

AN OCEAN LIKE NO OTHER

8.1 SOMALIA'S FISHERIES: THE HISTORY, CHALLENGES AND OPPORTUNITIES VIDEO DURATION – 9:32

At 3,300 km, Somalia has the longest coastline in continental Africa. Its extensive Exclusive Economic Zone includes one of the largest seasonal upwelling systems in the world.

This lecture was written by Frances James and Stephen Akester from MacAlister Elliott and Partners Ltd who have a long history working with fisheries in East Africa and Somalia.

The narrow Somali continental shelf is approximately 15 km wide in most sections, supporting a variety of fisheries which, if left unmanaged, can be easily over-exploited.

Ongoing political instability has limited data collection on many aspects of the fisheries sector. However, between 10 to 20 thousand fishers are estimated to be active, which support a further 30 to 60 thousand people in trading, processing and boat building.

Somalia's productive waters support a diverse range of species, which are present for all or part of the year depending on their migration patterns.

Compared to other countries, there is more uncertainty over the total volume of fish catches from Somalia's EEZ. Estimates suggest between 200 and 800 thousand tonnes per year could be caught in Somali waters, but this range is large and further highlights the urgent need for research on Somali fisheries.

Important large pelagic species include tuna species such as yellowfin, bigeye, skipjack and longtail, and billfish such as swordfish, marlin and sail fish. Between June and September, the upwelling system in Somali waters is most productive, and tuna pass through to feed on this abundance of food.

However, at the same time, wind and current conditions are also at their strongest, and most fishing boats (particularly small local boats) must wait until weather conditions are calmer between October and April.

These species are most heavily fished by the foreign industrial sectors, including European purse seine vessels, Asian longline vessels and Middle Eastern gillnet vessels. Due to a lack of national monitoring control and surveillance, all catch taken in

Somali waters today (apart from a group of Federal government-licensed Chinese boats), is presumed to be either illegal, unregulated, or unreported.

Small pelagic stocks of sardine and anchovy are known by fishers to be present in very specific and short seasons, and are important prey for migrating tuna. Coastal fishers occasionally target these species using nets but they are not an important part of the diet, and are used primarily as camel feed.

Coastal fisheries are a recent development in Somalia and only diversified away from line fishing in the 1970s when the first fibre glass boats were introduced.

Demersal species are an important component of Somali artisanal catches and comprise several hundred species, including reef-associated groupers and snappers, caught by a variety of fishing gears.

An important fishery for coastal populations has been shark, traditionally salted and sun dried for export on ancient trade routes, but it is now overfished and has limited markets.

The Indian Ocean coast of Somalia has one of the country's oldest fisheries, a very productive spiny lobster fishery, fished by artisanal trap, spear, net and diving. The lobster fishery is neither managed nor is data collected, and reports show signs of overexploitation, driven by strong demand in Middle Eastern markets.

Considering the high productivity of Somali waters, it might be surprising that the national fisheries sector is still relatively undeveloped, contributing around 2% of the country's GDP, and an annual per capita fish consumption of around 2kg compared to about 5kg in neighbouring Kenya.

When reasons for a lack of growth in the fisheries sector are discussed, the popular myth is that Somali people have not traditionally eaten fish. Traditional nomadic populations used to eat tuna or mackerel that had been roasted over fire-pits (which can be seen dotted around this traditional fishing camp), known locally as "haniid", and coastal populations have always eaten fish.

As the coastal urban centres expand, demand continues to grow. In Mogadishu for example, there is a thriving market system and a high demand for fish, supplied by a fleet of small boats fishing for a variety of species over the season.

Since ancient times, Somalian Indian Ocean coastal communities traded valuable fish products north to the Persian Gulf, and south to Kenya and Tanzania on sailing boats called 'dhows', following the changing seasonal direction of the monsoon winds. The last government saw this as a threat and brought it to an end by 1990, thus depriving

the coastal communities of their economy. In the north, the trade has since been taken up by fishers from Yemen, who fish themselves and also buy from Somali fishermen.

At present, growth of the fisheries sector is restricted by a lack of co-ordinated governance, a lack of suitable fisheries infrastructure, and coastal geography.

The Indian Ocean coast of Somalia has very strong ocean currents and there is 1000 km of coast with only one natural harbour. The North coast is more protected, but there are still strong seasonal winds that are dangerous for fishers, and only two harbours.

Fishing infrastructure investments and development of commercial fishing harbours is therefore limited, and Somalia's fishing fleet is mainly small fibreglass beach-based boats, operating a short distance away from the coast, and for a short fishing season when winds are favourable.

The images show a typical landing beach, a typical main road, and the extent of development at the capital city's fishing harbour

Greater economic benefit from Somalia's fisheries could be obtained via value addition activities in the domestic supply chain. Landing sites are generally not equipped with sufficient refrigeration, ice making facilities or fish processing spaces, which would enable seafood to be sold at higher prices to national and international markets. These images show typical fish landing conditions and typical markets.

Somalia's fisheries could support a thriving fisheries sector if they are well managed, well-monitored and sufficient value is obtained by Somalis.

A priority, is fisheries data collection which forms the basis for appropriate management. Through the ongoing support of the active local NGO 'Secure Fisheries', several Somali Universities and the Government now collaborate and regularly collect fisheries catch and effort data. Here is their Director, Sarah, talking about this.

"What started as a partnership between Secure Fisheries and City University in Mogadishu grew to encompass universities around the region, whereby students in marine science are trained on fish identification, data collection techniques and data analysis. We call this project Cullum which means fish in Somali. The success of that project was then modelled by Secure Fisheries, the UN Food and Agriculture Organisation and the ministries of fisheries around the region to roll out fish data collection at landing sites throughout the country. These data are incredibly important for informing sustainable and profitable fisheries management in the region. That's

why were also partnering with coastal communities to implement fisheries cooperative management also known as co-management.”

Illegal, unreported and unregulated fishing is often reported in Somali waters, in both coastal and offshore zones, and will compromise the livelihoods of Somalis and future developments to the sector if left uncontrolled in its current state.

The history of foreign activity in coastal waters is complex, and fleets from numerous countries have exploited the Somali continental shelf. Some activity is licensed but not all is recognised by central government, and it is almost entirely unmonitored.

Global Fishing Watch uses cutting-edge technology to visualise, track and share data about global fishing activity in near real-time and for free.

There are important revenue opportunities for Somalis, from well-managed tuna and lobster fisheries in particular.

Currently, all tuna and billfish caught by foreign long line fleets is directly exported, and licence fees only bring limited economic value to the Somali economy.

Developing a small national long line fishing fleet, or partnering with experienced Asian foreign fishing companies in a mutually beneficial economic relationship, could be highly valuable. Long line operations require less onshore infrastructure than other methods of tuna fishing, and sea operations are less capital intensive.

This type of fishing is also predicted to be relatively more adaptable to climate change, as adjustable hooks can continue to access species that may shift to deeper waters to avoid rising surface temperatures. Developing supporting port infrastructure for long line vessels would also support the development of local fisheries for tuna as larger, more seaworthy boats could be supported, thereby extending the short fishing season.

In this lecture we have learned about the past and present of Somali fisheries and the increasing role the fisheries may play in the future of the Somali economy. In the next lecture, we will look at the Somali Upwelling, the largest seasonal upwelling on Earth, which sustains the rich and productive ecosystems of these waters.