



Global economic losses and risks of labor abuse and IUU fishing

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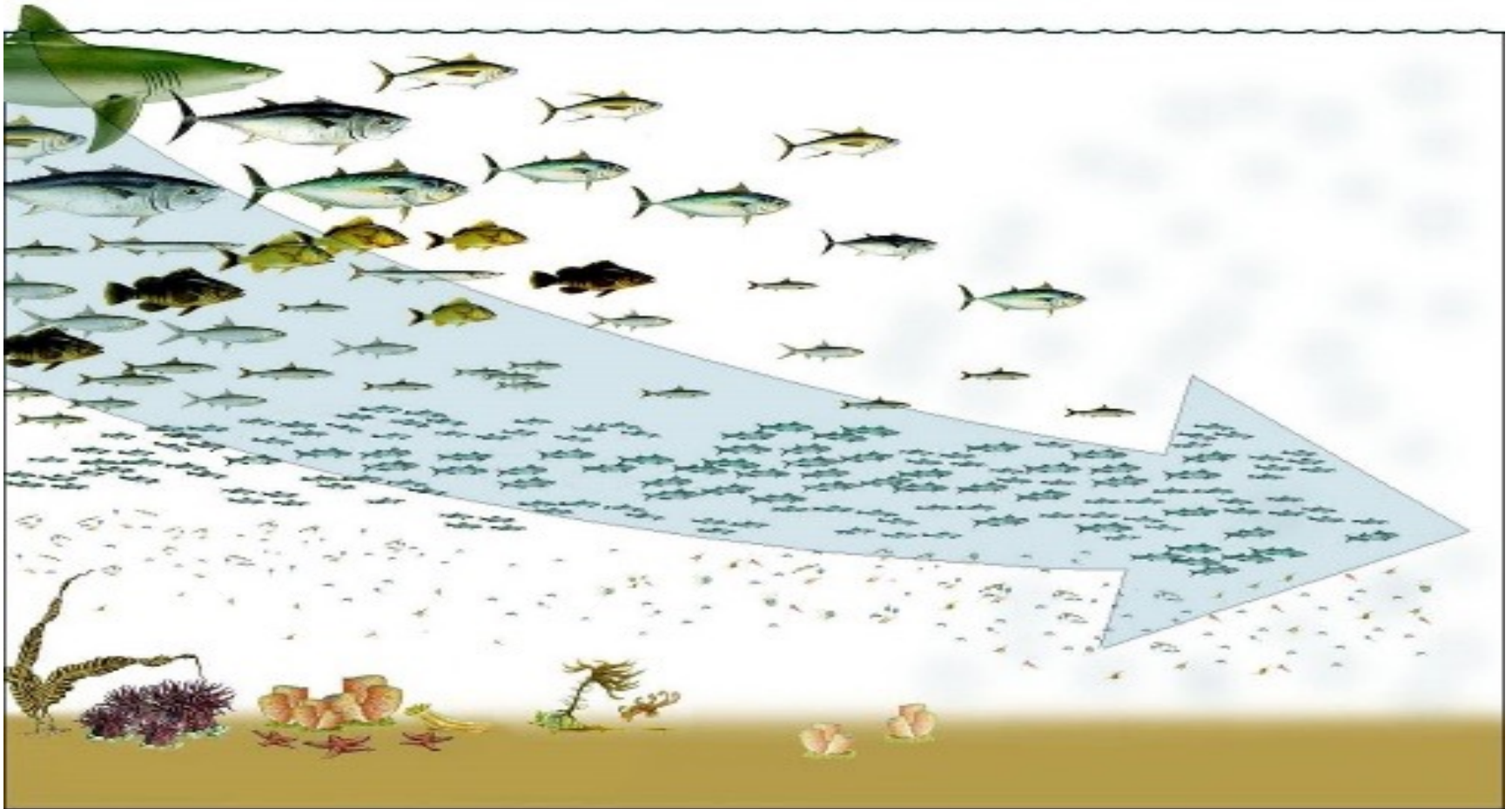
Outline of talk

- IUU activities
- Economic and social impacts
 - Overfishing and food supply
 - How to end IUU activities
- Concluding remarks

IUU fishing definition and impacts

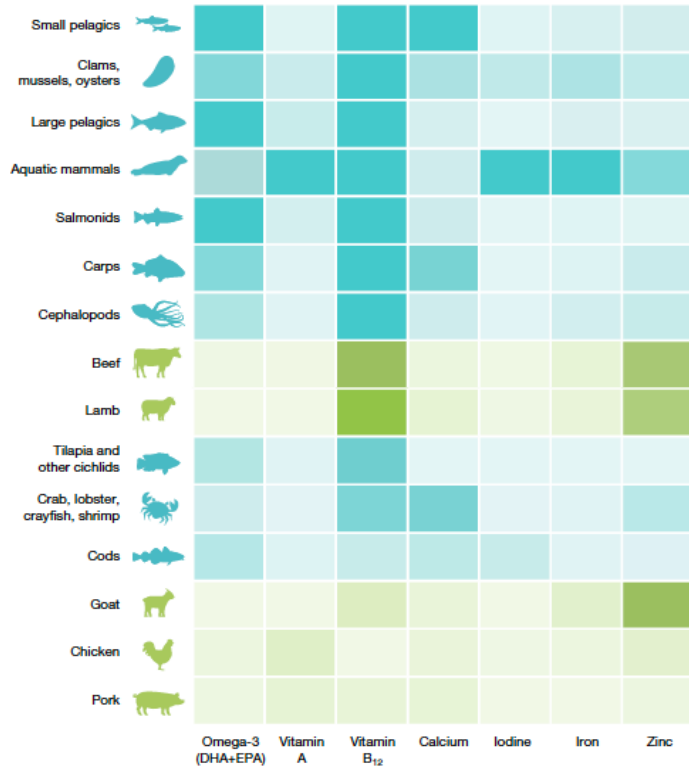
- Illegal, unreported and unregulated (IUU) fishing is a broad term that captures a wide variety of fishing activity (FAO, 2022)
- It is found in all **types of fisheries**; both on the high seas, and from the **capture to value chain**
- IUU fishing **undermines governmental efforts to manage fish stocks** and inhibits progress towards achieving long-term sustainability
- IUU avoid the **operational costs** associated with sustainable fishery management and may harvest more fish and seafood than is allowed

IUU drives overfishing as captured by fishing down marine food web (Pauly et al. 1998)



IUU drives blue food and ocean inequality

149 million of children under 5 years are affected by stunting



Only among adults globally, 2.1 billion are overweight or obese

Around 7.7-14 million catches of IUU/year
Annual gross revenues ≈US\$ 8.9-17.2 billion
redirected out of legal market

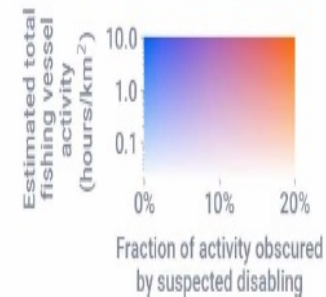
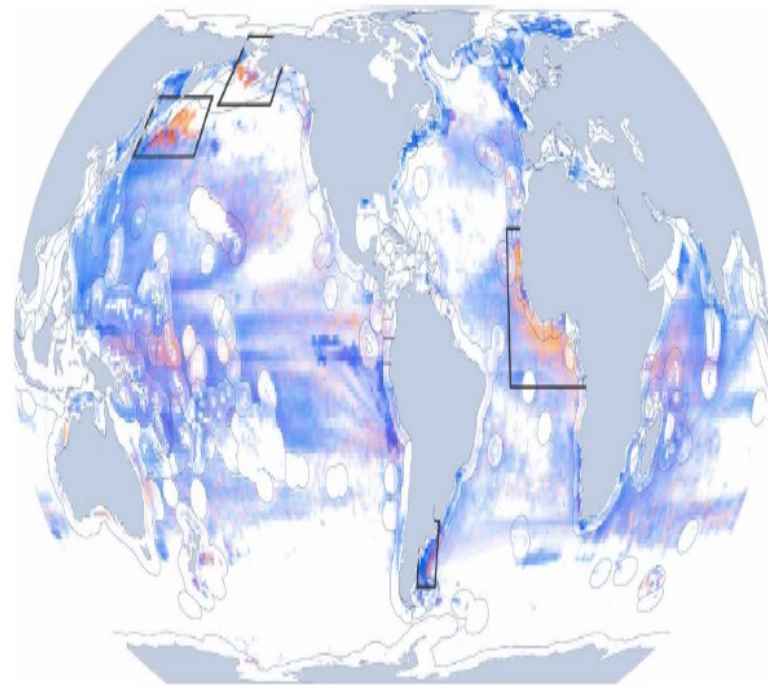
Geographic region	Scenario 1		Scenario 2	
	Catch loss (t × 10 ³)	Gross revenue loss (US\$ × 10 ⁶)	Catch loss (t × 10 ³)	Gross revenue loss (US\$ × 10 ⁶)
Africa	2,153–3,465	3,325–5,358	1,959–3,271	2,944–4,977
Antarctic and sub-Antarctic	0.1–0.2	0.8–1.2	0.1–0.2	0.8–1.2
Asia	4,116–6,635	4,689–7,586	3,618–6,137	3,852–6,749
Europe	959–1,545	1,124–1,811	850–1,436	991–1,679
North America	339–552	780–1,271	241–454	562–1,052
Oceania	31–51	61–99	28–47	55–92
South America	1,104–1,777	679–1,106	1,000–1,673	481–908
Total	8,702–14,024	10,659–17,232	7,696–13,018	8,886–15,459

Potential annual economic impact between US\$ 25.5-49.5 billion redirected out of legal market towards illicit trade

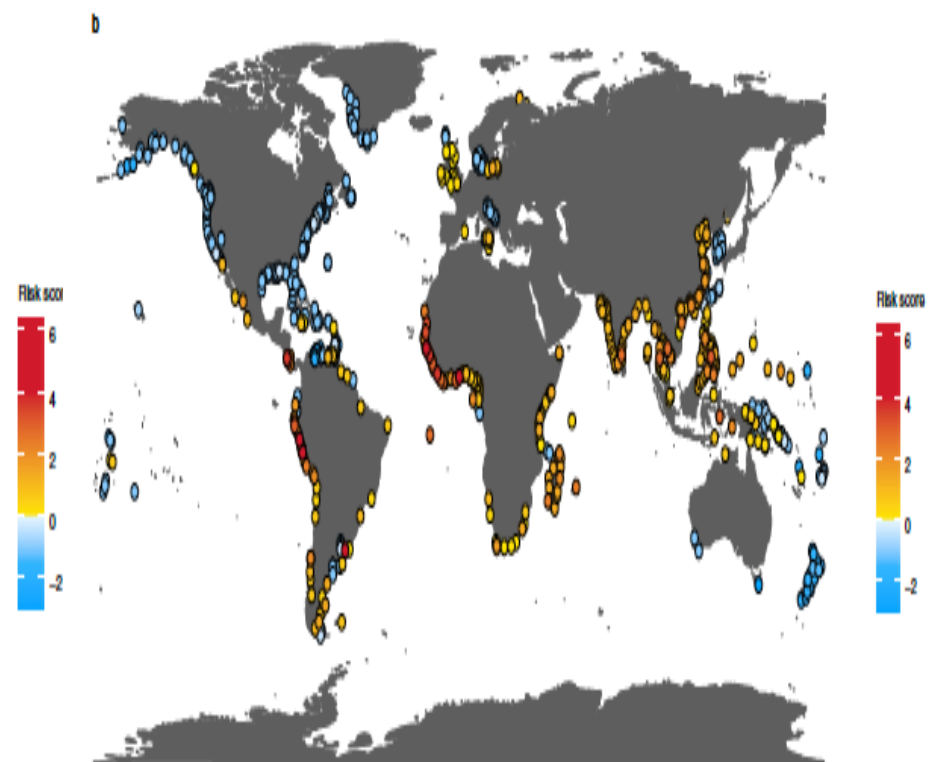
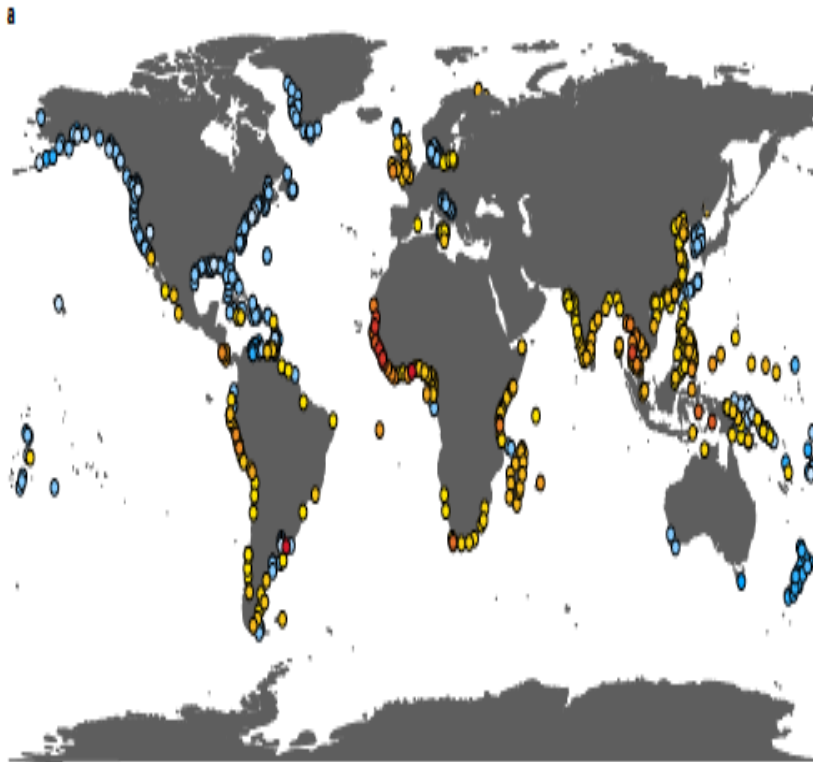
Geographic region	Scenario 1			Scenario 2		
	Economic (US\$ × 10 ⁶)	Income (US\$ × 10 ⁶)	Tax revenue* (US\$ × 10 ⁶)	Economic (US\$ × 10 ⁶)	Income (US\$ × 10 ⁶)	Tax revenue* (US\$ × 10 ⁶)
Africa	8,612–13,877	2,061–3,322	939–1,513	7,626–12,892	1,826–3,086	832–1,406
Antarctica and sub-Antarctic	3.0–4.7	0.8–1.2	0.2–0.3	3.0–4.7	0.8–1.2	0.2–0.3
Asia	12,520–20,255	3,329–5,386	989–1,600	10,284–18,019	2,735–4,792	812–1,423
Europe	3,506–5,651	854–1,376	217–350	3,092–5,237	753–1,276	192–325
North America	2,747–4,473	952–1,550	209–340	1,978–3,703	686–1,284	150–281
Oceania	201–323	45–72	17–28	178–301	40–67	16–26
South America	1,392–2,267	380–619	185–301	987–1,862	270–509	131–247
Total	30,591–49,455	8,207–13,268	2,651–4,286	25,503–44,367	6,842–11,903	2,210–3,845

Hot spots of unseen fishing vessels

- Vessels disable AIS devices adjacent to EEZ-High Seas (e.g. South West Atlantic Ocean, West Africa)
- Transshipment is the at-sea transfer of catch, personnel, and supplies between fishing vessels and refrigerated cargo vessels.
- Potential for human rights violations due to the length of time vessels are able to remain at sea.



At-sea risk areas are primarily driven by (a) fishing vessel linked to poor control, (b) high ownership by countries other than their flag state and (c) Chinese-flagged fleet



Actions for Curbing IUU fishing

Focal area	Governments	Industry
Improve transparency	Mandatory Automatic Identification System (AIS)/Vessel Monitoring System (VMS) on all commercial fishing vessels	Publicly commit to 100% AIS/VMS coverage on all vessels
	Mandatory observer coverage using video monitoring systems	Publicly commit to 100% observer coverage
	Mandatory International Maritime Organization (IMO) ship identification number scheme to empower identification of beneficial ownership and vessel history	Publicly commit for all vessels
	Maintain a public database of all fishing records	
	Publish rules/regulations in plain language and on easily accessible platforms for public and industry utility	
	Reduce the number of countries registering vessels as flags of convenience	Publicly commit to avoid flags of convenience and flag hopping
		Publicly commit to whole-of-industry supply chain accountability
Policy	Ratify and enforce the 2012 Cape Town Agreement*	
	Ratify and enforce the 2009 Port State Measures Agreement†	
	Design and implement an international standard policy for transshipment practices	Publicly commit to rapidly phase out all transshipments
	Apply market sanctions to encourage all flag states to join relevant fisheries agreements	
	Require insurance companies to only insure vessels that are not on any IUU list and restrict fishing access to insured vessels	
		Full and transparent accounting of all species and locations fished by every vessel in annual shareholder and Annual General Meeting reports
Enforcement	Criminalize illegal fishing practices in all countries	
	Apply innovative approaches to monitor and enforce national waters, e.g., Tanzania/Sea Shepard partnership	
	Establish and strengthen inter-agency cooperation	
	Reduce corruption along the fisheries value chain	

Thanks for your attention

