The shark fin trade

The most common practice related to catching sharks is finning, which occurs when a fin is sliced off and the remaining body get dumped overboard while still alive (Ilouan 2017). The fin soup was once a delicacy in Asian nations reserved for the upper class, but in recent years, has become more available to a wider spectrum of the population due to economic growth. Sharks have for generations been an important resource for coast communities in developing countries (Simpfendorfer et al. 2011). Hong Kong and Guangzhou, mainland China, are the largest shark fin markets and consumption centres in the world (Cardeñosa 2020).

Do not fear the shark

Several shark populations have declined in the last four decades, mainly due to overexploitation to meet the high demand for fins in Asia and meat in other countries. Estimates suggest that up to 73 million sharks are killed each year (until 2006) within the shark fin trade (Clarke et al. 2006). Over 95% of the actual shark meat is wasted when finning, because fishermen rather prioritize the space onboard for valuable fins instead. Sharks play an important role in the marine ecosystem, an apex predator at the top of the food chain. They have a significant function and are necessary for maintaining the natural equilibrium in the marine environment (Knip et al. 2010). If they were to go extinct, this would disturb the distribution of predators and prey along the food chain (Heupel et al. 2014). For example, the tuna would witness a severe spike in population which would ultimately decrease the population of squid, the tuna's primary food source. This is a scenario that might happen if overfishing where to continue. Currently 11 shark species are listed as endangered in the CITES list (CITES n.d). Asia remains the main importer and exporter of shark fins, in a flourishing commerce with a rising trend in prices (Worm et al. 2013). In fact, the price of a shark fin has doubled from 21USD in 1997 to 42USD per kilogram as of today (Clarke et al. 2007).

Policies

However, the demand for shark fins in China is declining. Vendors in Guangzhou reported that there is 82% decline in sales. Moreover 85% of Chinese consumers, said in an online survey that they gave up the shark fin soup (Jaiteh et al. 2014). By banning the shark fin import, given that most of the shark fin are sent to China or Hong Kong, this will shut down most of the market and give a substantial boost to the shark population (Iloulian 2017). It is fair to argue that the biggest trade market in the world is the U.S. The fishing industry have been strongly affected by the Magnuson-stevens act of 1976, which also includes shark fishing. The act has been amended twice, to cover existing loopholes. The first amendment was in 2000, when President Bill Clinton signed the Shark Finning Prohibition Act. In 2011 the act was amended for a second time with the Shark Conservation Act (Iloulian 2017). The U.S. federal law does not allow any persons within the U.S. jurisdiction to remove any of the fins at sea or to land any fin that is not naturally attached to the corresponding carcass (Iloulian 2017). The European Union has taken inspiration from the U.S. when implementing policy on shark finning. In 2003 the EU enacted their shark fin act. However, this act contained loopholes. The best example for this is: The regulation allowed an exception for shark finning if 1) the vessel with the carcass could find better use for the entire shark and 2) it had a special permit that approved the work (Iloulian 2017). These loopholes have in recent years been closed.

Shark finning and the SDG 2030 agenda

The shark finning industry has a great impact on multiple goals and targets considering the UNs sustainable development agenda 2030. Especially considering management and protection of marine and costal ecosystem (14.2) and regulate harvesting (14.4). For instance, illegal, unreported, and unregulated fishing is carried out across the globe mainly by China. An analysis from the Environmental Justice Foundation (2022) claims that China's Distant Water Fleet is fishing without license or authorization. The crew onboard has witnessed the incident of finning multiple times from inside the vessels. As the demand for fins increased the industry became more valuable, with the result that several sharks are now in danger of extinction due to overfishing. Scalloped hammerhead and the smooth hammerhead are the most finned sharks, estimates suggest that between 1.3 and 2.7 millions of these two species are killed each year because of shark fin trade (Mishler 2021). Measures are currently being

implemented and improved such as the Shark Finning Prohibition Act and Shark Conservation Act to prevent or minimize the fishing of sharks (14.c).

However, this topic is also connected to different aspects of the 2030 agenda than target 14 itself. About 95% of the shark meat is wasted through finning (Iloulian 2017), instead of feeding one person, approximately nineteen people could be fed if the whole body where to be utilized. The meat itself does not even make it to the ports, this practice is not efficient in terms of ending hunger (2.1). This target aims to ensure nutritious and sufficient food all year round, however the product that does arrive is the fin, which itself do not particularly contain any valuable nutrients. The US Food and Drug Administration (2016) recommend that pregnant women avoid eating shark meat due to its high level of mercury (Sequin 2016). Target 12.2 "By 2030, achieve the sustainable management and efficient use of natural resources". This links to the shark fin industry because that shark finning, as it is now, is not an efficient use of natural resources.

Carbon is a contributor to climate change and an important element in the cycle of life. Sharks maintain the carbon cycle in the ocean by feeding on the dead matter on the sea floor. Because of this, research has shown that sharks can isolate relatively large amounts of carbon in their bodies. When they die, they sink to the sea floor and gets eaten by other predators, and in this way the carbon is recycled (Motivarash et al. 2020). This relates to the SDG13 – climate change.

Several NGOs are already working for eliminating the global shark fin industry, like the NGO "Mission Blue" (Mission Blue 2016). This is a direct link to SDG17 – Partnerships for the goals, target 17.16 (UN n.d).

The needs for further research

Traditionally in China, they believed that consuming strong and fierce animals would give them strength and for that reason the shark fin soup was suitable for the emperor and his family (Dell'Apa et al. 2014). The traditional beliefs are the main driver for exploitation of the sharks and other wildlife animals in China. A big part of the cultural beliefs concerning food is associated with a person's social status. There are several studies on the shark finning issue, its markets and trade, but there is a lack of research concerning the specific cultural beliefs and how this shapes the exploitation of sharks (Dell'Apa et al. 2014).

A journal from ICES poses that there is a lack of local information on fishery and history of targeted species (Jaiteh et al. 2016). In tropical and developing regions there is an absence of resources and institutional capacity to analyze and incorporate data from fisheries, which often cause problems to the development of management. This can be an area to make improvements to better further research.

What now?

The shark fin trade as it is carried out now, is an unsustainable, cruel, and unnecessary act which needs to be eliminated. To abolish this practice, international laws must be implemented, controlled, and followed up. Even though measures have been introduced and enforced some places, progress in this field is still needed to account for declining shark populations. Illegal, unreported, and unregulated fishing still occurs despite the arising concern for this irresponsible consumption. The shark fin trade could become more sustainable if the whole shark is utilized. However, this do not make up for the ongoing overfishing of a keystone specie in the food web. Work within the field of policy and international agreements have paid off in specific areas, but further cooperation and partnerships are necessary to expand and strengthen the collaboration against shark finning. The importance of how cultural aspects and traditions affects the use of food in Asian culture should not be ignored. Therefore, scientific research and information must be provided to the public. Despite good research on shark finning as an issue, its markets and belonging trade, needs such as local information and institutional capacity is crucial for further research.

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