

ARE BAD SUBSIDIES LINKED TO SLAVERY IN FISHERIES?

By Claudia Kobetitch & Jessika Woroniak
41294142 21357116

Hypothesis

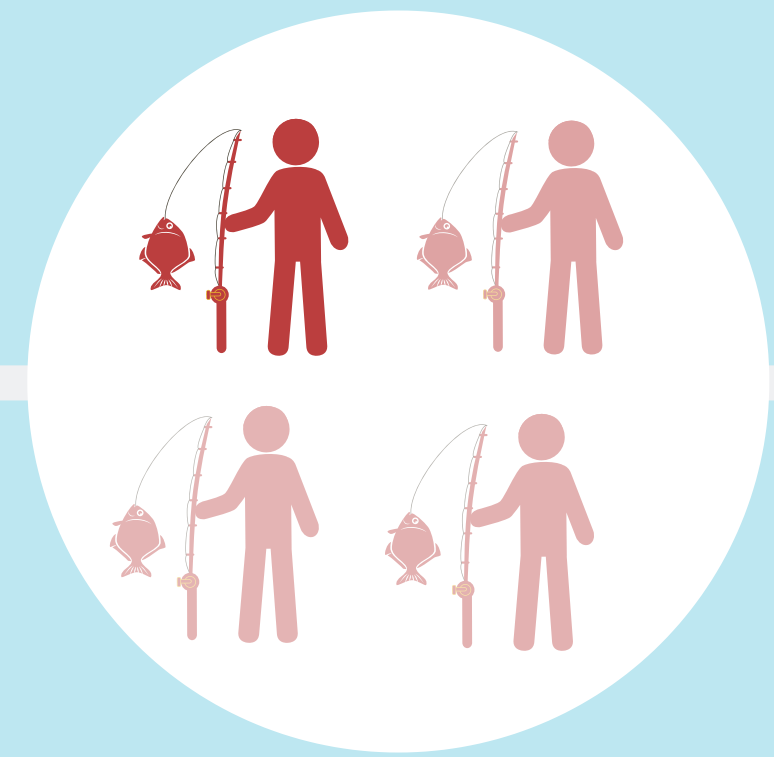
Pernicious government subsidies contribute to modern slavery in Thailand's marine capture fishing industry

Harmful Subsidies in Fisheries

Fishery subsidies are financial contributions made to the fishing industry by the government or a public entity. Subsidies can take many forms including cash payments, tax breaks on services or fuel, building infrastructure, etc. and are typically categorized into three types: beneficial, capacity enhancing and ambiguous.

Capacity enhancing subsidies, also called "harmful subsidies", are those that encourage an increase in fishing capacity to a point where exploitation exceeds the maximum sustainable yield (MSY). The World Trade Organization, under SDG target 14.6 framework and the Aichi Targets, is undergoing negotiations to end (eliminate or redirect) capacity enhancing subsidies globally by 2020 as they contribute to the overcapacity of the fishing fleets, overfishing, IUU fishing, etc.

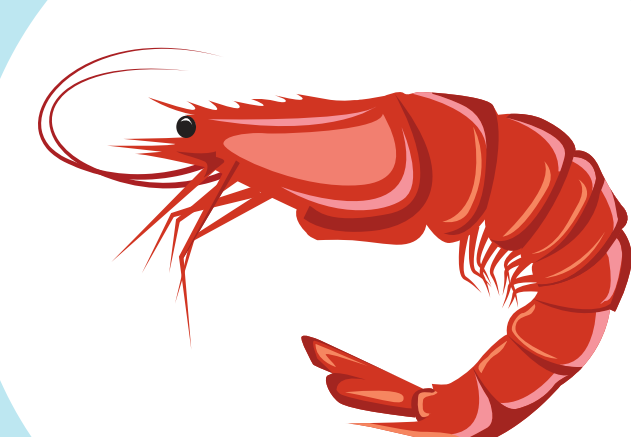
Influencing Factors



Domestic crew shortages



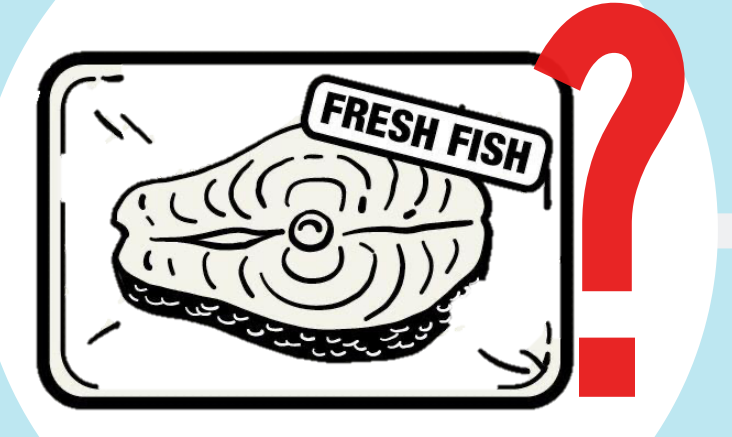
Surplus of migrant labour



Dwindling fish stocks, increase demand for seafood



Low enforcement of laws



Traceability issues

Analysis

By definition, **capacity-enhancing subsidies** promote overexploitation of marine resources, which exacerbates the decline in abundance of marine fish stocks. Globally, there has been a shift toward the removal of capacity-enhancing subsidies by the United Nations as observed in the Sustainability Development Goal target 14.6 and the World Trade Organization.

Currently, there is an opportunity for fisheries employers to **exploit cheap labour** by hiring migrant workers. There is an **excess of migrant labour** while the domestic labour force has simultaneously declined due to low wages. Many migrant workers do not possess the required legal documents to work in the country and, as such, fear contacting authorities when human rights are violated. In addition, employers may withhold pay which amplifies feelings of **entrapment**. Lastly, workers are not only economically trapped in these situations, but also physically trapped. Working at sea offers unique labour conditions where boats may not dock for many months. Traffickers magnify entrapment by sending support vessels to meet motherships at sea; they trade catches for necessary supplies removing the need for boats to ever dock.

A study by Tickler et al. (2018) examined the factors that influence the presence of slavery in the marine commercial fishing industry. Their team developed a model (Fig.2) which included variables that predict the presence of slavery per thousand people for the top 20 fishing countries (accounting for 80% of worldwide catches). We observe a significant correlation between prevalence of modern slavery and characteristics of the fishing industry. Variables with the strongest explanatory power were **% harmful subsidies**, **% catch outside EEZ** and **distance from home country** but also included **% unreported catch** and **value of the catch (\$/kg)**. These results support the presence of a correlation between the harmful subsidies and prevalence of slavery in the industry.

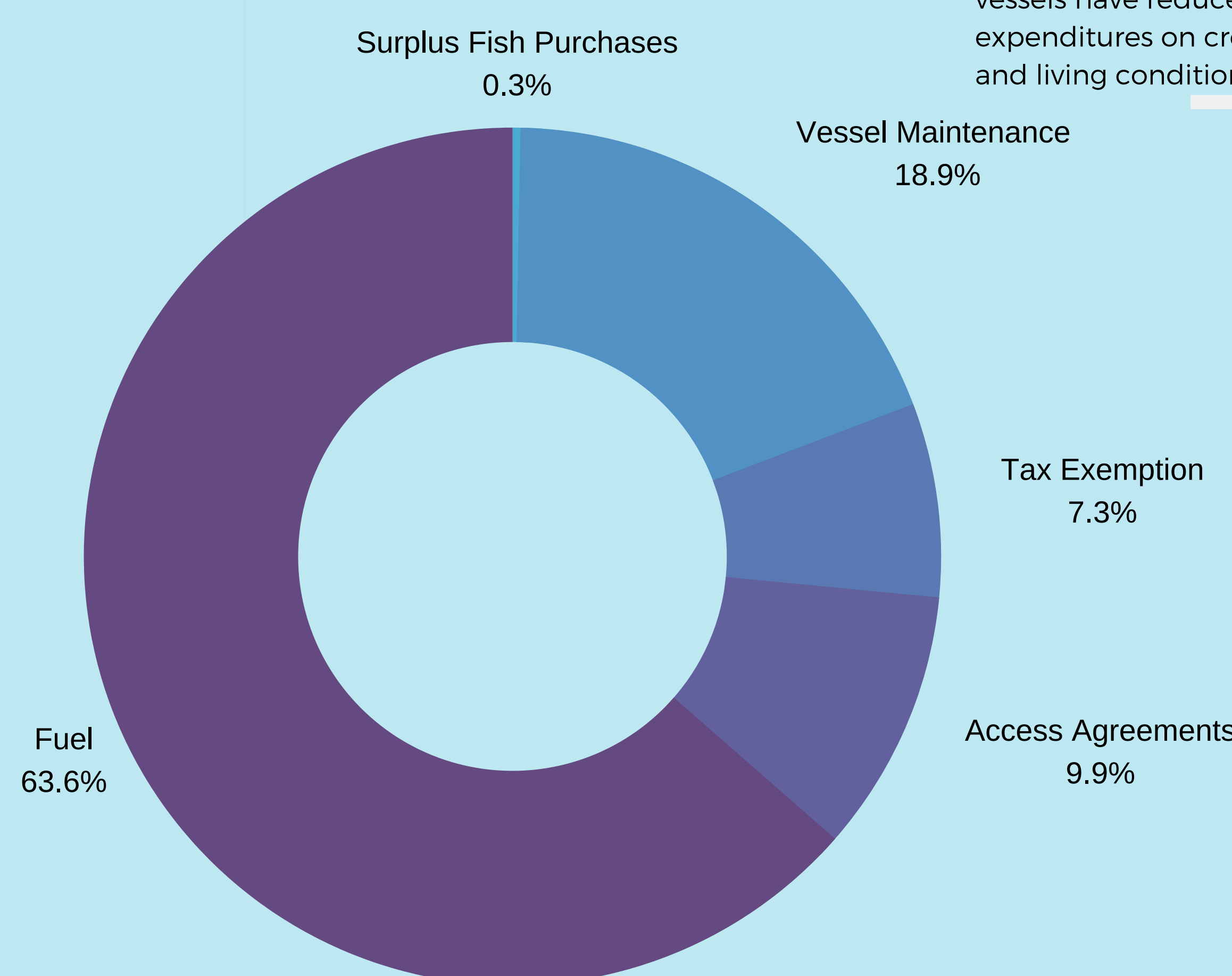
These results have important implications for policy at multiple levels of governance. Suggestions include: **ending harmful subsidies or reallocating funds**, improving immigration policy, setting minimum standards for working conditions at sea, improving transparency and traceability in the seafood supply chain, and reducing fishing practices in the high seas.

References: Pauly D & Zeller D. 2016. Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining. *Nature Communications*. 7: 10244.; Sumaila RU, Khan AS, Dyck AJ, Watson R, Munro G, Tydemers P & Pauly D. 2010. A bottom-up re-estimation of global fisheries subsidies. *Journal of Bioeconomics*. 12:201–225 DOI 10.1007/s10818-010-9091-8.; Sumaila, RU, Lam V, La Manch, Swartz & Pauly D. 2016. Global Fisheries Subsidies: An Updated Estimate. *Marine Policy* 69:189–193.; Sumaila RU, Ebrahim N, Schubbauer A, Skerrett D, Li Y, Kim HS, Mallory TG, Lam VWL & Pauly D. 2019. Updated estimates and analysis of global fisheries subsidies. *Marine Policy*. 109:103695.; Tickler D, Meeuwij JJ, Bryant K, David F, Forrest JAH, Gordon E, Larsen JJ, Oh B, Pauly D, Sumaila UR & Zeller D. 2018. Modern slavery and the race to fish. *Nature Communications*. 9(1): 4643 doi:10.1038/s41467-018-07118-9.; Willmann R & Kelleher K. 2009. The sunken billions: the economic justification for fisheries reform (English). Agriculture and rural development. Washington, DC: World Bank.; EJP. 2015. Thailand's Seafood Slaves. Human Trafficking, Slavery and Murder in Kantang's Fishing Industry: London. Retrieved from <https://ejfoundation.org/resources/downloads/EJP-Thailand-Seafood-Slaves-low-res.pdf>

FISHERIES

\$22.2 billion

USD provided by public entities globally in **capacity-enhancing fisheries subsidies in 2018**. This makes up 63% of the estimated total global fisheries subsidies for that year (Sumaila et al. 2019). In Thailand specifically, the estimate of total fisheries subsidies is \$1,149 million USD in 2018. 93% of which are considered to be capacity-enhancing.

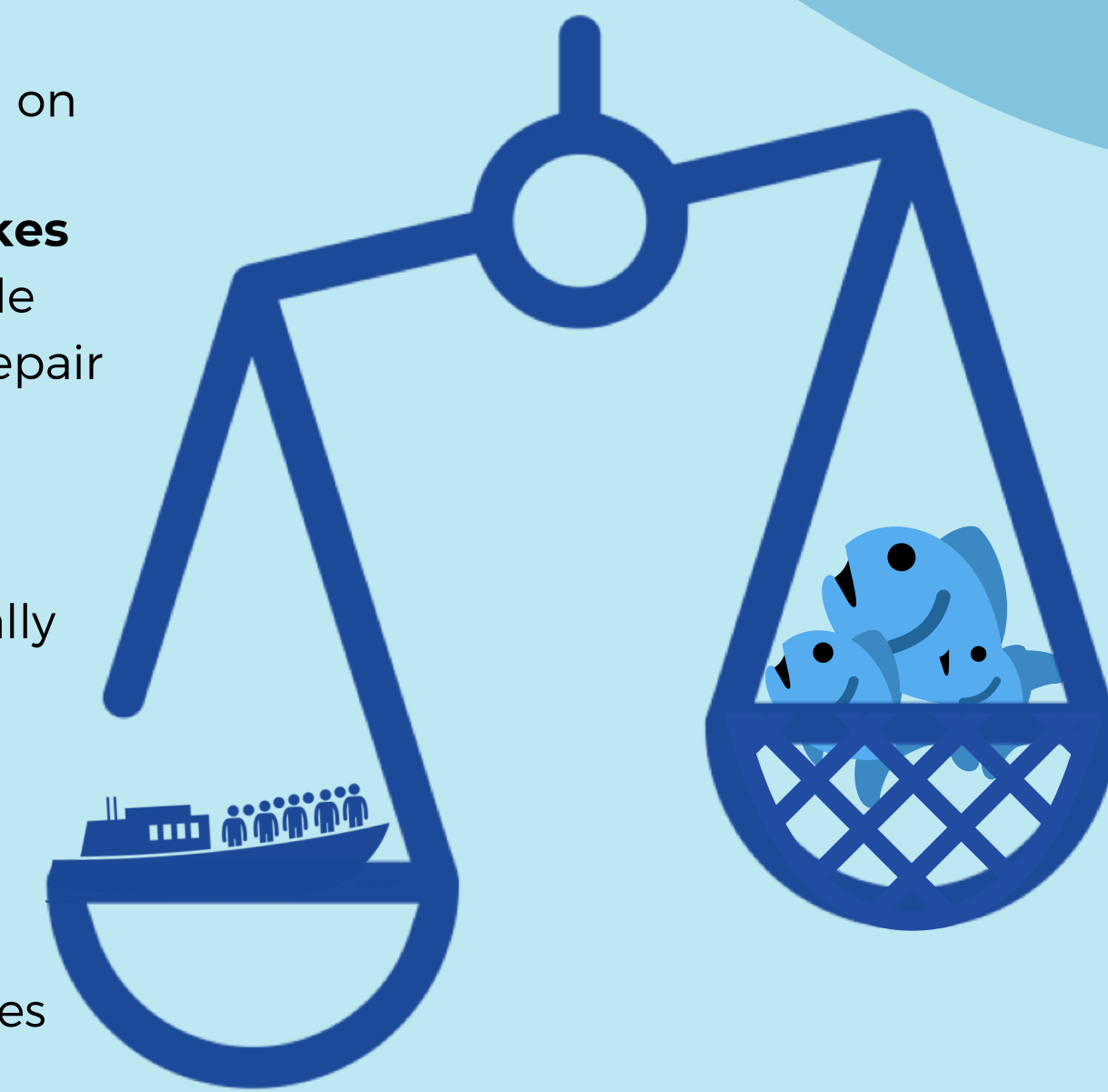


PROFIT = REVENUE - COSTS

Revenue in fisheries is derived from the quantity of fish/seafood caught at sea and the price of these fish on the market.

Costs mainly consist of harvesting costs; **labour makes up 30-50%** of harvesting costs on fishing vessels while the rest includes fuel (10-25%), fishing gear (5-15%), repair and maintenance (5-10%) and capital costs (e.g. depreciation and interests; 5-25%).

Marine fisheries catches have been decreasing globally with a concurrent increase in fishing effort since the mid-1990s. This has led to an overall decrease in profitability. To stay economically viable, vessels are forced to cut costs or fish illegally. One way in which vessels have reduced operating costs is by reducing expenditures on crew members, i.e., decreasing wages and living conditions on fishing vessels.



Slavery

Forms of trafficking in persons are: sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform is under 18 years of age; or (b) the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

76%

of migrant workers in Thai fishing industry have been held in debt bondage

Conclusion

Increase in harmful government subsidies

Over capacity in marine capture fisheries

Decline in profits

Vessel operators may choose to further cut costs by decreasing labour costs

Increase in labour abuses/human trafficking

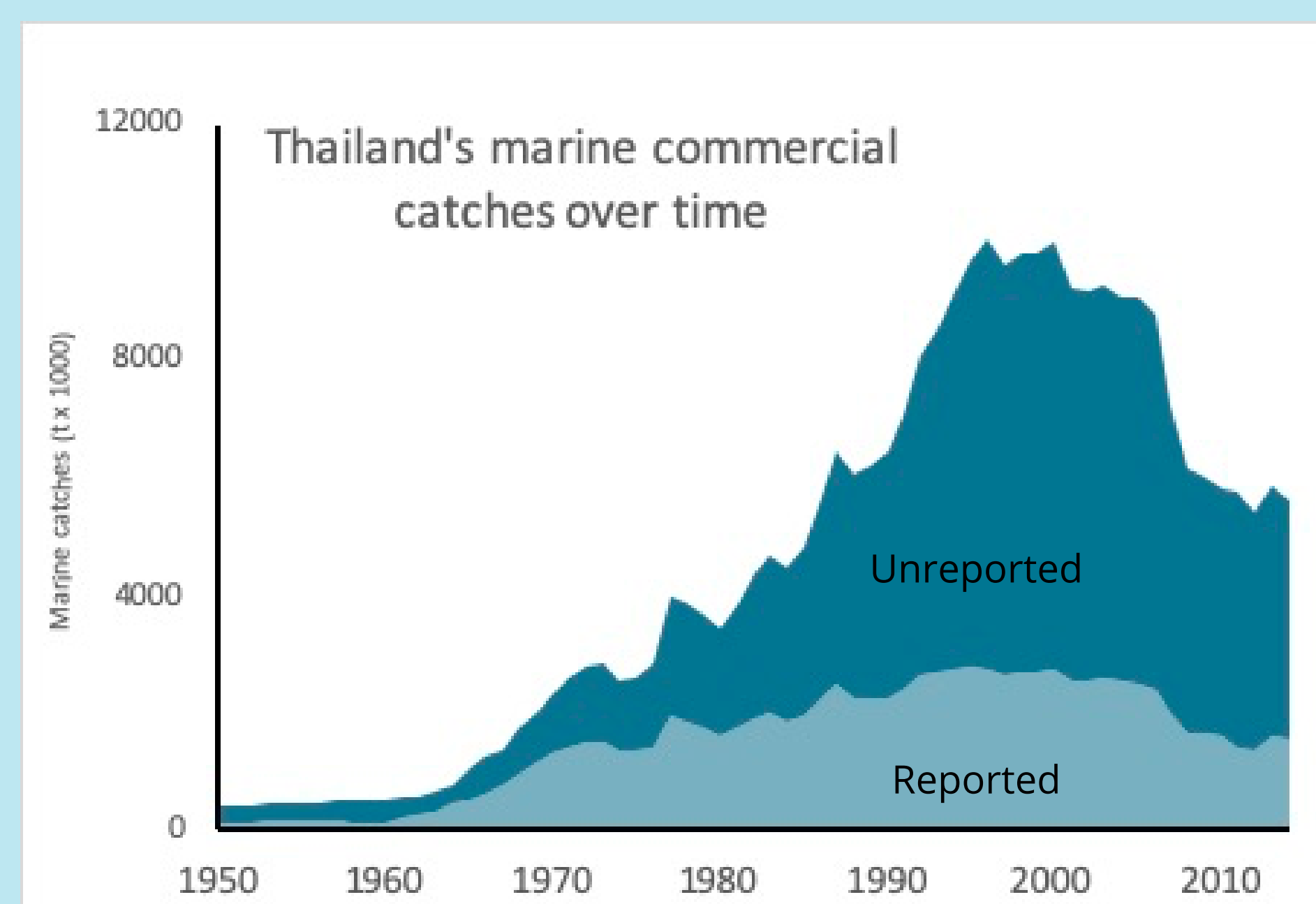


Figure 1: Catch time series of Reported and Unreported catches by Thailand

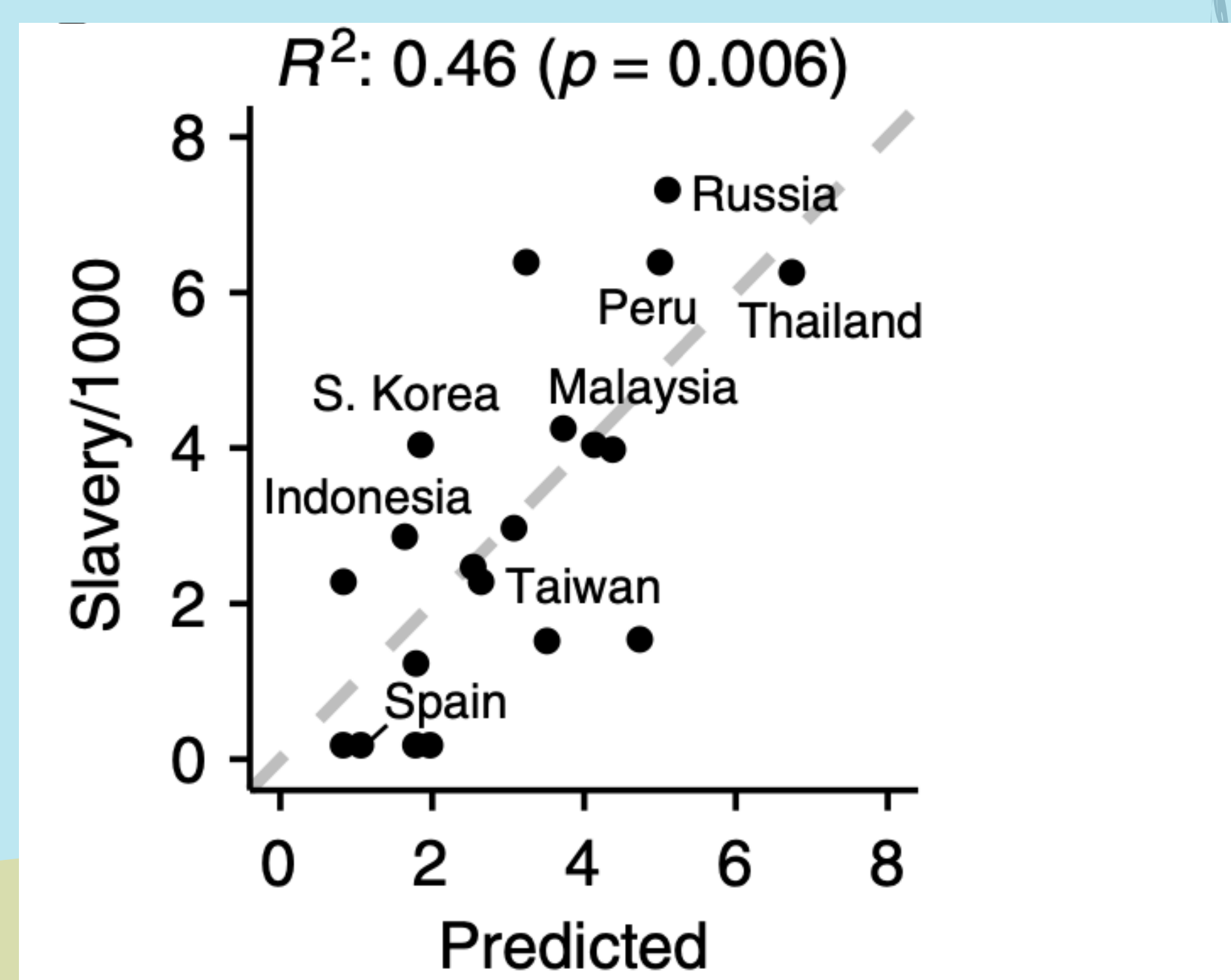


Figure 2: Slavery multiple regression model for top 20 fishing countries (Tickler et al. 2018)