

## Supporting sustainable development in the COVID-19 era through fisheries in Asia-Pacific small island developing States

The fisheries sector holds great importance for small island developing States (SIDS) of Asia and the Pacific. For many Governments, fisheries bring much-needed public revenues. Government income from the fisheries sector expanded significantly with the establishment of the 200-nautical mile exclusive economic zone (EEZ) in 1982, providing SIDS with greater opportunity to negotiate and collect fishing access fees. Indeed, license access fees paid by distant-water fishing nations for access to marine resources in the EEZs of SIDS are currently the main source of public revenue for some Governments, constituting, for example, as much as 75 per cent of government revenue in Kiribati.

For households, fisheries are vital sources of food and employment; they provide food and income to more than 200 million people in the Asia-Pacific region. The importance of this sector for SIDS is evident considering that their average per capita fish consumption is two to three times higher than the global average. Also, fisheries-related employment in Asia and the Pacific accounts for 84 per cent of the global population engaged in the fisheries and the aquaculture sector.

Beyond Governments and households, the importance of fisheries is reflected in the share of fish and fish-related products in national output. For instance, in the Marshall Islands these amount to 14 per cent of GDP.

### Challenges

Despite the importance of fisheries for Asia-Pacific SIDS, the health of their fish stocks has become increasingly fragile. In coastal areas, overexploitation is a concern, while illegal, unreported and unregulated fishing (IUU) contributes to overexploitation particularly in the EEZs and High Seas.

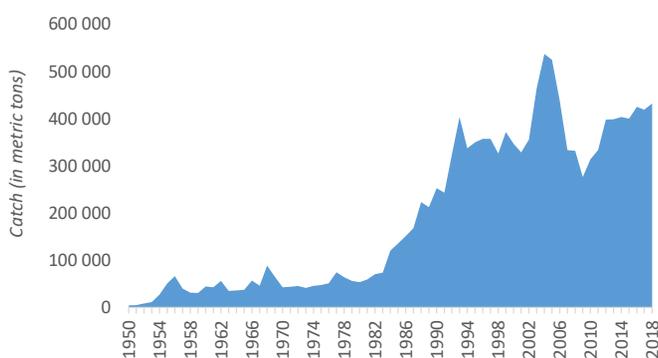
#### (a) Overexploitation of coastal fisheries

While all the key commercial stocks of tuna – bigeye, skipjack, albacore, and yellowfin – are assessed to have still been managed and maintained at sustainable levels in the Pacific, the biomass of most stocks continues to decline. In the Indian Ocean, the stock of yellowfin tuna is estimated to be close to or has possibly entered an overfished state (Figure 1). In South-East Asia, overfishing is considered an important threat to the marine ecosystem. Indeed, 64 per cent of the fisheries resource base is at a medium to high risk of overfishing.

Coastal fishery resources often show signs of overexploitation, especially in areas close to highly populated centres and for particular fishery products (for example, *bêche-de-mer*) that are in demand in rapidly growing Asian economies.

The COVID-19 pandemic is likely to have accentuated this problem as with the suspension of tourism activities and the related loss of jobs during the pandemic, many Pacific islanders

Figure 1. Catches of yellowfin tuna in the Indian Ocean between 1950 and 2018



Source: IOTC (2018).

have moved from the urban centres back to their villages. This may imply that more people are now engaged in subsistence fishing, resulting in increased fishing pressure on coastal fishery resources (SPC, 2020).

One of the reasons for not being able to accurately assess the overexploitation of coastal resources is limited availability of data. The lack of accurate, transparent and harmonized data and information is an obstacle to the effective management of fisheries. Monitoring coastal fisheries is typically expensive in countries with extensive coastlines and has historically been unaffordable, beyond rudimentary statistics, for many countries in the region.

#### (b) Illegal, unreported and unregulated fishing

IUU fishing is a key concern exacerbating the overexploitation of fish stocks, both in EEZs and High Seas. Eliminating the impacts of IUU fishing alone could reduce losses worth \$23.5 billion, or 20 per cent of all wild marine catches (FAO and IOC/UNESCO, 2017).

Due to the COVID-19 pandemic, governments of Pacific SIDS have temporarily suspended the use of observers to monitor activities on fishing vessels. Fisheries observers are critical to ensure the effective management and monitoring of fisheries, and to control IUU fishing, as they assess and verify the quantities of the target catch, bycatch and discards. IUU fishing may therefore increase in the short term because of less monitoring. At the same time, the suspension of observers on vessels will reduce the availability of critical information and data. This will impact the tuna stock assessment for the four major commercial species of tuna in the Western and Central Pacific Ocean (WCPO) for the year 2021, which is based on data from 2020. Moreover, transshipments are likely to increase

during the COVID-19 pandemic because of port closures and access restrictions in many of the countries in the region, which may also increase the risk of IUU fishing.

## Recommendations

**Among the policy options, there are two concrete recommendations** that could help SIDS in addressing the aforementioned challenges.

### (a) Better data and efficiency

One approach to enhance the sustainability of the fisheries sector is through increased use of digital technology. SIDS can take advantage of technological improvements to strengthen conservation of their marine resources, at the same time increasing fishing efficiency. In the Pacific region, SIDS are increasingly using e-reporting and e-monitoring to improve and support stock assessment, measure bycatch and combat IUU fishing (FFA, WWF and SPC, 2017). Furthermore, the application of remote sensing technology, e-reporting and e-monitoring, for example, could potentially provide new sources of data for improved monitoring in the absence of on-board observers.

Indeed, e-monitoring could be a potential alternative to on-board fisheries observers: the installation of cameras and gear sensors on ships has already been shown to produce high-quality, cost-efficient data in the Pacific (Knuckey and Dunn, 2013). It also allows for real-time remote monitoring of the activities of fishing vessels. The benefits of e-monitoring include: (a) cost savings, especially in situations where placing observers on-board can be expensive, (b) data accuracy, as they provide objective real-time data avoiding human bias such as intimidations or threats to observers; and (c) reduced risk of IUU fishing.

Similarly, e-reporting has been designed to facilitate and speed up the reporting process of fisheries data. It allows the electronic transmission of fisheries information or log sheets to databases where the information is automatically stored. The systems can bring significant benefits to improve data quality, as it allows real-time reporting through satellite transmission or mobile networks. Thus, well-developed e-monitoring programmes are currently implemented in Alaska, in the United States and Australia. Similarly, the application of e-monitoring in fisheries located in remote areas where monitoring is expensive or inefficient, such as the WCPO or the Indian Ocean, is a fast-growing practice. Indeed, FFA members reiterated at their annual meeting in June 2020 the commitment to gradually adopt e-monitoring for fishing vessels operating within their EEZs and High Seas, with a goal to complete implementation by 2022 (FFA, 2020).

### (b) Enhanced regional cooperation

Regional cooperation can greatly improve the effectiveness of measures to control and monitor IUU fishing. This has been explicitly recognized in the United Nations Convention on the Law of the Sea (UNCLOS) and reflected in the number and importance of regional fishery bodies.

Regional cooperation has proven successful over the years

in improving the management of Asia-Pacific SIDS' fisheries and their fish stocks. Two initiatives resulting from regional cooperation have been particularly effective for fisheries: the "Harmonized Minimum Terms and Conditions for Foreign Fishing Vessel Access" which specifies consistent conditions across the region, and the "Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest", which introduced the Vessel Day Scheme in 2011.

Asia-Pacific-wide platforms for collaboration should also be useful in building a shared understanding about opportunities and challenges related to the sustainability of the fisheries sector. For instance, since 2018 ESCAP has held annually the Asia-Pacific Day for the Ocean to facilitate conversation between SIDS and distant-water fishing nations to discuss and collectively tackle challenges, such as IUU fishing.

## Conclusion

As highlighted in the 2021 Asia-Pacific Countries with Special Needs Development Report, entitled "Leveraging Oceans Resources for Sustainable Development of Small Island Developing States" (ESCAP, 2020), fisheries are an important source of food, employment and income in Asia-Pacific SIDS. Despite this importance, the sector faces several challenges such as the overfishing of coastal resources and IUU fishing, which hamper its sustainable development. The temporary suspension of fisheries observer coverage on fishing vessels in response to the ongoing pandemic as well as the loss of local jobs due to the travel restrictions have accentuated these existing vulnerabilities. In order to improve fisheries' sustainability, SIDS should take advantage of digital data collection systems, such as e-monitoring and e-reporting, to ensure the sustainable management of their fisheries. Furthermore, regional cooperation among Asia-Pacific countries must be enhanced, as collaboration platforms such as the Asia-Pacific Day for the Ocean have proven to be successful in devising new opportunities and addressing challenges related to the sustainability of the fisheries sector.

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