

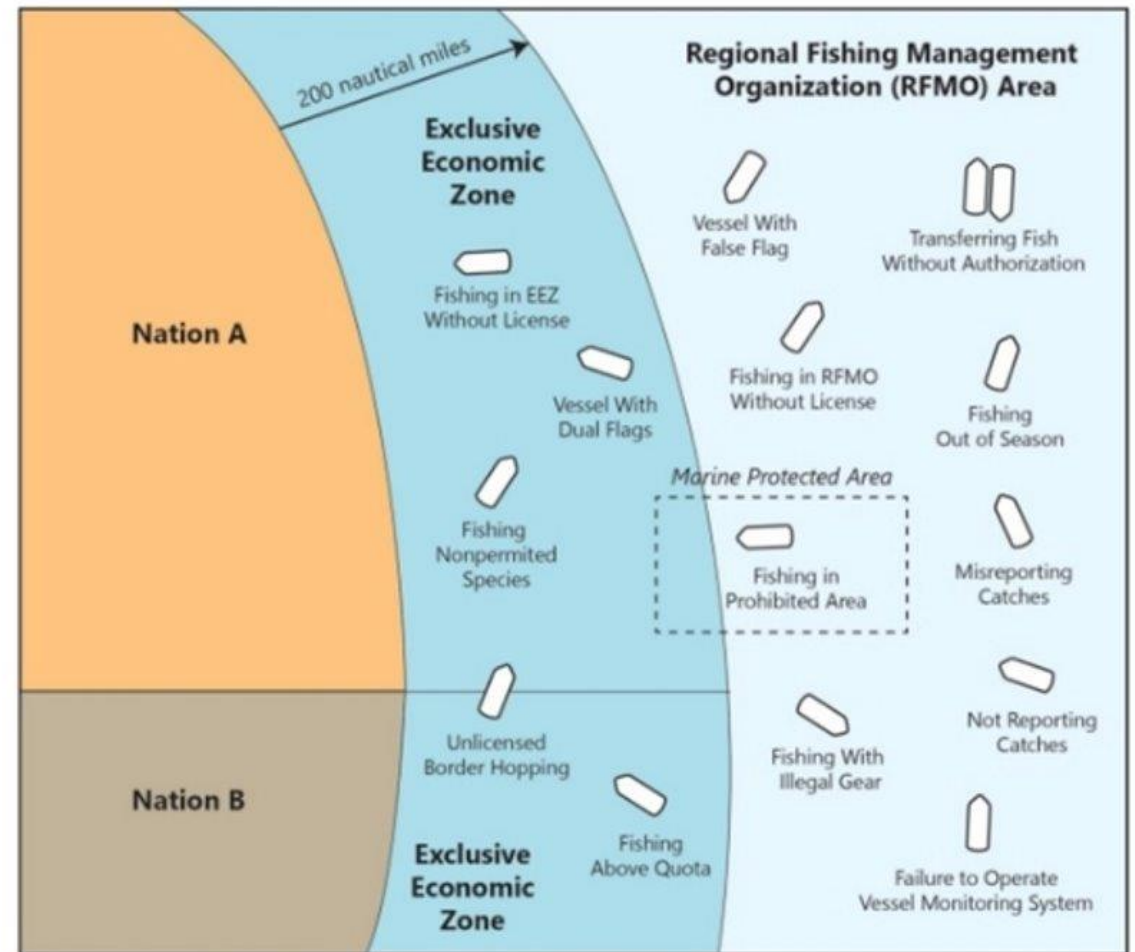
IUU Fishing Overview

Whitley Saumweber and Tyler Pavlowich | 16 June, 2026

IUU Fishing

- Illegal, Unreported, Unregulated fishing
- Occurs both within national jurisdictions and on the high seas
- Biodiversity, fisheries management consequences
- Often intertwined with organized crime and human rights abuses such as human trafficking, forced labor

Common Forms of IUU Fishing



Unregulated fishing may also occur on the high seas, outside of any Exclusive Economic Zone (EEZ) or Regional Fishing Management Organization (RFMO) area.

Source: U.S. National Intelligence Council (NIC), "Global Implications of Illegal, Unreported, and Unregulated (IUU) Fishing," September 19, 2016, 6, https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/NIC_White_Paper_on_IUU_Fishing.pdf.

Illegal Fishing

- Conducted by national or foreign vessels within jurisdiction of a coastal state without permission or in contravention of laws and regulations
- Vessels flagged in a state which is party to the RFMO or international treaty, but operates in contravention of the laws and regulations of that convention or treaty
- In violation of national laws or international obligations, including cooperating states of RFMOs
- Examples:
 - Fishing in another country's EEZ
 - Fishing in another EEZ as part of the same RFMO, but violating the regulations
 - Fishing in a restricted area such as a Marine Reserve
 - Fishing for protected species



Photo: Global Fishing Watch

Source: [FAO.org/what-is-iuu-fishing](https://www.fao.org/what-is-iuu-fishing)

Unreported Fishing

- Unreported or misreported catch to the relevant national authority, in contravention of national laws and regulations
- Unreported or misreported catch, in contravention of reporting procedures of that Regional Fisheries Management Organization
- Examples:
 - Incorrect or forged catch logs reported to relevant authorities, national and/or RFMO
 - Bycatch- incidental catch of non-targeted species



Photo: FAO.org

Source: [FAO.org/what-is-iuu-fishing](https://www.fao.org/what-is-iuu-fishing)

Unregulated Fishing

- A vessel fishing within applicable jurisdiction of an RFMO, flagged in a State which is not party to the convention or bilateral treaty, and inconsistent or in contravention of conservation and fisheries management measures of that organization
- Fishing in an area or for stocks which have no conservation or fisheries management measures or regulations in place, inconsistent with State responsibilities for the conservation and management under international law
- Examples:
 - Vessel flagged in a state which is not party to the agreement or convention
 - Fishing for species that are considered non-targeted species and therefore have no regulations
 - Fishing in areas with limited fisheries management regulations
 - Bycatch
 - THE HIGH SEAS- BBNJ Biodiversity Beyond National Jurisdiction

Source: [FAO.org/what-is-IUU-fishing](https://www.fao.org/what-is-IUU-fishing)

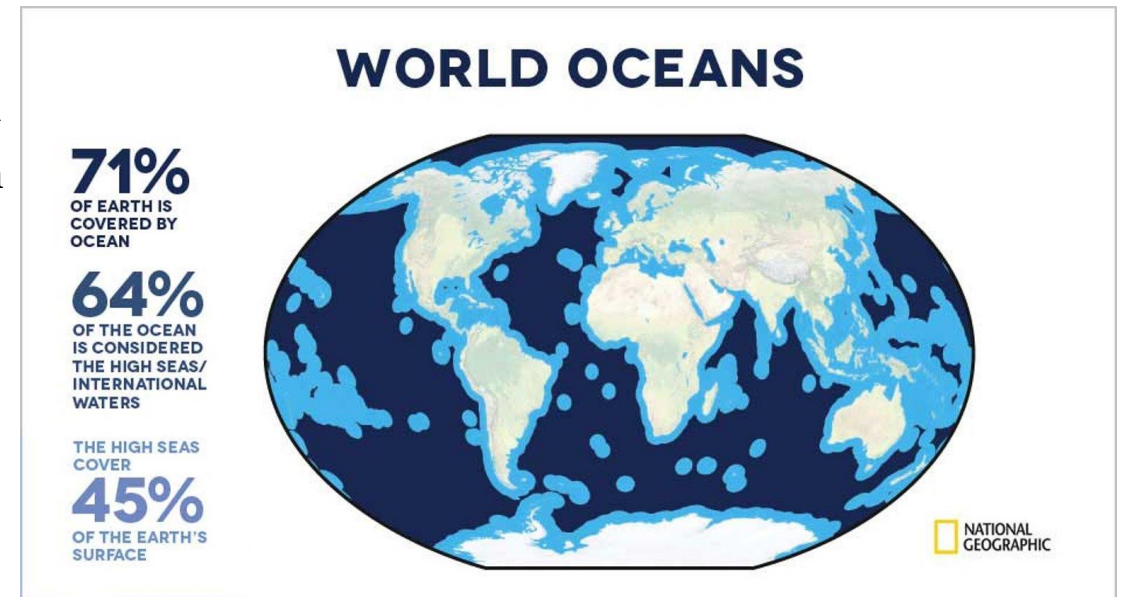


Photo: National Geographic

IUU Fishing Extent

- Approx. 1/3 of the global seafood trade is the product of IUU fishing
- 26 Million tonnes of fish caught annually, USD 10-23 Billion (FAO.org)
- Up to \$50 billion in lost revenue
- Recent studies show that up to 90% of long-line fisheries are engaged in IUU fishing in ABNJ



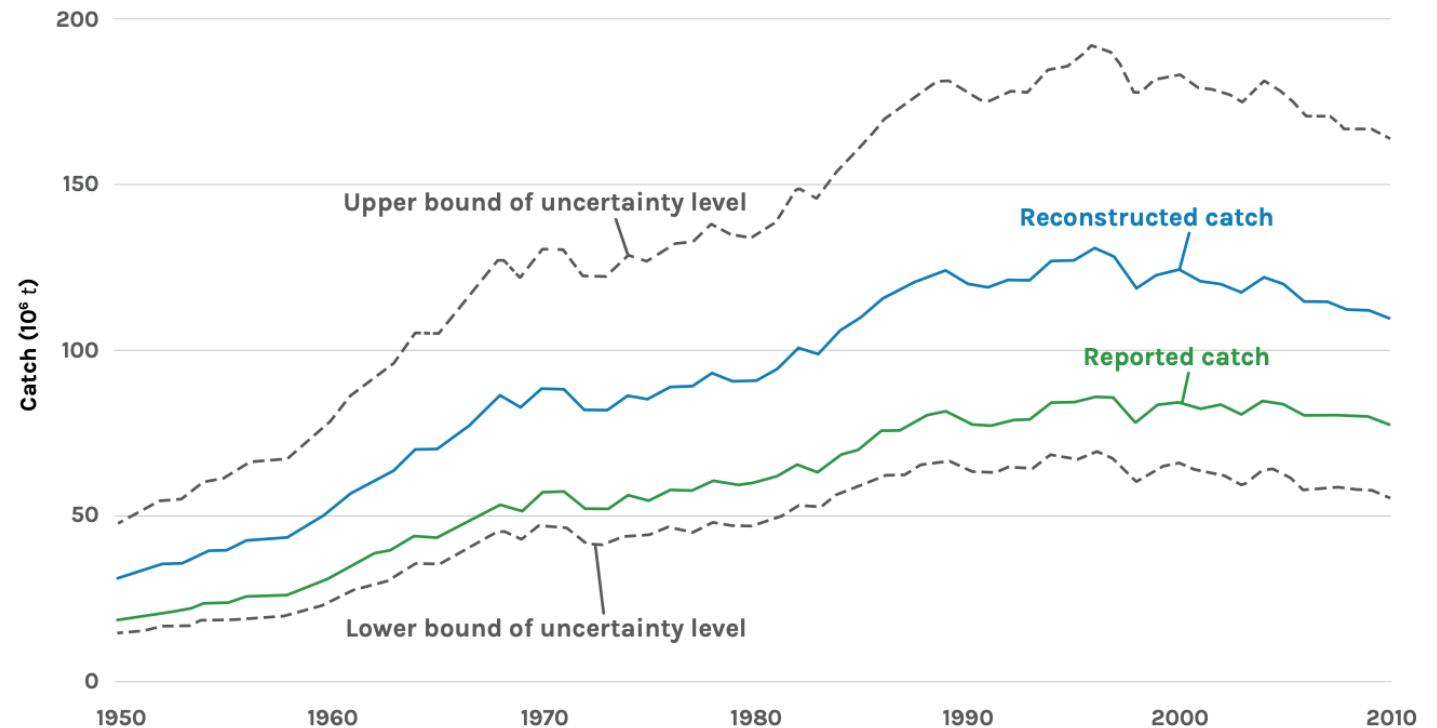
Photo: World Ocean Review

What Drives Forced Labor and IUU Fishing?

Falling Fishing Yields:

- Since 1980 fisheries employment has increased by 60% while catch has fallen slightly.

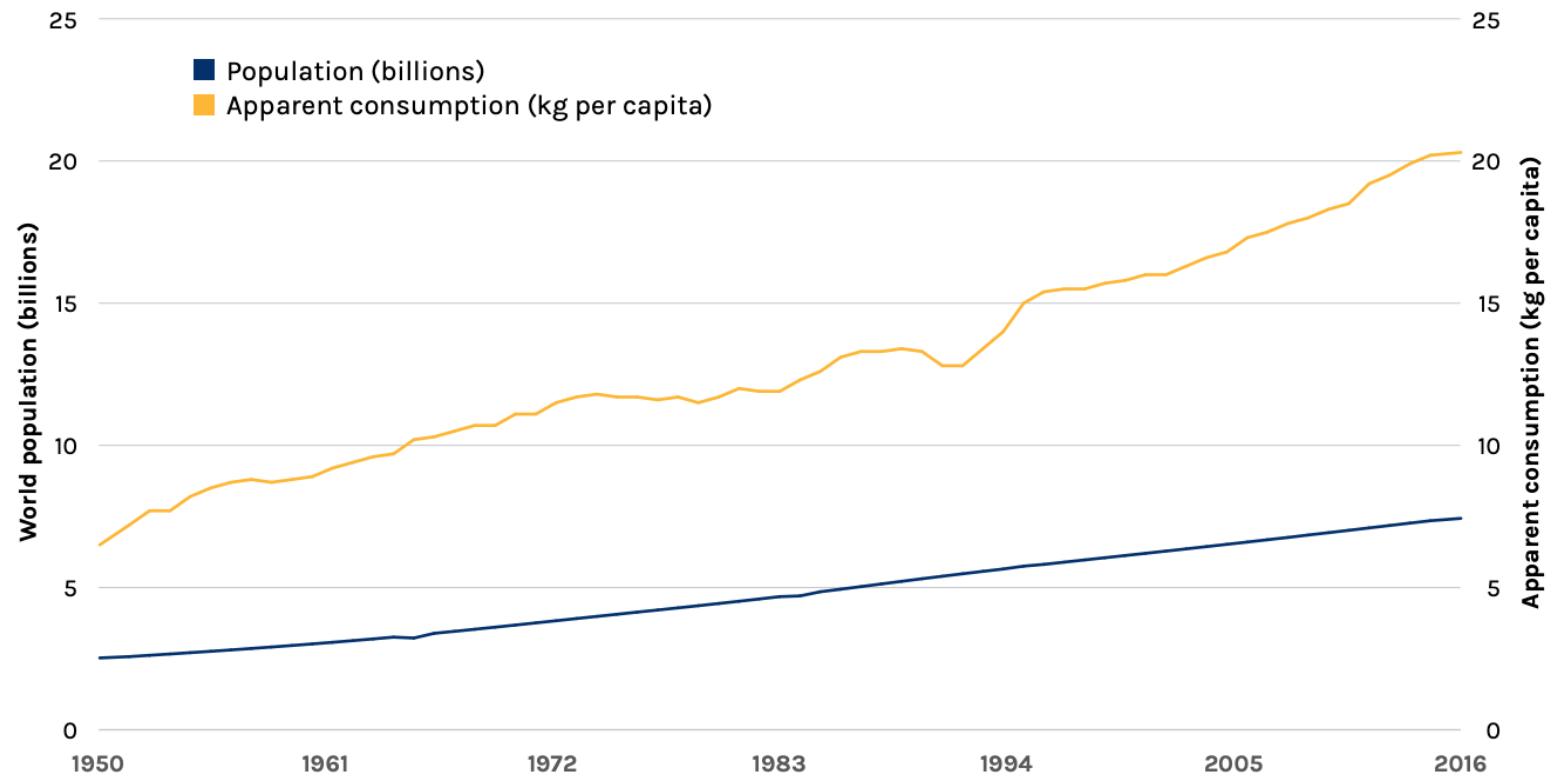
Figure 2. Trajectories of Reported and Reconstructed Marine Fisheries Catches, 1950–2010



Source: Pauly and Zeller 2016.

Marine Resource Competition

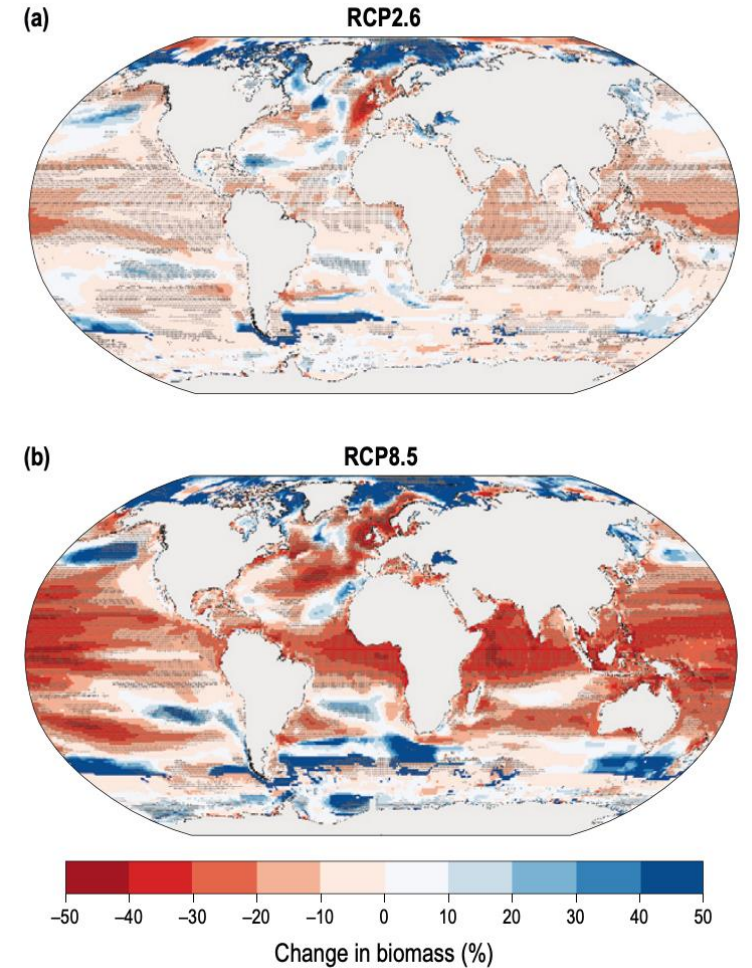
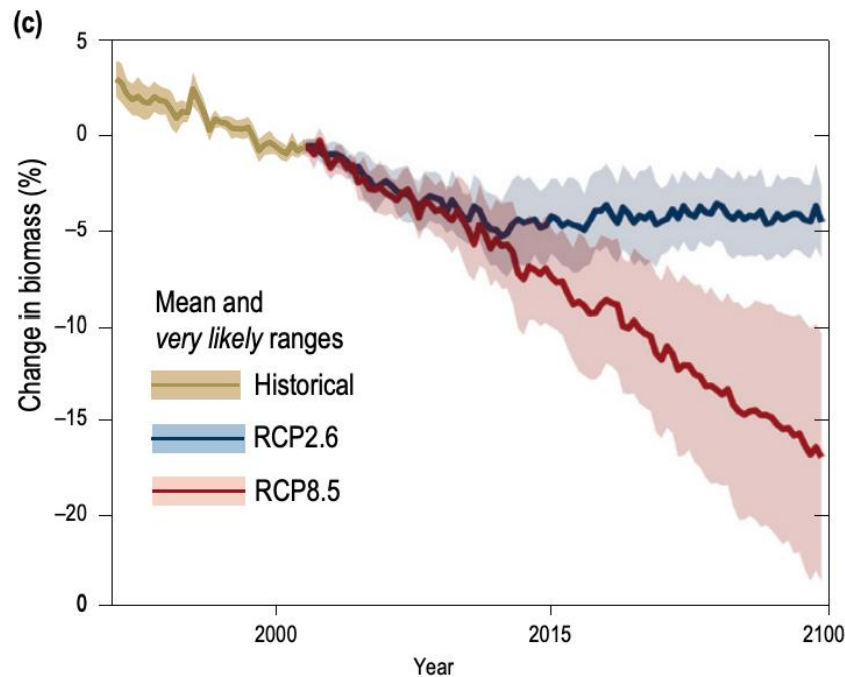
Figure 3. Increase in World Population and Apparent Consumption of Fish, 1950–2016



Data and image from the High Level Panel for a Sustainable Ocean Economy

A Warmer Ocean Sustains Less Life

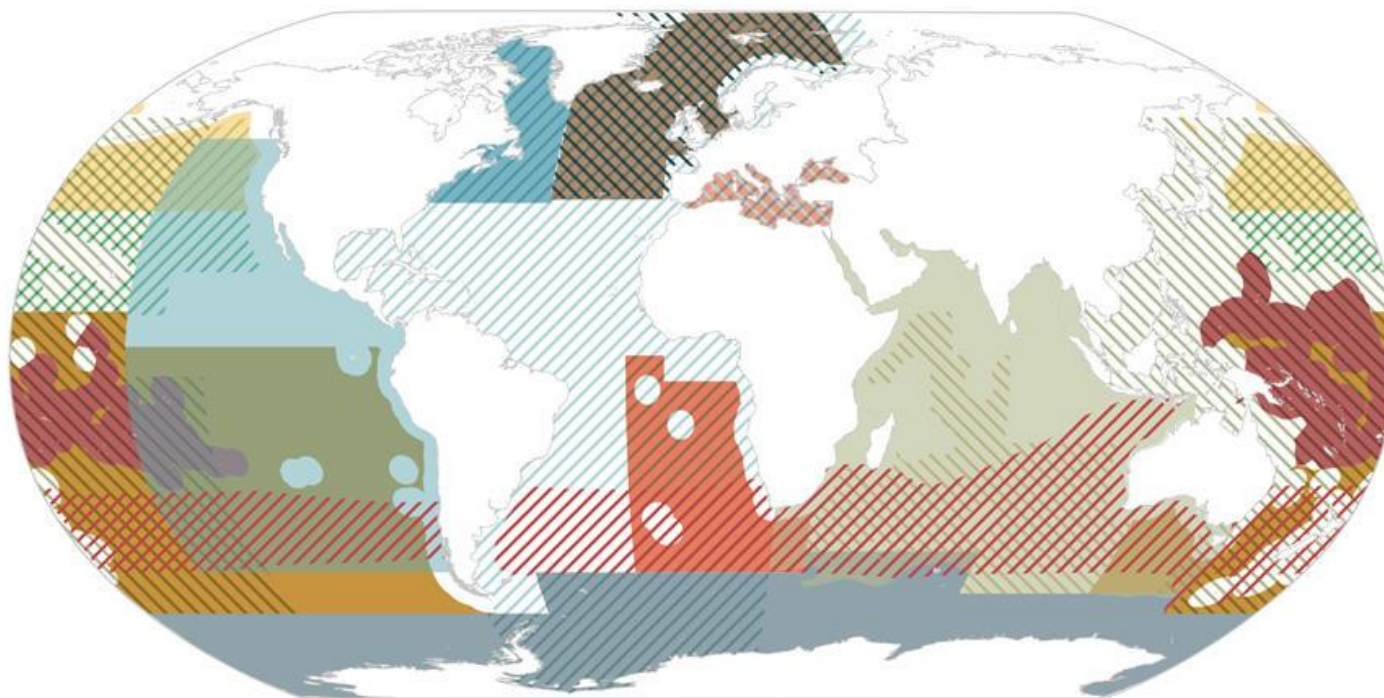
- Ocean biomass may decline by 20% globally and 50% in parts of the tropics by 2100 (IPCC SROCC)



Overlapping of international governance organizations with high seas mandates

Map 1

International Governance on the High Seas



Organizations included



An Ungoverned Ocean:

- The High Seas encompass 130 million square kilometers or two thirds of the world's oceans
- UNCLOS Fish Stocks Agreement mandates cooperation for shared resources on the high seas and sustainable management of resources within EEZs
- But management on high seas is piecemeal and with EEZs highly subject to local capacity, regional competition, and pressure from distant water fishing fleets

The Extent of the Problems

- **The Economic Cost of Illicit Fishing:** \$26 to \$50 billion per year globally
- **The Ecological Cost of Illicit Fishing:** 90% of fisheries are at capacity or overfished
- **The Prevalence of Forced Labor:** example: 76% of migrants in the Thai fishing industry have been held in some form debt bondage
- **The Ill-Sourced Fish on U.S. Plates:** Wild-caught U.S. imports sourced from IUU valued at \$2.3B

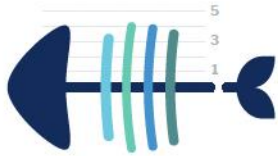
Ten worst-performing countries

for IUU fishing risk scores by type, for all types of state responsibility, 2025

All Types

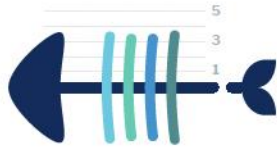
#1 China

3.60



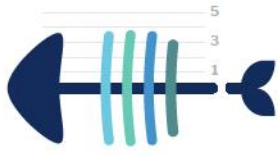
#2 Iran

3.01



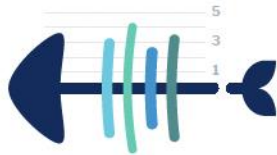
#3 Indonesia

3.00



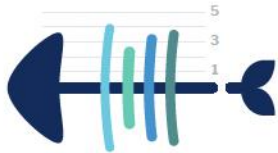
#4 Russia

3.00



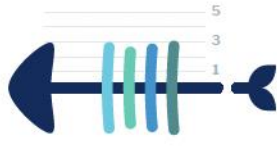
#5 Yemen

3.00



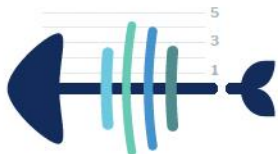
#6 India

2.99



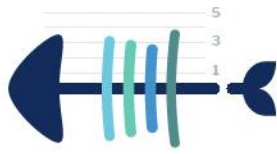
#7 Taiwan

2.98



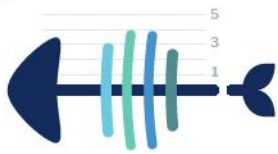
#8 Comoros

2.85



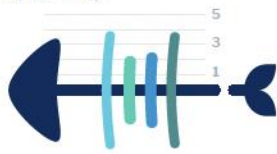
#9 South Korea

2.75



#10 Eritrea (and Somalia)

2.74



The fishbone colours, by responsibility:

Coastal Flag Port General

Scores for regions

by type, for all types of state responsibility, 2025

All Types

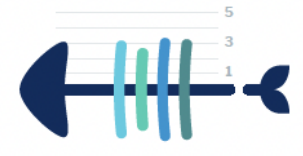
#1 Asia

2.55



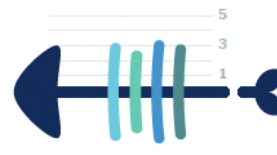
#2 Middle East

2.41



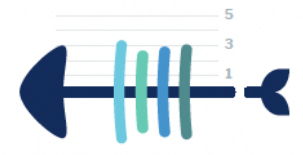
#3 South America

2.34



#4 Africa

2.33



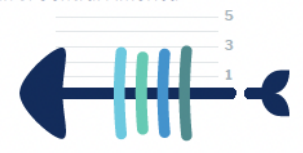
#5 North America

2.28



#6 Caribbean & Central America

2.19



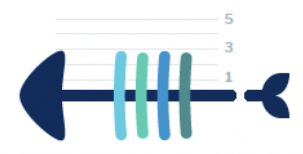
#7 Oceania

2.14



#8 Europe

2.05



Illicit Fishing and Human Rights Abuses

- Fisheries employment has increased by 60% since 1980, though catch has plateaued
- Many fishers spend years at sea against their will
- IUU costs up to \$50 billion per year and accounts for 33% of U.S. imports
- 90% of global fisheries are at capacity or overfished

One by one, the men described to church officials and later to government investigators their captivity on a ship of horrors... Insubordinate crew were sometimes locked in the refrigerator. Others were forced to eat rotten fish bait. On good days, shifts lasted 20 hours. Sometimes they worked for 48 hours straight.

—Ian Urbina, *The Outlaw Ocean*

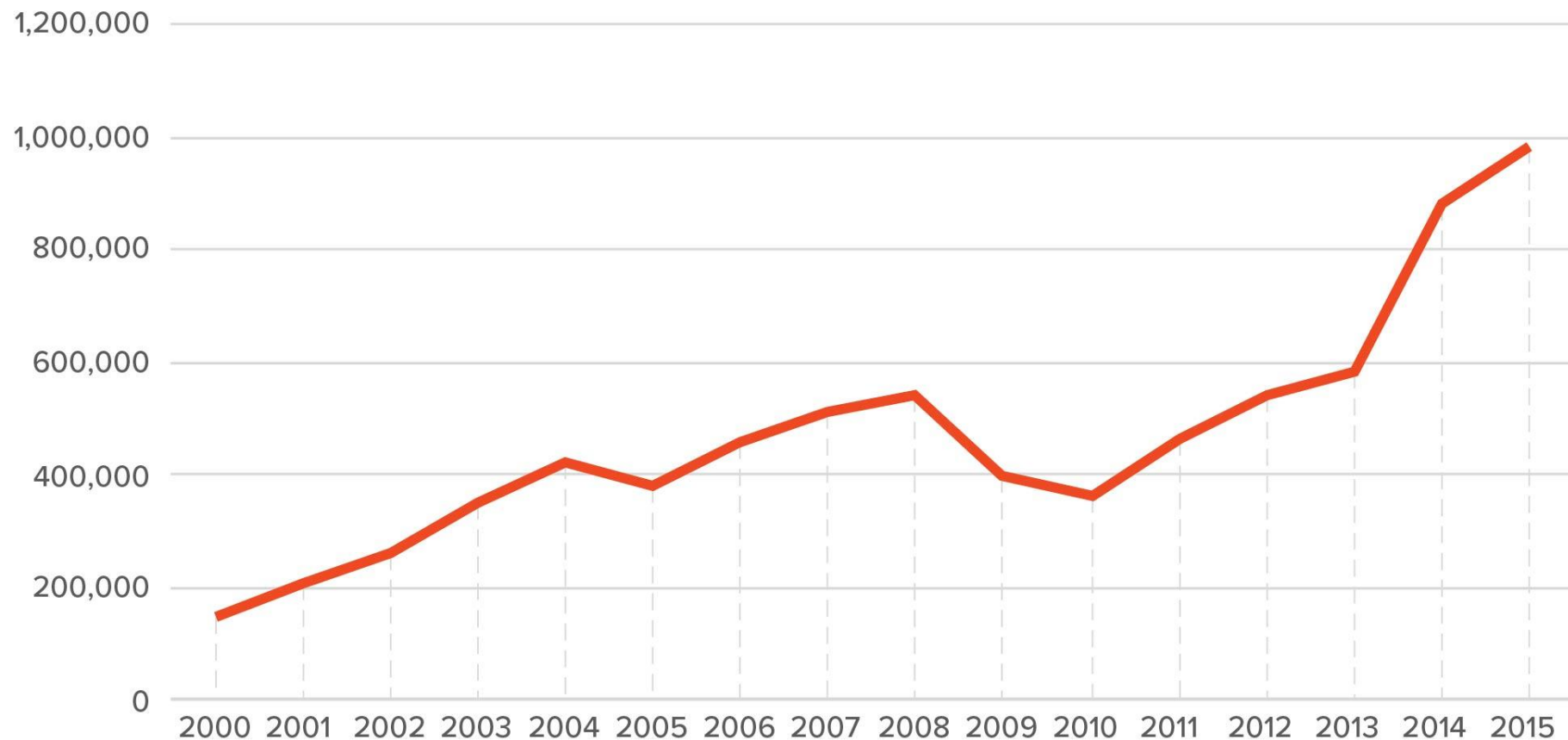
IUU Fishing and Risk

- Acute
 - Conflict
 - Human Rights
 - Economic
 - Food
- Strategic
 - Sovereignty
 - Sustainability
 - Security



Photo: China Dialogue Oceans

CHINESE DISTANT-WATER FISHERIES CATCH HAS SKYROCKETED SINCE 2000



Distant Water Fishing

Main Actors in the IUU fishing industry

(Distant Water Fishing Fleets)

- 90% of DWF Activity by:
 - China
 - Taiwan
 - Japan
 - South Korea
 - Spain

Driven by:

- Economics
- Governance and Enforcement Capacity
- Political influence/corruption

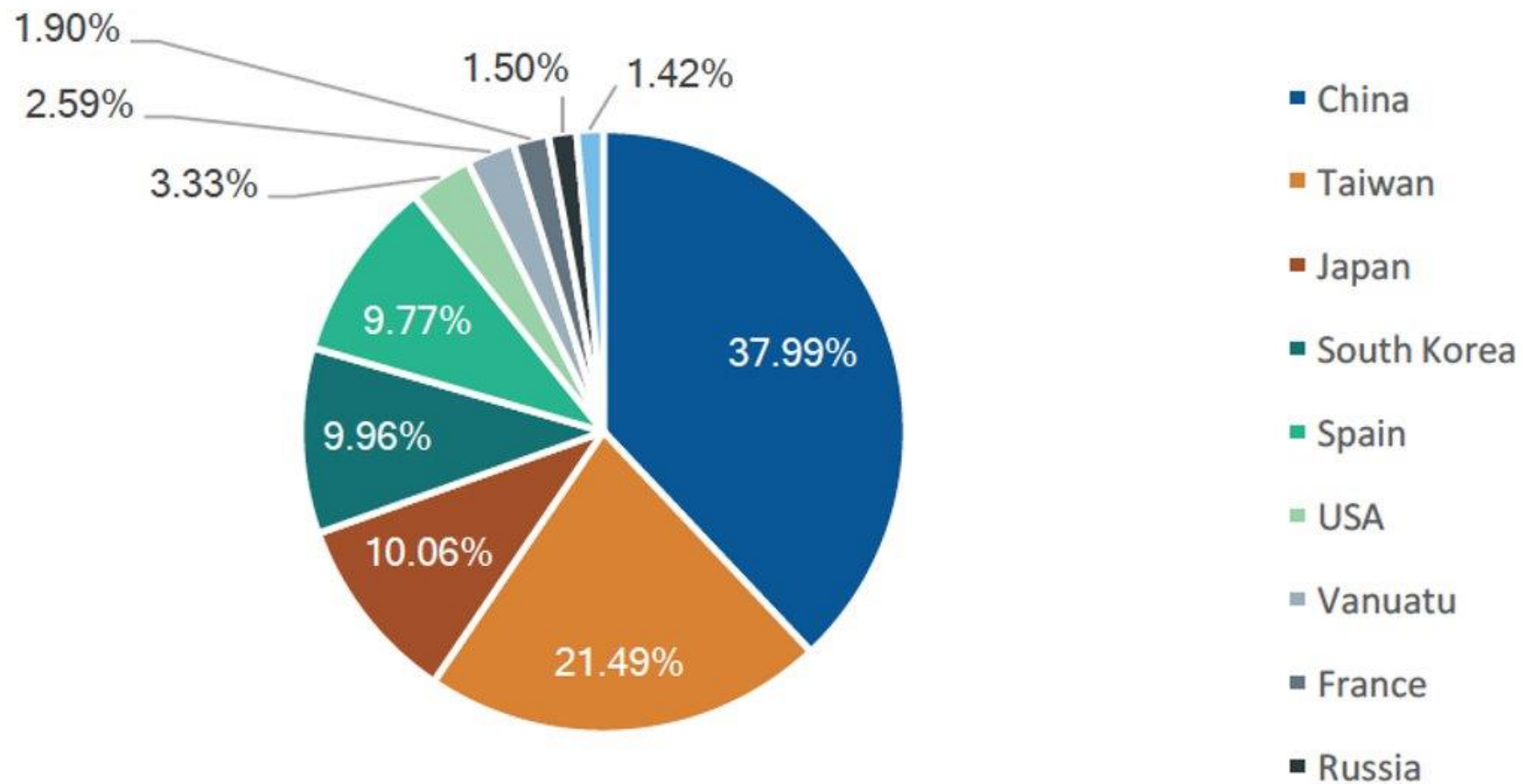
FIGURE 1: TOP TEN DISTANT WATER FISHING FLEETS BASED ON AIS DATA FROM GLOBAL FISHING WATCH, 2016-2017



Stimson Center: <https://www.stimson.org/2019/shining-light-need-transparency-across-distant-water-fishing/>

Distant Water Fishing

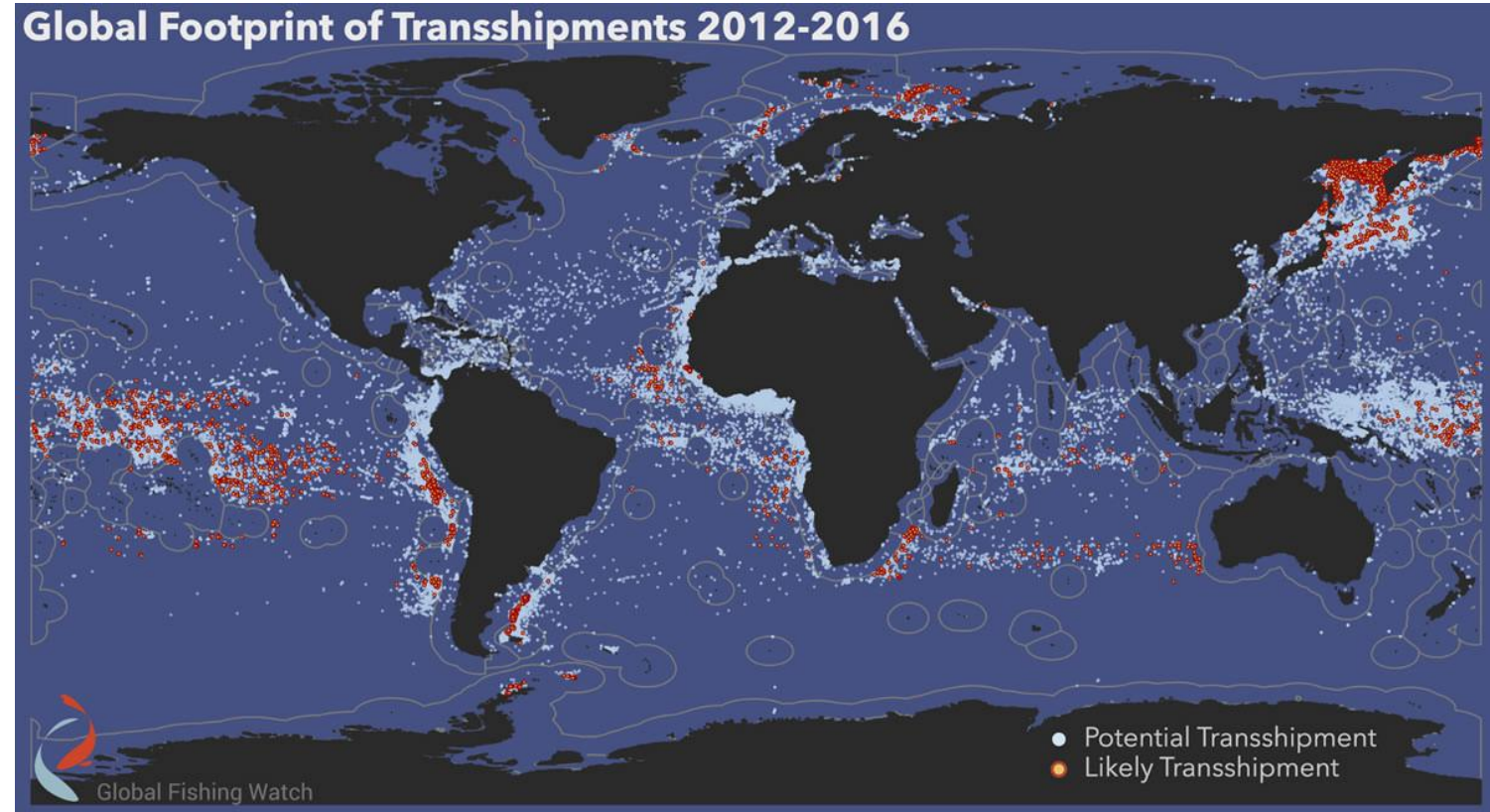
FIGURE 2: PROPORTION OF FISHING EFFORT BY THE TOP TEN DWF FLEETS BASED ON AIS DATA FROM GLOBAL FISHING WATCH, 2016-2017.



Stimson Center: <https://www.stimson.org/2019/shining-light-need-transparency-across-distant-water-fishing/>

Emerging Technologies: Democratizing MDA

- AI based analytics of AIS tracked behaviors
- Expansion and publication/sharing of VMS applications
- Privatized SAR capability and pairing with AI driven analysis to provide radar image based identification of vessels at sea from space
- Detection and identification of RF (ship based radar) signals from space



Policy Solutions

1. Support fisheries management in developing states
2. Regional Enforcement Cooperatives
3. Multilateral vs. Bilateral Ocean Governance
4. Multilateral Instruments:
 1. PSMA
 2. Cape Town Agreement
 3. WTO subsidy negotiations
5. Increased Transparency
6. Focus on links between Sovereignty, Sustainability, Security

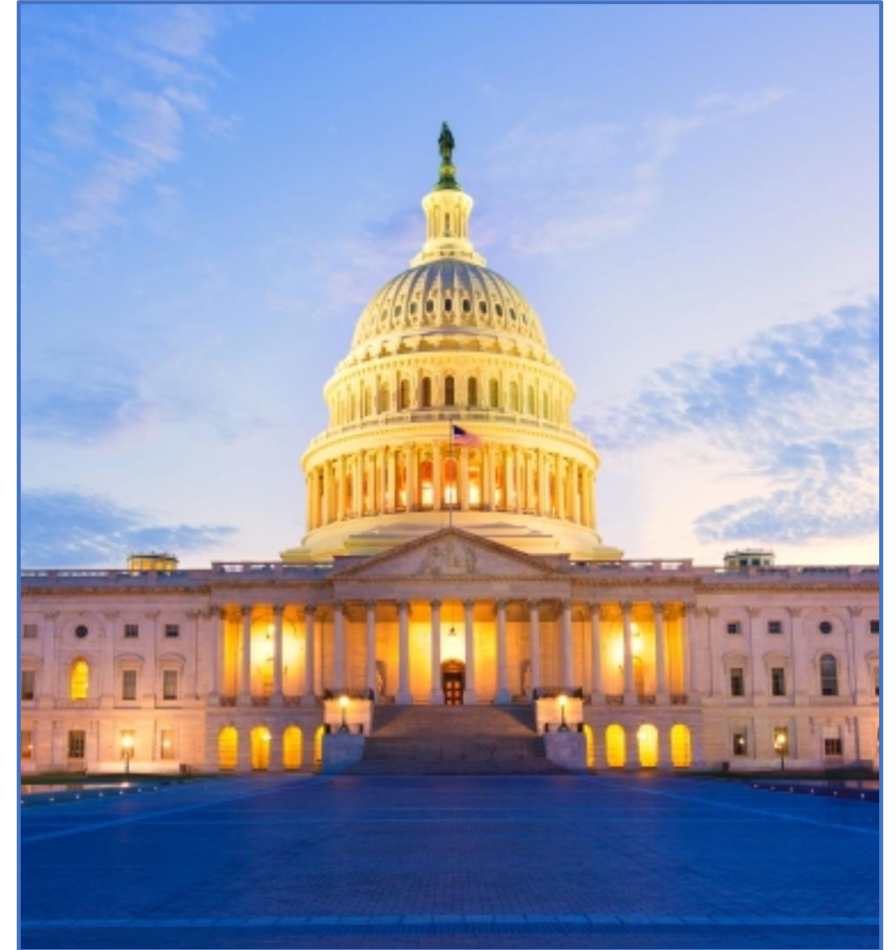


Photo: Adobe Stock

Questions?
