

## MARINE FISHERIES IN THE SOMALI EEZ, UPDATED TO 2018\*

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### Abstract

Marine fisheries catches in Somalia's EEZ, which were previously reconstructed for 1950 to 2010, were here updated to 2018. Domestic catches were primarily artisanal and subsistence in nature, with artisanal fisheries also generating some discards. Domestic industrial fishing was only present from 1974-1991, while industrial fishing thereafter was exclusively by illegal foreign fishing fleets. Almost 40% of the total catches in Somalia's EEZ since the 2000s were foreign in nature, excluding catches by industrial tuna fisheries managed by the IOTC.

### Introduction

Somalia had been plagued by social and political instability since the collapse of a functional national government in 1991. From then until 2001, Somalia did not have an internationally recognized national government (but see Anon, 2019). The country's political instability led to extensive foreign illegal fishing in the Exclusive Economic Zone (EEZ) of Somalia. Foreign fishing in Somali waters has occurred since at least 1981 and persists to the present. In 2018, the Somali national government began issuing foreign fishing licenses<sup>4</sup> which may impact some of the foreign fishing activities in the EEZ in the future. However, such changes depend heavily on both enforcement as well as compliance, both of which seem to be in very short supply in the waters of Somalia.

The domestic catches for Somalia were first reconstructed by Persson *et al.* (2015) for the years 1950 to 2010 (see also Persson 2016), while foreign fishing was estimated originally by Glaser *et al.* (2015). Subsequently, both domestic and foreign catches were updated to 2016 by Cashion *et al.* (2018). Here, these data are updated from 2016 to 2018 using updated reported landings data provided by the FAO for the domestic fisheries, and Glaser *et al.* (2019) for the foreign catches.

### Methods

#### Domestic catches

The catches reported for Somalia by the FAO have remained the same since 2006, likely due to Somalia not reporting any catch data to FAO (Garibaldi 2012). As the original methods by Persson *et al.* (2015) and Cashion *et al.* (2018) estimated the small-scale fisheries catches based on the estimated number of active boats, and since no new information regarding this was available, the existing ratios of unreported fisheries (subsistence, discards) to the available FAO reported landings data were used, along with the trend of unreported artisanal landings. Unreported discards were estimated based on a 1:5 artisanal discards to artisanal landings ratio, while unreported subsistence catches were assumed to represent 30% of total reported landings.

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<sup>4</sup> <http://www.fao.org/emergencies/fao-in-action/stories/stories-detail/en/c/1176104/>

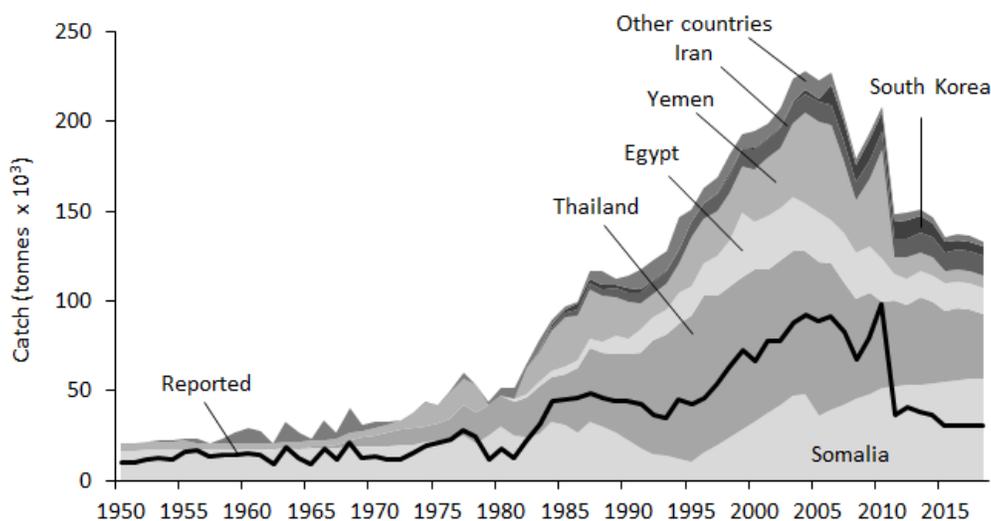
## Foreign catches

Foreign catches were updated using the Glaser *et al.* (2019) study on foreign fishing in Somalia as well as the previous study of Glaser *et al.* (2015), which had been integrated in Cashion *et al.* (2018). The foreign catches reported in Glaser *et al.* (2019) were extended to 2018 using information on how these fleets have developed in Somalia's water in recent years. Catches by the trawlers of Egypt, Greece, Italy, Kenya, and South Korea were carried forward unaltered from 2015 based on Glaser *et al.* (2015). Thailand had previously ceased to fish in the Somalia EEZ in 2009, but is known to have restarted fishing in 2018 (Glaser *et al.* 2019). Here, the 2018 catch by Thai fishers was very conservatively estimated as the catch of one vessel based on the previous catch rate from 2009. Future research will need to evaluate the number of Thai vessels and the size of fleets from other countries fishing in Somali waters.

Since catches of the industrial tuna fisheries are estimated separately (Coulter *et al.* 2020), any foreign fisheries targeting tuna and other large pelagic species were examined to avoid any catch double-counting. Although the fisheries by Iran and Yemen in Somali waters are pelagic in nature and target tunas, Cashion *et al.* (2018) found that these catches were severely underestimated in the data reported by the Indian Ocean Tuna Commission, which forms the Indian Ocean data foundation used by Coulter *et al.* (2020). Therefore, in this reconstruction the Iranian and Yemeni catches (Glaser *et al.* 2019) were retained and carried forward. However, when updating the industrial tuna reconstruction, it will be important to avoid double-counting these catches and also to ensure that they are not over estimated.

## Results and Discussion

Since 2010, 57% of the total catches taken within the Somali EEZ were deemed to have been domestic in nature (Figure 1).



**Figure 1.** Catches in the Somali EEZ waters for 1950-2018, by fishing country. “Other countries” consists of additional countries (primarily Italy, Japan, Sudan, and Taiwan) with minor catches.

All domestic catch is considered to be taken by small-scale fisheries, and over 80% of domestic catches are considered artisanal. Domestic catches have been steadily increasing over time; however, in the more recent years, they seem to be levelling off. Foreign fishing fleets from at least eight countries engaged in illegal fishing in Somalia, primarily from Egypt, Iran, South Korea, Thailand and Yemen.

## Marine biodiversity protection

Somalia has agreed to protect its biological diversity through the international Convention on Biological Diversity (Aichi) (Marine Conservation Institute 2020). There are some discrepancies in the available data

about MPAs' existence and regulations, as the MPAtlas states that Somalia supposedly has one MPA, the Hoby National Park (MPA extent not known; Marine Conservation Institute 2020). However, the WDPA indicates that Somalia has no area under marine protection (UNEP-WCMC and IUCN 2020) and the Ramsar sites information service does not indicate any wetland of international importance in the country (Ramsar sites information service 2020).

The Hoby Grassland and Shrubland ecoregion, where the National Park is supposed to be, comprises sand dunes dominated by perennial dune grasslands and sedges (WWF 2020). The Hoby National Park reserves may have extended their protection to the surrounding waters. However, due to the political instability of the country, information is not available. “[...] it is not known how much habitat remains in this ecoregion, nor how fragmented it has become. The only official protected area is Lag Badana Bush-Bush National Park, but this is undoubtedly no longer functional. [...] No recent information on threats is available. It is known that local populations use the scrub and grassland habitats of the ecoregion to graze their animals and gather fuelwood. The recent political instability and clan warfare in Somalia may have impacted habitats through the displacement of people to the coastal strip from urban centers and from areas further inland” (WWF 2020).

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