management “shall organise itself and its operations or administration in a manner that is conducive to the effective conservation and management of fisheries resources” (Fisheries Management Act 2002, Section 14¹⁰). A coastal community management committee helps the coastal community manage the area, including by drafting and enforcing its management plan (Fisheries [Coastal Communities] Regulations 2009¹¹).

If traditional practices are recognised under the law, then it is possible to take decisive measures to combat IUU fishing in ways that are appropriate to the local culture and context. SPC has also been providing remote support to members

in the review and development of laws and regulations for sustainable and equitable coastal fisheries management. In particular, the following activities have been carried out:

- Assistance was provided to fisheries agencies in drafting laws and regulations on coastal fisheries and aquaculture, via email and other available communication platforms.
- Virtual workshops on gender and human rights in coastal fisheries legislation were successfully held in August 2020 and July 2022, followed by the preparation of legal reviews for nine PICTs and the publication of a Policy Brief (Graham and D’Andrea 2021).
- To enhance the legal writing skills of government staff, SPC has developed an online training course for legislative drafting in coastal fisheries, in collaboration with the University of California. The online course will provide tips and methods to draft laws, regulations and other supporting documents that are key to sustainable coastal fisheries management.
- To increase awareness and facilitate access to relevant information, legal resources are also made available on REEFLEX (Pacific Law and Policy Database on Coastal Fisheries and Aquaculture).

To support the implementation of the Pacific Framework for Action on Scaling up Community-based Fisheries Management, SPC has also prepared a legal guide to identify enabling provisions for community-based fisheries management. The guide, developed in collaboration with the Environmental Law Institute, a Washington DC-based non-profit organisation, is intended to assist Pacific Island fisheries agencies in implementing CBFM on a larger scale by assessing and improving their legislative framework. A variety of examples of legal provisions illustrate national legal frameworks for CBFM in the Pacific and outside the region. The main objective of the guide is to allow PICTs to select among different approaches and develop a CBFM framework that is adapted to their national context.

Better coordination with participating partners

As mentioned earlier in this article, resources and funding are crucial to enabling communities to manage their fisheries and combat IUU fishing, and these must be managed carefully to be put to efficient and effective use. Donors and implementing agencies who are involved in capacity building for effective coastal fisheries management could

⁷ Fisheries Management Act 2015, Section 18 <https://purl.org/spc/fame/cfp/legaltext/msm82>

⁸ Fisheries Management Act 2016 <https://purl.org/spc/fame/cfp/legaltext/r563p>

⁹ Village Fono Act 1990 <https://purl.org/spc/fame/cfp/legaltext/z2cvx>

¹⁰ Fisheries Management Act 2002, Section 14 <https://purl.org/spc/fame/cfp/legaltext/jxm55>

¹¹ Fisheries (Coastal Communities) Regulations 2009 <https://purl.org/spc/fame/cfp/legaltext/xmeao>

coordinate their activities to ensure that there is no duplication of effort. New Zealand's Ministry of Foreign Affairs and Trade has provided support to address capacity building for MCS and resource management over many years. One example is the Effective Coastal Fisheries Management Project,¹² which has been extended for a further five years as the Sustainable Coastal Fisheries and Aquaculture for Pacific Livelihoods, Food and Economic Security,¹³ and provides technical assistance and training alongside awareness raising to promote compliance.

Currently, there appears to be no mechanism for capturing all that is happening in this area, and this relies on people knowing what's happening through their personal networks. Developing more project coordinator roles to provide a focal point and to integrate workplans is one idea towards increasing the efficiency of the projects at play. The Pacific is vast, but effective collaborations can enable a speedier response to IUU activities in coastal fisheries.

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¹² The Effective Coastal Fisheries Management Project aims at strengthening governance structures and processes for effective management of coastal fisheries and aquaculture, both at national and subnational level. <https://fame1.spc.int/en/projects/mfat>

¹³ Sustainable Coastal Fisheries and Aquaculture for Pacific Livelihoods, Food and Economic Security project brief. <https://purl.org/spc/digilib/doc/bhacu>