

CAUGHT IN THE NET

Illegal fishing and child labour in Vietnam's fishing fleet



A report produced by the Environmental Justice Foundation



Protecting People and Planet



Protecting People and Planet

The Environmental Justice Foundation is a UK-based environmental and human rights charity registered in England and Wales (1088128).

EJF
1 Amwell Street
London, EC1R 1UL
United Kingdom
www.ejfoundation.org

Comments on the report, requests for further copies or specific queries about EJF should be directed to: info@ejfoundation.org

This document should be cited as: EJF (2019) Illegal fishing and child labour in Vietnam's fishing fleet.

Supported by Humanity United.

EJF is proud to acknowledge the generous support of Humanity United which has enabled our research and the production of this report.



Humanity United is a foundation committed to building peace and advancing human freedom. We lead, support, and collaborate with a broad network of efforts, ideas, and organizations that share our vision of a world free of conflict and injustice. Learn more at HumanityUnited.org

OUR MISSION

To Protect People and Planet

EJF believes environmental security is a human right.

EJF strives to:

- Protect the natural environment and the people and wildlife that depend upon it by linking environmental security, human rights and social need
- Create and implement solutions where they are needed most – training local people and communities who are directly affected to investigate, expose and combat environmental degradation and associated human rights abuses
- Provide training in the latest video technologies, research and advocacy skills to document both the problems and solutions, working through the media to create public and political platforms for constructive change
- Raise international awareness of the issues our partners are working locally to resolve

Our Oceans Campaign

EJF's Oceans Campaign aims to protect the marine environment, its biodiversity and the livelihoods dependent upon it. We are working to eradicate illegal, unreported and unregulated fishing and to create full transparency and traceability within seafood supply chains and markets. We conduct detailed investigations in to illegal, unsustainable and unethical practices and actively promote improvements to policy-making, corporate governance and management of fisheries along with consumer activism and market-driven solutions.

EJF is working to secure sustainable, legal and ethical seafood.

Our ambition is to secure truly sustainable, well-managed fisheries and with this the conservation of marine biodiversity and ecosystems and the protection of human rights.

EJF believes that there must be greater equity in global fisheries to ensure developing countries and vulnerable communities are given fair access and support to sustainably manage their natural marine resources and the right to work in the seafood industry without suffering labour and human rights abuses.

We believe in working collaboratively with all stakeholders to achieve these goals.

For further information visit
www.ejfoundation.org

Contents

Executive summary	4
Introduction	6
Seafood depletion in Vietnam	7
IUU fishing on an international scale	9
Reform delays, ambivalence and denial	13
Exposing the extent of illegal fishing	15
Lack of transparency	17
Child labour	21
Portside inspections	22
Informal labour situation	22
Life on board and payment structures	23
Conclusions	25
Recommendations	27
Appendices	30

It should be noted that the names of all workers used in this report are pseudonyms. All interviews were carried out with the informed consent of the individuals involved.

Abbreviations

AIS	Automatic identification system	IEZ	Inshore exclusion zone
ASEAN	Association of Southeast Asian Nations	ILO	International Labour Organization
ATM	Automated telling machine	IUU	Illegal, unreported and unregulated fishing
C188	ILO Work in Fishing Convention	JTIP	Office to Monitor and Combat Trafficking in Persons
C87	ILO Freedom of Association Convention	LRA	Labour Relations Act
C98	ILO Collective Bargaining Convention	MCS	Monitoring, control and surveillance (mechanisms)
CCCIF	Command Centre for Combating Illegal Fishing	MoL	Ministry of Labour
CPUE	Catch per unit effort (measured in kg/hr)	MPA	Marine protected area
DLPW	Department of Labour Protection & Welfare	NFAT	National Fisheries Association of Thailand
DoF	Department of Fisheries	NGO	Non-governmental organisation
EC	European Commission	NOAA	National Oceanic and Atmospheric Administration
EEZ	Exclusive economic zone	P29	Protocol of 2014 to the Forced Labour Convention, 1930
FAO	United Nations Food and Agriculture Organization	PIPO	'Port in port out' centre
FMC	Fisheries Monitoring Centre	PSMA	Port State Measures Agreement
FoC	Flag of convenience	RTG	Royal Thai Government
GPRS	General packet radio services	SIMP	Seafood Import Monitoring Program
GSP	Generalised scheme of preferences	Thai-MECC	Thai Monitoring, enforcement and control centre
GT	Gross tonnes	UVI	Unique vessel identifier
		VMS	Vessel monitoring system



Executive summary

Illegal, unreported and unregulated (IUU) fishing is a global problem threatening to destabilise or even collapse marine ecosystems around the world. Globally, IUU fishing accounts for between 13% and 31% of reported global catch while financial losses are estimated to be between \$10 and \$23.5 billion per year.¹ The practice threatens the livelihoods of countless communities who rely on the oceans for food and income.

In recent years, Vietnam has become an infamous and archetypal example of how uncontrolled expansion in the fishing sector can lead to an accelerated depletion of marine resources, resulting in vessels travelling further and further from shore in search of fish. In doing so, they are increasingly fishing illegally in neighbouring countries' waters and beyond, travelling as far as 6,000 kilometres from their home ports.

This report details these declines in fish populations, recent trends in Vietnamese vessel activity and legislative and enforcement mechanisms implemented by the Vietnamese authorities since the EU carding decision in October 2017. We also conduct an analysis of the efficacy of these measures in addressing IUU fishing. This analysis is based on investigative findings collected from within Vietnam, as well as 45 detailed interviews and almost 240 surveys with Vietnamese fishermen detained in Thailand for illegal fishing since the start of 2018.

Through these investigations EJF has uncovered several incidences of child labour on board Vietnamese vessels, with the youngest worker only 11 years old. These children are often related to the captain or other crewmembers but are still expected to work on the vessel, with the promise of a meagre wage on their return to shore. Many of the children EJF has spoken to reported that they no longer attended or would choose to go fishing over school in order to help support their families.

Living and working conditions on board these fishing vessels are already fraught with danger - with fishing being listed as one of the most dangerous professions in the world by the FAO and ILO. Crew testimonies from these Vietnamese vessels reveal consistently harsh work environments with often low-quality food and water, gruelling working hours for little pay, and squalid, cramped sleeping quarters.

Many of the boats observed by EJF and documented in surveys were flagless, had partially obscured names and registration numbers, and did not carry any form of crew identity documents, crew list or logbook. This exemplifies an almost complete lack of transparency mechanisms that would at least begin to shed some light on these opaque fishing practices. Interviewees also stated that portside inspections were rare and/or cursory, meaning that catches were not being properly documented or verified.

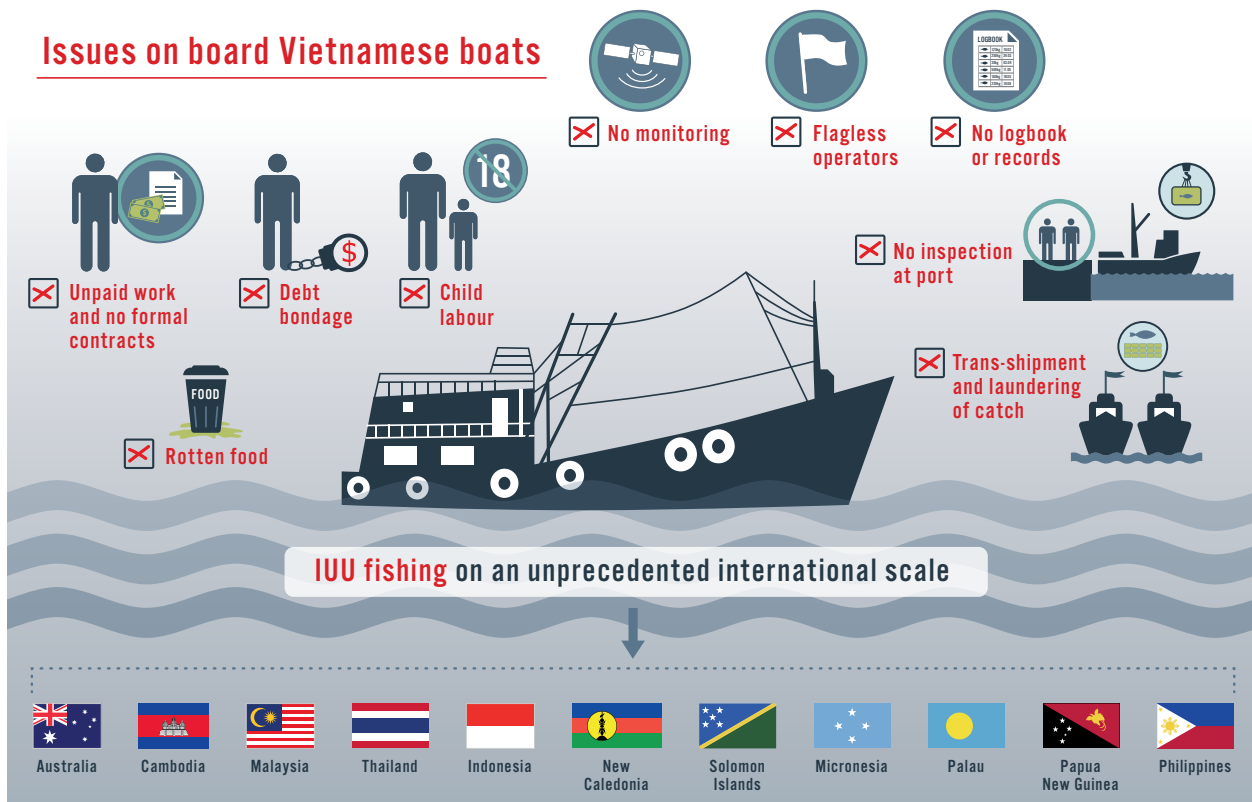
Such a lack of transparency or accountability for fishing practices has allowed Vietnamese fishing boats to proliferate across the Asia-Pacific region. Between the start of 2018 and mid 2019 there have been reports of at least 250 Vietnamese vessel detentions and arrests of over 640 crew across at least 11 countries across the Asia-Pacific region. Throughout this rise of ubiquitous illegal fishing, the Vietnamese authorities have resisted conceding that they are facing a crisis in one of the country's most economically important industries. Growth in the sector has propelled Vietnam to become the world's fourth largest seafood exporter with seafood products flowing to over 170 countries and territories.²

Far from looking to better control the sector, Vietnam is aiming for \$10.5 billion in exports from seafood products in 2019, up by 23% compared to 2017 figures. The country also has one of the fastest growing fishing fleets in the world - increasing in size from just 41,000 vessels in 1990 to around 108,500 in 2018 (an increase of over 160%).³ Interviewees that EJF has spoken to have also reported that portside inspections of fishing vessels are infrequent and cursory, comprising of a basic vessel documentation check and a crew count - unlikely to detect either illegal labourers, child labour or illegally caught fish.

Outright denial of the scale of the problem - some government ministers have declared the country free from IUU fishing as recently as May 2018 - has exacerbated many of the industry's afflictions and aggravated Vietnam's neighbours who are now forced to arrest Vietnamese vessels *en masse*, often at great expense to their own enforcement agencies.

Critical recommendations that require urgent implementation:

- Vietnam must implement EJF's ten principles for global transparency in fisheries as a matter of urgency;⁴
- Vietnam must set about regularising vessel standards and vessel inspection regimes across its 28 coastal provinces. This must include thorough checks for the presence of child labourers on board vessels;
- The distant-water fleet should be immediately recalled to Vietnam pending formal signing of fishing agreements with relevant coastal states. Vessel owners who have been implicated for IUU fishing crimes abroad should be barred from registering additional vessels in order to dissuade them from attempting to construct and register additional vessels to resume illegal fishing practices;
- Vietnam should seek to ratify and implement critical International Labour Organization Conventions which are fundamental to protecting labour rights and securing decent living and working conditions on board fishing boats;
- Seafood companies, processors and retailers should conduct thorough audits and assessments of their supply chains to ensure that their seafood products do not originate from vessels using child labour and/or fishing illegally either within Vietnam's or foreign countries' waters;
- If consumers find seafood products from Vietnam they should ask their retailer whether that product's supply chain is free from child labour and whether it was legally caught by Vietnamese vessels.



EJF has exposed a myriad of problems on board Vietnamese fishing vessels in Vietnamese waters as well across the Asia-Pacific region.

Introduction

The country's broader seafood industry, including farmed fish, is growing fast, having exported almost \$9 billion worth of products in 2018 and forecast to exceed this by almost 20% in 2019. This rapid expansion has fuelled an alarming increase in illegal, unreported and unregulated (IUU) fishing and a steep rise in crew arrests and vessel detentions across the Asia-Pacific region. Continued failures to tackle IUU fishing resulted in the European Commission issuing a 'yellow card' warning against Vietnamese wild-caught seafood exports in October 2017, which could lead to trade sanctions.

Since the carding, sorely needed new legislation has finally been introduced, training regimes for fishers announced, and some initial installations of vessel monitoring systems (VMS) on board fishing vessels above 15m have been carried out. However, poor implementation, widespread complacency amongst officials, and a domestic fishery in steep decline suggest that a great deal remains to be done to rectify years of neglect.

In recent years, EJF has investigated the status of Vietnamese fisheries and in 2018 and 2019 accompanied the Royal Thai Police on several patrols in the Gulf of Thailand. On one patrol in 2018 EJF witnessed the apprehension of five Vietnamese fishing vessels and the arrests of 30 crew members. In 2019, three further trips resulted in another eight vessels and 49 crew being arrested and escorted back to Thailand for processing and eventual repatriation.

On all four trips, the initial sightings occurred within approximately 10 hours of the police vessel reaching its patrol area. All intrusions were well within Thailand's Exclusive Economic Zone, showing a brazen determination amongst these vessel operators to find fish wherever they can.

“Vietnam caught a lot of fish before so now there's none left. We have to go elsewhere. I am sad that we can't catch anything in Vietnam. I feel sorry for my mother because I have no money to give her.”

Hyun Sik, Vietnamese fishing boat crew member –
Interviewed in January 2018.

It is the poorest and most disenfranchised fishers who often bear the highest price of illegal fishing. This is certainly the case for the Vietnamese fishers detained for illegal fishing in other countries. Many were already concerned how their families would survive month to month purely on the meagre catches they bring back from their increasingly lengthy fishing trips. Now they languish in prisons across the Asia-Pacific region while their impounded fishing vessels fall into disrepair in port.

If Vietnam is to deliver a credible fisheries management regime, that can return fishing effort to sustainable levels and eradicate the bulk of illegal fishing by its fleet, it must take urgent action targeting these illegal Vietnamese operators in both domestic and international waters. Strict limits to fishing effort must be introduced along with dedicated enforcement action and serious deterrent sentences for illegal operations. A suite of low-cost, immediately available and operationally deliverable tools must be employed to drive transparency and enable a risk-based response. Above all, political leadership must be engaged to ensure recent reforms are fully and forcefully implemented.



As illegal fishing vessels are sighted and arrested, they are brought alongside Poseidon, A Royal Thai Police patrol vessel (2019). © EJF

Seafood depletion in Vietnam



Trawlers and fishmeal factories line the estuary in Sông Đốc. © EJF

Vietnam is aiming for US\$10.5 billion in seafood exports in 2019. This is up from US\$8.5 billion in 2017 with the top five export destinations that year being the EU (representing just over 17% of total seafood exports), USA (16.5%), Japan (15.4%), China (14.5%) and South Korea (9%). In terms of seafood output forecasts for 2019, Vietnam predicts production to grow to 8.08 million tonnes (up 4.2% year-on-year) with 4.38 million tonnes (54.2%) comprising farmed species and 3.7 million tonnes (45.7%) of wild-caught seafood.⁵

Country	Trade value (US \$ billion)	% of total exports
European Union	1.46	17.2
USA	1.41	16.5
Japan	1.31	15.4
China	1.24	14.5
South Korea	0.78	9.2
Total exports	8.53	

Data from UN Comtrade (2019) Trade data statistics for seafood exports from Vietnam for 2017.

To fuel increases in aquaculture feed production and capture fisheries production, fishing fleets across Vietnam's 28 coastal provinces have rapidly increased in size. According to the Ministry of Agriculture and Development, the total number of fishing vessels has increased from just 41,000 vessels in 1990 to around 108,500 in 2018.⁶ The Vietnam Association of Seafood Exporters and Producers (VASEP), however, states that the number may even exceed 110,000 vessels.⁷ The number of coastal vessels has fallen from 81,188 vessels in 2014 to 76,589 in 2016 (a decrease of 6%) but the number of distant water vessels has grown by 25% since 2012 - rising from 26,000 vessels to approximately 33,000 vessels in 2019.^{8/9/10} The size of vessel engines have also increased, with larger, more powerful vessels capable of catching far greater quantities of fish. In 2018, almost 18,000 vessels were found to have engines of over 400 horsepower, up 30% compared to 2016.¹¹

This gradual increase in engine capacity complicates reform efforts, and is exacerbated by the fact that trawlers have begun operating in pairs so they can fish faster and drag a much larger net - thereby catching far greater numbers of fish.

In Vung Tau province, southern Vietnam, trawlers have traditionally had engines smaller than 90 horsepower but are increasingly employing engines as large as 600 to 900 horsepower. Now just 30% of the total registered vessels in the province are responsible for 70% of the province's total catch (220,000 tonnes per year).¹² Average horsepower across the provincial trawl fleet of 1,765 vessels is now 490 horsepower, a huge increase in the sheer power of the trawling fleet in just one province.¹³

Such rapid expansion in the numbers and capacity of the fishing fleet is contributing to the unsustainable depletion of marine resources across Vietnam's fishery.¹⁴ The total seafood catch for 2018 was 3.4 million tonnes, over a million tonnes more than the maximum sustainable yield per year of 2.3 million tonnes (maximum sustainable yield is a measure of the highest possible average catch that can be sustained over time).¹⁵ In Cà Mau province - which has over 3,600 registered vessels¹⁶ - seafood resource declines are now often blamed by fishers as the principle reason for forcing them to engage in illegal fishing overseas.¹⁷

“There are too many fishing boats. There are too many boats and too many people in Vietnam catching fish. We just go further and further without knowing that it's dangerous.”

Tran Linh, Vietnamese fishing boat captain –
Interviewed in April 2019.

“There are many illegal trawlers operating in the province but to catch them is very difficult because many of them have engine capacities of 500-800 horsepower. We even call them the flying trawlers.”

Le Hong Son, Senior Lieutenant Colonel and Deputy Head of the Department of Drug and Crime Prevention, Vung Tau province.¹⁸

Sustained trawling efforts up and down the coast of Vietnam threaten to collapse the country's already damaged marine ecosystems and further deplete vulnerable and endangered wildlife species. The ability to evade capture by enforcement agencies has allowed them to encroach on areas previously reserved for artisanal fishers and nursery environments for juvenile fish. In Ha Tinh and Thua Thien Hue (both located in northern central Vietnam) illegal vessels have been reported operating as close as 200-300 metres from shore.¹⁹

“Before we could catch by going several miles off from shore. Now we small boat owners have to go very far, several 10s of miles with the hopes of catching something. Trawlers are now our nightmare.”

Mr. Huynh Minh Hung, Vung Tau province.²⁰



One of a pair of trawlers caught fishing illegally in Thailand tries to evade capture by cutting its nets and attempting to flee back to Vietnamese waters. © EJF

A potential indicator of fish population depletion in Vietnam has been a steady increase in imports of fresh and frozen seafood products into the country. In 2018, imported seafood was worth \$1.7 billion, up 30% compared to 2017. The vast majority of these imports are products destined for processing and then re-export from the country. In the past, exports were made up of mostly domestic catch. Now, however, 93% of imports are destined for re-export, up 38% from 2017.²¹ As the VASEP concedes, the dramatic increase in imports is due to an “instability of (domestic) raw materials” which are “increasingly exhausted, causing enterprises to find solutions to import more raw materials”.²²

Declines in fishmeal production provide an additional indicator that domestic supplies of fish are faltering; despite Vietnam having a vast and growing trawl fleet supposedly capable of supplying large quantities of suitable product.²³ Saltwater domestic fishmeal production has traditionally been stable with 324,000 tonnes being produced in 2013 - accounting for 85% of production. By 2017 this had fallen to 306,000 tonnes, representing 71% of production. This decline has largely been offset by increases in freshwater production and imports.²⁴

Rapid declines in marine species populations are now recognised and accepted by the Vietnamese Directorate of Fisheries (DoF). In January 2019, the DoF began designing and implementing fishing restrictions and bans for 20 inshore areas along Vietnam’s 3,260 km coastline to address the situation.²⁶ These bans will be put in place from April to June along the northern coast and from May to July along the central and southern coasts with the goal of inhibiting vessel encroachments and catching of juvenile fish. However, these reforms will need to be adequately enforced and combined with other fleet controls and vessel decommissioning if they are to prove effective.

Sustained trawling up and down the coast of Vietnam threatens to collapse the country’s already damaged marine ecosystems and further deplete vulnerable and endangered wildlife species. Without urgent reforms and enforcement action against illegal operators who currently sweep the coastal waters, damaging artisanal fishers’ gears, there is little hope that fish populations will recover.

(Tonnes)	2013	2014	2015	2016	2017	2018	2019
Total fishmeal production	382,549	397,511	422,887	429,072	433,412	450,000	460,000
Saltwater production	324,942	319,170	319,501	319,501	306,275	305,000	300,000
Freshwater production	57,607	78,341	103,386	120,812	127,137	145,000	160,000
Imports	-	-	103,671	114,996	155,289	160,000	165,000
Saltwater production % of total	85%	80%	76%	74%	71%	68%	65%
Imports % of total	-	-	25%	27%	36%	36%	36%

This table shows how fishmeal production from saltwater sources has declined over the years while freshwater sources and imports have increased.²⁵

The Formosa Disaster: Threatening an already declining fishery

In April 2016, a chemical spill - often referred to as the 'Formosa Disaster' - led to one of Vietnam's worst environmental catastrophes, decimating marine life and destroying livelihoods for several thousand coastal fishers.²⁷ It was triggered by the discharge of highly contaminated water from the Formosa Ha Tinh steel mill in Vung Ang Economic Zone of Ha Tinh province.²⁸

Within days of the discharge, huge numbers of dead fish began washing ashore along the coast near the plant. Farmed fish in the vicinity were also affected when ocean tides entered their enclosures and ponds.²⁹ The contamination spread southwards, killing much of the marine life along an almost 200km stretch of coastline across four of Vietnam's central provinces; Ha Tinh, Quang Binh, Quang Tri, and Thua Thien-Hue.³⁰

Official estimates state that at least 115 tonnes of wild fish, shrimps and squid along with 140 tonnes of farmed fish were killed as a result of the spill.^{31/32} Local residents fell sick from consuming poisoned fish and there are reports of people having died from conditions caused by the spill.^{33/34} Thousands of fishers were left jobless within days.^{35/36}

In the aftermath of the disaster, local communities, fishers and environmental groups protested against the company as well as the government for facilitating an alleged coverup.^{37/38} Formosa eventually accepted full responsibility for the spill in June, confirming that harmful chemicals including cyanide, phenols and iron hydroxide had leaked into the natural environment.³⁹ Although the company was found guilty of over 50 environmental law violations and ordered to pay \$500 million in compensation to local communities, many of the fishers have still not been paid.^{40/41/42} In addition, the Vietnamese government has predicted that the marine environment will take as long as 10 years to recover from the disaster, creating further strain on Vietnam's already depleted fish populations and increasing pressure on vessels to fish overseas.⁴³

IUU fishing on an international scale

Radio chatter between two Vietnamese fishing boats, recorded in April 2019 on board Poseidon:

Person 1: *The other guys who entered (Thailand) earlier told me not to worry and keep on fishing...
If they receive any news [of authorities], they will tell us so we can prepare.
[Break]*

Person 1: *Don't kid around. Pay attention to the radio, it's easy to tell if they're really trying to escape or not.*

Person 2: *There are many topics to joke about. I will never joke about escaping though.*

Crew testimony gathered by EJF suggests that depleted fish populations and uncontrolled fishing fleet expansion are key contributing factors to the increase in Vietnamese vessels illegally fishing overseas.^{44/45} Two interviewees EJF spoke to in 2018 – a crew member and a vessel owner – stated that their crew knew before leaving that they would be illegally entering Thai waters in search of fish. The vessel owner said he had heard from friends at the port that, because of the lack of fish in Vietnamese waters, they should go to Thailand instead.

In recent years, Vietnamese vessels have been arrested in Australia,⁴⁶ Cambodia,⁴⁷ Malaysia,⁴⁸ Thailand,⁴⁹ and most of the members of the Pacific Islands Forum Fisheries Agency (FFA), made up of 17 countries.⁵⁰ The Indonesian authorities alone have sanctioned and sunk almost 300 Vietnamese vessels caught fishing illegally between 2014 and 2019.⁵¹ Such persistent infractions by Vietnamese vessels provided a strong impetus for the European Commission to issue Vietnam with a 'yellow card' in October 2017 – which can lead to trade sanctions – for failing to control its distant water fishing fleet.⁵²

Vietnam was recently ranked as the fifth worst offender for IUU fishing (of 152 qualifying states assessed in the IUU Fishing Index). This score was based on countries' vulnerability, prevalence and response to IUU fishing with a score of 1 = the best and 5 = the worst.⁵³

Country	IUU Fishing index score ⁵⁴
China	3.93
Taiwan	3.34
Cambodia	3.23
Russia	3.16
Vietnam	3.16

The most infamous class of Vietnamese fishing vessels is the so-called 'blue boats' – often caught travelling vast distances overseas in search of high-value seafood.⁵⁵ These vessels are often relatively small and therefore are not legally obliged to carry on-board satellite or mobile tracking devices. This allows the 'blue boat' fleet to pursue high-value species – such as sea cucumbers for the lucrative Chinese market – over large areas with little or no oversight.⁵⁶

Low vessel construction costs and generous government support for boat building and renovation have contributed to extremely rapid fleet expansion and overcapacity.⁵⁷ Low initial financial investment for vessel owners means that the risk of vessel seizures, sinkings and demolitions do not provide the necessary disincentive to prevent IUU fishing. Small 'blue boats' (carrying 10-13 crew) can cost as little as \$12,000 to purchase, while larger boats (with on average 17 crew) may cost \$24,000.⁵⁸ Labour costs for a crew of 10 might be between \$1,200-\$3,200 for an entire fishing trip, meaning that even several failed fishing trips are easily absorbed in pursuit of highly prized sea cucumbers and other high-value seafood.⁵⁹ The potential returns from one successful overseas trip far outweigh the financial risks of having one's vessels seized. One kilo of sea cucumbers normally fetches between \$10-\$350 depending on the species.⁶⁰ Some of the most expensive and rare species can reach up to \$3,500 per kilogram.⁶¹

This imbalance between financial risk and reward, coupled with uncontrolled expansion of the fishing fleet and decline of domestic fish populations has contributed to the proliferation of illegal fishing by Vietnamese vessels across the Asia-Pacific region.

The potential profits of one successful trip far outweigh the costs or potential losses from vessels being confiscated.



The price of sea cucumbers normally ranges between \$10-350/kg. Based on an average catch of eight tonnes of sea cucumbers this means that net profits could range between \$60,000 - \$2.76 million for one successful trip.⁶²

A prized delicacy drives illegal fishing

Sea cucumbers, known as *Hải sâm* in Vietnamese, are considered to be one of the most luxurious and sought-after delicacies of the sea. They have been known in Asia for centuries as an ingredient rich in proteins. They are also believed to offer health benefits.^{63/64/65}

Demand for sea cucumbers surged in the 1980s coinciding with China's economic reforms and an increasingly affluent middle class seeking ever more luxurious ways of using their new-found wealth.⁶⁶ Consequently, the number of countries supplying sea cucumbers to China increased from 35 to 88 between 1996 and 2011.⁶⁷ Their popularity spread across East and Southeast Asia, but Hong Kong and Mainland China are still the main importers.⁶⁸

Living on the seafloor, sea cucumbers are mainly caught by hand divers descending 20 to 30 metres. However they can also be caught by more destructive fishing methods such as trawling and electro-fishing, whereby electric currents are passed through the surrounding seawater in order to stun fish and other marine animals.⁶⁹ Due to the low survival rates of sea cucumber larvae and long maturity period (2-6 years), aquaculture is currently not a viable alternative to natural harvesting.

Complicated catching methods, a lack of aquaculture alternatives, and increased demand in recent years have led to dramatic spikes in sea cucumber prices.^{70/71/72} This growth has driven many sourcing nations to overfish their sea cucumber populations, with almost 40% of global sea cucumber populations now classified as overfished.⁷³ In Mexico, local harvests have dropped by up to 95% in the space of just two years.⁷⁴ Poaching and smuggling of sea cucumbers to avoid tariffs (also known as "grey trade") are reported in several countries including Australia, Papua New Guinea, and Mexico.^{75/76/77}

Over exploitation and illegal fishing of these animals not only damages marine ecosystems but poses other serious environmental threats to the world's oceans. Sea cucumbers play a critical role in cleaning the sea floor of waste and algae and transforming it into essential nutrients for other marine life. They also help protect corals from ocean acidification by producing calcium carbonate – a key component of coral skeletons.^{78/79} The removal of these animals may therefore jeopardize the overall health and stability of these already vulnerable marine ecosystems.



Vietnamese light luring squid boat shelters near Kaoh Tang, Cambodia, April 2016. EJF spotted approximately eight similar boats waiting for darkness to resume fishing, demonstrating these vessels' prevalence across the Southeast Asian region. © EJF

Impounded vessels take their toll on Pacific island nations

Illegal fishing in the Pacific Ocean is estimated to cost more than US\$600 million a year according to a 2016 report by the Pacific Islands Forum Fisheries Agency (FFA).⁸⁰ Direct economic losses to the FFA's 17 member countries are estimated to account for US\$150 million of this.

Even though the members of the FFA are some of the smallest island nations in the world in terms of population - just 6 million people - they control a vast area of ocean measuring 19.8 million km². These countries' waters and several nearby high seas areas provide 40% of the world's supply of tuna - a global industry worth \$3.2 billion.⁸¹ Enforcement efforts to combat IUU fishing across this vast expanse of ocean are therefore a critical but costly endeavour.

Illegal Vietnamese fishing vessels have proliferated across the Pacific Islands region, with reported cases some 4,000 to 7,000 km from vessels' home ports.⁸² In recent years, over 20 vessels have been reported detained across six members of the FFA.⁸³ Such intrusions impose a significant burden on the marine resources of these Pacific island nations, often harvesting high-value species such as sharks and sea cucumbers. In addition, several of these countries are obliged by their laws to accommodate, feed, and repatriate the vessel crews back to Vietnam while also prosecuting and imprisoning those responsible, and extracting punitive fines from the vessel owners or captains.⁸⁴ In New Caledonia, for example, the recent prosecution and repatriation of 12 Vietnamese crew cost the territory approximately \$1.5 million.

"We can barely feed the students in our schools, and here we are having to feed all these illegal fishermen."
Eugene Paugelinan, Head of Marine Resources of the Federated States of Micronesia.⁸⁵

The rich marine resources surrounding island nations of the Pacific Ocean have spurred regional efforts to pool monitoring, control and surveillance mechanisms and resources to share enforcement costs. Efforts such as the FFA, a shared Fisheries Monitoring Centre that can keep track of vessel movements, and the regional 'IUU list' of prohibited vessels are all attempts at improving transparency across the area.⁸⁶

Even so, Vietnamese fishing vessel sightings and arrests continue because of a lack of adequate checks and enforcement back in Vietnam. The potentially high economic returns for just one successful fishing trip justify the means for many of these illegal fishing vessels. Addressing this economic imbalance requires both strict enforcement of the newly introduced Vietnamese Fisheries Law 2017 as well as coordinated, international action against vessels that continue to circumvent the regulations.



Fishers are well-looked after on-board Poseidon however the sheer number of vessels being arrested across the region is putting a strain on enforcement agencies. © EJF

Reform delays, ambivalence and denial

The official EU IUU Regulation warning from the European Commission set out four groups of recommendations where urgent work was deemed necessary for Vietnam to rectify the situation; 1) introducing a new legal framework; 2) overhauling monitoring and control of fishing operations; 3) improving law enforcement; and 4) implementing traceability measures for seafood resources.⁸⁷ As part of the Vietnamese government's attempts to have the 'yellow card' lifted, new fisheries legislation was announced in November 2017 which was designed to replace existing regulations (last updated in 2003).⁸⁸ Fines of up to VND 1 billion (US\$44,000) for captains and fishing boat owners engaging in IUU fishing within Vietnamese waters were included as well as fines of up to VND 2 billion for companies engaged in illegal fishing overseas.⁸⁹ This law did not enter force until 1st January 2019 meaning that the vessels EJF encountered in April 2018 were not legally obliged to follow its statutes, as opposed to the ones observed in April 2019 which are in direct breach of the new law.⁹⁰

The 1st of January 2019 was the deadline set for all fishing vessels above 15 metres in length to be fitted with vessel

monitoring systems (VMS) which would enable the DoF to monitor vessel movements.⁹¹ The regulation stipulated that any vessel in this category without VMS after the deadline would not be allowed to proceed to sea.

In addition to the new 'Law On Fisheries', new training regimes have been introduced for fishers and fishing vessels must now adopt basic traceability measures such as the use of logbooks and catch reports.⁹² At the provincial level, authorities have adopted their own less orthodox measures to dissuade illegal fishing including asking fishing boat captains to sign a commitment document before they leave port stating that they will not engage in illegal fishing operations.⁹³ It should be noted that because of Vietnam's governance structure and devolution of fisheries management to the provincial governments, the effectiveness and robustness of monitoring, control and surveillance mechanisms across the coastal provinces can vary considerably.⁹⁴ New legislation, for example, is weakened by fragmented and inconsistent implementation across provincial governments. This is especially pronounced in uneven provincial enforcement for 'blue boats' and vessels that frequently fish overseas.⁹⁵



Vietnamese fishing vessels in Sông Đốc port. © EJF

The efficacy of reforms has also been thwarted by complacency and open denial from officials. In early May 2018, for example, the Vietnamese Ministry of Agriculture and Rural Development declared that since the beginning of the year there had been no cases of illegal fishing carried out by Vietnamese fishing vessels either in domestic waters or in international waters.⁹⁶ This announcement was at odds with media reports from several Southeast Asian countries including the Philippines,⁹⁷ Indonesia,⁹⁸ and Thailand⁹⁹ where Vietnamese vessels continued to be arrested for IUU fishing. Between the start of 2018 and mid 2019 there were media and government reports of over 250 Vietnam vessel detentions and arrests of over 640 crew across the Asia-Pacific region. For further information about these arrests please refer to appendix 3.

As of the end of 2018, reports from the DoF did begin to acknowledge that detention of Vietnamese fishing vessels has continued overseas. The 2018 annual report stated that for the year, 137 vessels engaging in IUU fishing were apprehended, registering an alarming 50.5% increase compared to 2017.¹⁰⁰ Official DoF reports from early 2019 indicate that 46 vessels had already been arrested overseas as of mid-May 2019.¹⁰¹

Deputy Director of the DoF Nguyen Quang Hung, explained this by saying that greater penalties and improved patrols in domestic waters were leading vessels to travel to foreign

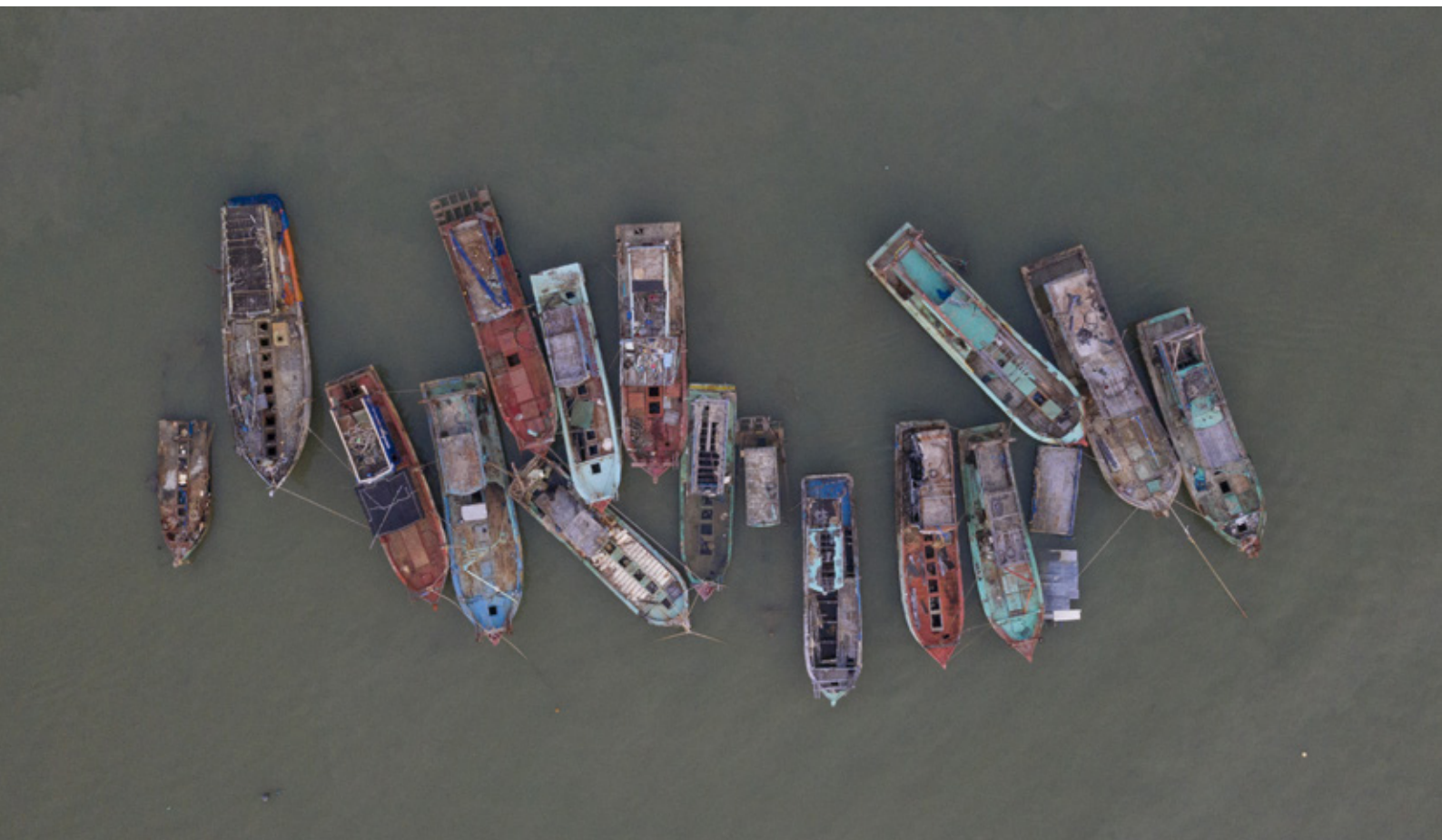
waters.¹⁰² However, media reports, government statistics, and statements by interviewees, suggest that it is the exhaustion of fish populations in domestic Vietnamese waters have driven this activity abroad.¹⁰³

“There are many new law changes. Now you cannot go fishing with my kind of boat anymore because this kind of boat is only allowed to fish near the shore, but if you only stay near the shore there is nothing left to catch. So we either go offshore or we stay near the shore. We will all be unemployed if we stay near the shore.”

Tran Linh, Vietnamese fishing boat captain –
Interviewed in April 2019.

“It’s not worth fishing in Vietnam. The boat owner pushed me [the captain] to go out of Vietnam because if not we won’t bring back enough money.”

Le Thiet, Vietnamese fishing boat captain –
Interviewed in January 2018.



Impounded Vietnamese trawlers at Songkhla port, Thailand. © EJF

Exposing the extent of illegal fishing

Radio chatter between two Vietnamese fishing boats, recorded in April 2019 on-board Poseidon:

Person 1: *Now we're all panicking! Whenever I think about it [being caught], I get scared. We beware of any ships we see now!*

Person 2: *They [the Thais] are celebrating their New Year, don't worry!*

In response to a dramatic increase in IUU fishing offences committed by Vietnamese vessels, EJF has carried out a wide range of interviews and focus groups with detained Vietnamese crew members. Quantitative survey results have also been collected from 239 individuals from 41 vessels detained in Thai waters. For further details regarding the methodology please refer to Appendices 1 and 2. All vessels identified were apprehended by either the Royal Thai Navy or Thai Marine Police for suspected illegal fishing activities within the Thai EEZ between late 2017 and early 2019.

Poseidon: Undercover tactics facilitate enforcement



Poseidon - an undercover patrol vessel used by the Royal Thai Police. © EJF

One of Thailand's approaches to intercepting illegal fishing vessels within its waters has been to convert an old fish carrier into an undercover police patrol vessel. The vessel, *Poseidon*, is unremarkable looking, still peppered with rust, dents, and chipped paintwork. This worn exterior makes *Poseidon* an effective tool in the ongoing battle against IUU fishing. Its unassuming profile on the horizon does not raise the alarm as a regular law enforcement vessel might do, meaning that illegal fishing vessels will approach. *Poseidon* carries a crew of Royal Thai Police and Thai Department of Fisheries officials, radar technology, and a speedboat. Once within range of suspected illegal vessels, the speedboat is deployed and sent in for the final interception.

EJF has accompanied *Poseidon* on several patrols in the Gulf of Thailand since April 2018. Four such trips have resulted in the apprehension of 13 Vietnamese fishing vessels caught illegally fishing in Thailand's waters. This is reflective of *Poseidon's* remarkable capture rate. In 2018, it impounded 91 vessels, 23 of which were Thai while 68 were flagged to other countries.¹⁹⁴ Thailand's innovations in enforcement should provide encouragement to coastal states around the world to adopt similar methods in combating IUU fishing while also minimising the financial burden of enforcement.

"Poseidon is different to any other patrol boats. Navy, Fisheries, Marine Police – they can't do what we do because fishing boats can see them coming and run away. With Poseidon, they don't know it's a patrol boat until it's too late." - Poseidon captain.

The vessels identified by interviewees and survey respondents vary in size from 10m to over 26m in length, with an average length of 17m. The Law on Fisheries 2017 classes vessels above 6m in length as commercial fishing vessels, and thus required to hold commercial fishing licenses. The previous Law on Fisheries (2003) does not explicitly define commercial vessel categories but does state that any vessel weighing over 0.5 tonnes must hold a fishing licence.¹⁰⁵

EJF surveyed crew from 41 vessels, which used a multitude of different gear types targeting a variety of catch: notably squid, trash fish, and sea cucumbers. While there are varying definitions of trash fish, in this report, it is defined as fish (including crustaceans) and other marine biota.¹⁰⁶ On four of the seven boats apprehended by Poseidon in April 2019 there were at least three different gears designed to target different species; squid jiggers, purse seine net, and longlines. Although there are no specific regulations in the new Law on Fisheries 2017 to bar this, the practice of using multiple gears can allow for overexploitation of resources as well as inaccurate fleet records - further complicating monitoring efforts.

Approximately a third of interviewees stated that because of a lack of sea cucumbers, fish, and squid in Vietnam, their vessels had been forced to travel outside of their territory to remain profitable. Such messaging further indicates a growing crisis in Vietnam's fisheries.

“All my friends told me that Thailand has everything you want to catch, you have to come.”

Nguyen, Vietnamese fishing boat owner and captain –
Interviewed in January 2018.



Workers transfer trash fish bags from a fishing vessel to a smaller barge. Undocumented product transfers such as this can make supply chain traceability more complicated and opaque. © EJF

Cà Mau's shrimp supply chains

Sông Đốc is situated in the An Van Thoi district along the banks of the Ông Đốc River. It hosts vessel piers, fish markets, fish drying & processing facilities and fishmeal factories. The skyline is crowded with tall chimneys belching out black smoke and the air is thick with an acrid smell of drying and cooking seafood. The majority of vessels apprehended by the Thai authorities and observed by EJF in April 2018 and 2019 operated from this town.

Cà Mau province is a prime location for these fishmeal and processing factories; as the top shrimp farming province in Vietnam it accounted for 23% of shrimp production in 2017.¹⁰⁷ The province is also home to over 30 seafood processing plants with a total capacity of 150,000 tonnes per year.¹⁰⁸

Crew testimonies suggest that product flows through Sông Đốc are porous meaning they receive little scrutiny. Several companies in Sông Đốc supply products to the European Union and the United States.¹⁰⁹ The European Commission's Directorate General for Health and Consumer Protection (DG SANCO) lists five processing and aquaculture facilities in Tran Van Thoi as authorised to distribute products to supermarkets across the EU.¹¹⁰

With such a concentration of fishmeal and seafood processing facilities in Cà Mau it exposes export-orientated supply chains and international buyers to inadvertently sourcing product from unknown or high-risk vessels or sources. One company in Sông Đốc, Biển Tây Seafood (DG SANCO Number: DL783), for example, states that it provides several species of shrimp, pangasius, skipjack tuna, octopus and cuttlefish, amongst others for export markets including Japan, South Korea, EU, USA and the UAE.¹¹¹ Another nearby company, Minh Phát Cà Mau which also exports to the United States, South Korea and Japan, was already fined 60 million dong (\$2,560) in 2017 for several environmental and administrative violations.¹¹²

The company has ties to several shrimp processing subsidiaries including Minh Quy and Minh Phu - the last of which was also recently accused of product mislabelling by purchasing large amounts of frozen Indian shrimp, 'minimally processing' them in Vietnam before then selling them to the USA labelled as Vietnamese product.¹¹³



Shrimps destined for export are farmed in ponds like this across the Mekong Delta of Southern Vietnam. A lack of traceability on-board vessels and at ports exposes these export-orientated supply chains to inadvertently sourcing product from high-risk sources. © EJF

Lack of transparency

A lack of transparency in fishing is one of the strongest enablers of IUU fishing across the globe.¹¹⁴ Fishing vessels are out at sea, far from authorities, for weeks, months, or even years at a time. This isolation is often compounded by opaque vessel or owner identity. These factors can make fishing operations difficult to track and monitor, or to adequately enforce fisheries laws – especially if the authorities responsible are not adequately staffed, trained, or supported by legislation to prevent illegal activities.¹¹⁵ The challenges in uncovering a vessel’s illegal activities, both current and past, mean that illegal operators are at low risk of capture and sanction by control authorities. Many of these issues are present in Vietnam’s fisheries.

Out of the 41 vessels surveyed since December 2017, 28 were reported flagless during their fishing operations. Under both the current Vietnam Maritime Code (2015) and previous Law on Fisheries (2003) fishing vessels were not required to fly any flag while operating in either Vietnamese or international waters.^{116/117} Although this meant that many of these boats were not operating illegally, such practices can facilitate IUU fishing by making it more difficult to accurately determine vessel identity and ownership. This gap in fisheries transparency was addressed in the new Law on Fisheries (2017) (this law came into force in January 2019), now requiring all commercial fishing vessels to fly the Vietnamese flag both inside and outside Vietnam’s EEZ.¹¹⁸ However, judging from recent interviews and a lack of flags on five out of seven vessels apprehended by *Poseidon* in April 2019 – three months after new legislation was implemented – there is a continued lack of compliance with, or possibly awareness of, fisheries regulations.

Interviewer: *Is there any regulation that says that you have to fly a flag on your boat?*

Boat captain: *No*

Interviewer: *So you can choose to either fly the flag or not?*

Boat captain: *Right!*

Tran Linh, Vietnamese fishing boat captain
– Interviewed in April 2019.

Article 52 of the Law on Fisheries (2017) states that vessels should:

“Fly the national flag of the Socialist Republic of Vietnam on their commercial fishing vessels; mark their commercial fishing vessels according to each fishing area, mark their fishing tackle that used at fisheries in accordance with regulations issued by the Ministry of Agriculture and Rural Development;”



A Vietnamese squid jigging vessel is apprehended by the Royal Thai Police in 2019. Faded markings such as these and lack of vessel flag or clearly visible name make it difficult for coastal states to verify a vessel's identity. © EJF

A vessel's identity and flag state can be obscured if vessels do not have adequate markings. Of the vessels described in both interviews and survey responses, EJF was unable to identify five vessels as their respective crew members were unable to recall either the name or registration number. One vessel was reported to have no identification markings at all. The masking or changing of vessel identities is a common tactic used by IUU fishing vessel operators in order to make it more difficult for inspection authorities to detect known illegal vessels. The ability to easily obscure or change a vessel's identity could also allow such operators to copy the legitimate identity of another vessel in order to avoid detection. Both the 2003 and 2017 fisheries laws state that fishing vessels must undergo registration and have their name and registration number clearly marked on the hull.^{119/120} It is evident from the latest arrests in April 2019 that enforcement of these regulations is still lacking.

A lack of verifiable official vessel documentation such as the vessel fishing license, logbook, crew list, and crew contracts can also complicate vessel identification. None of the 41 vessels surveyed since December 2017, including those detained in April 2019, had copies of any of these documents. The revised Law on Fisheries 2017 requires all commercial fishing vessels to carry at least copies of these documents.¹²¹ A lack of proper vessel registration can mask a vessel's true identity, allowing for the duplication and falsification of legitimate vessel identities in order to avoid detection by relevant authorities. It can also disrupt efforts to accurately determine fleet numbers or sufficiently manage fish stocks because of an unknown or poorly estimated number of unregistered or duplicate vessel names and identities in authorities' databases.



Two large commercial scale Vietnamese vessels moored up in Pak Phanang, Nakhon Si Thammarat. Both vessels were detained in January 2018. The vessel in the foreground is considerably larger than any of the other vessels cited in this briefing with a metal superstructure and extensive boom trawling fishing gears. It was detained on its maiden voyage with the hour meter showing only 210 hours of operation. © EJF

None of the 13 vessels that EJF observed the detention of exhibited any sign of using catch reporting documents or logbooks, nor did any of the captains interviewed state that they had ever used such documentation in the past. Such an absence of documents makes it extremely difficult for fisheries authorities to verify a vessel's catch or catching location and time. It can also facilitate the transfer and subsequent laundering of illegally caught fish from other vessels amongst legitimately caught seafood.

“We don't use [a logbook]. We only calculate once we arrive back into port. We sum it all up before we sell the catches.”

Tran Linh, Vietnamese fishing boat captain
– Interviewed in April 2019.

A lack of catch documentation also makes it difficult for subsequent stages of the supply chain to document and verify the origins of their seafood. This makes it all but impossible for retailers sourcing seafood products from vessels such as those impounded by the Thai authorities to state that their products are being sourced legitimately.

The lack of even simple transparency measures on board the vessels impounded in April 2018 and 2019 demonstrated a clear failure to comply with legal requirements.

Furthermore, the seven vessels from April 2019 were found to be in contravention of several statutes under the new Law on Fisheries, including such requirements as flying the national flag of Vietnam and carrying copies of the fishing license, logbook, crew manifest and crew identity papers.¹²² Such compliance failures strongly suggest that regulations are not adequately enforced, a full 18 months after the European Commission issued the yellow card warning to Vietnam.



Without catch verification it can be all but impossible to verify that the fish caught by trash fish vessels such as this one are caught legally. © EJF

EJF's 10 principles for transparency in fisheries:

In 2018, EJF launched a report setting out a Charter for Transparency made up of 10 realistic, financially viable principles. Examples include the mandatory use of unique vessel numbers, the publication of vessel license lists and the ratification of international conventions that improve scrutiny of vessels in port. Many of the transparency deficiencies identified by EJF since early 2018 could be addressed through the Vietnamese DoF's adoption of these principles. Detailed information on each recommendation can be found in EJF's full report: *Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing*.¹²³

States should:



1 Immediately mandate International Maritime Organization (IMO) numbers for all eligible vessels, implement a national unique vessel identifier scheme for non-eligible vessels, maintain a vessel registry and provide all information to the United Nations Food and Agriculture Organization (FAO) Global Record of Fishing Vessels (which ultimately includes all eligible vessels over 12 metres length overall).



2 Require automatic identification systems for fishing vessels and/or make unedited vessel monitoring system data public with regular transmission intervals sufficient to ensure vessels can be effectively tracked.



3 Publish up-to-date lists of fishing licences and authorisations, as well as vessel registries.



4 Publish information about arrests and sanctions imposed on individuals and companies for IUU fishing activities, human trafficking and other related crimes.



5 Implement a ban on trans-shipments at sea unless they are pre-authorised and are subject to robust and verifiable electronic monitoring and are covered by a human observer scheme appropriate to the fishery.



6 Mandate and implement the near-term adoption of cost-effective digital tools that safeguard in a digital form key information on vessel registration, licenses, unloading records, catch location and information and crew documentation. These should be designed in such a way as to support a rapid move towards a universal, interoperable digital catch certification scheme.



7 Close open registries to fishing vessels and stop the use of flags of convenience by vessels fishing in their waters or importing to their markets.



8 Publish information about beneficial ownership in all public lists and require companies to provide information on true beneficial ownership when applying for a fishing licence, fishing authorisation or registration to their flag.



9 Include provisions in legislation to identify where nationals are supporting, engaging in or profiting from IUU fishing, and implement deterrent sanctions against them. This effort can be aided by a register of vessels owned by nationals but flagged to other countries.



10 Adopt international measures that set clear standards for fisheries vessels and the trade in fisheries products, including the FAO Port State Measures Agreement, the International Labour Organization Work in Fishing Convention (C188) and the IMO Cape Town Agreement.

Child labour

Radio chatter between two Vietnamese fishing boats, recorded in April 2019 on-board Poseidon:

Person 1: *How many people are there on your boat?*

Person 2: *Now there are four old men and a little boy.*

Person 1: *Just that?*

Person 2: *The old men should be given a rest for one day and let the young boy help with the work.*

In total, 17% of the 41 surveyed vessels had at least one child on board. Of the 239 survey respondents, the youngest person found on board was 11 while the oldest was 69. In total, 12 crew members were under the age of 18. The Vietnamese Labor Code (Article 165) states that workers under 18 years of age are classified as ‘minor employees’ and prohibited from working in ‘heavy and hazardous work’ environments, which includes distant water fishing.¹²⁴

EJF spoke to seven children under the age of 18. They reported that they worked on their parents’ fishing vessels, often helping out with the catch. Most of them do not regularly attend school and are largely illiterate like their parents. The children often described how they had taken it upon themselves to become a breadwinner, choosing to sacrifice their education in order to help their family survive.

“I am scared of the sea because I don’t even know how to swim. But as long as my father and big brothers are around it should be okay.”

Vietnamese child fisher, 14 years old –
Interviewed in July 2019.

Fishing vessels are one of the most dangerous work environments in the world with workers succumbing to injuries and even death through accidents, falling overboard, inclement weather, or disease.¹²⁵ These risks are exacerbated when vessels fish illegally, away from safety inspections. Labour laws, such as Vietnam’s own Labor Code, are designed to protect children from these harsh work environments. However, without adequate enforcement of such laws through rigorous vessel inspections, children will continue to be exposed to harsh living and working conditions, hundreds if not thousands of kilometres from land, and away from any chance of help from the authorities.

Child labour on fishing vessels is not a problem specific to Vietnam alone. There are reports of children being trafficked, forced, and threatened to work in commercial fisheries as a way of supplementing the labour force. International efforts are required if the global community is to eradicate the worst forms of child labour from extractive industries such as fisheries.

Child fisher A (14 years old): Vessel impounded in late 2017. When EJF spoke to A, he described how in his hometown he had heard that he could earn reasonable money working on a fishing boat. He approached a vessel owner at the port who employed him on his boat as a cook. The captain told him that if he worked at sea for three months he could receive 500,000-600,000 Dong (\$22-\$26) from the sale of fish. This would equate to a daily wage of 24-29 cents.

“When I get back to Vietnam I won’t go back to school, I will go work at the pier but I won’t go back to sea. If I got caught again it would not be worth it.”

Child fisher A, 14 years old – interviewed in January 2018.

Child fisher B (11): Vessel impounded in January 2018. This child’s boat was officially crewed by 10 men, including the captain. However, when the vessel was apprehended in Thai waters, an 11 year-old boy was discovered on board. The boy told EJF that he had run away from home and hidden on board the fishing vessel as it was making ready to leave port. He hid in the engine room and only made his presence known the following day. The vessel captain told EJF that by the time they discovered the boy it was too late to turn back. One of the crew members claimed to be his brother and it was decided that they would continue fishing and return to port as planned after 30 days. The vessel was caught five days later.

Child fisher C (17): Vessel impounded in April 2019. When EJF spoke to C he was wearing his old, white high school uniform shirt which after weeks at sea was now torn at the sleeves and covered in grime and oil stains. He had numerous scars on his arms and legs which he said were from a recent motorbike accident and fishing hook accidents. His role on board was to help with catching the squid, putting them in baskets to wash and then mixing them with ice and salt to aid preservation.

When asked about his school he said that “it was a waste of time and his parent’s money” so he would rather go fishing to help earn a living for his family. C had a keen understanding of the problems back home in Vietnam:

“Vietnam is running out of seafood...because of overfishing. We can’t make a profit so we have to go far out to sea. Many fishing boats from Vietnam want to come to catch in Thailand.”

Child fisher C, 17 years old – interviewed in April 2019.

C already had one year’s experience on board his father’s fishing boat meaning that he would have started working at the age of 16. Many of his family members are also involved in fishing, with his uncles working on coastal boats back in Vietnam. He finished the interview by saying that he wanted to return to Vietnam as quickly as possible so that he could continue working to earn a living for his mother and his siblings.

It is important to note that it was not possible for EJF to verify the ages of any of these children due to a lack of identity documents.

Portside inspections

Interviewee testimonies from 2018 and 2019 suggest that if portside inspections do occur they are infrequent and cursory, comprised of a basic vessel documentation check and a crew count. Individuals stated that when they return to port, the crew would be re-counted and the vessel's identity would be verified, but there would be no catch inspection. One individual reported that the port authorities would take a photo of the fish that was caught but there would be no weighing or cross-referencing of the catch against the vessel logbook.

“When we arrive back into port we dock and then go call the port authority. They come and count the crew and then stamp some documents. Then we start unloading....The authorities don’t check the catch, we can sell it straight away.”

Pham Luan, Vietnamese fishing boat captain –
Interviewed in May 2018.

“When we arrive at port, we will go see the marine police and report to them the date we departed and the date that we arrived back. The officers don’t check where we went or what we caught.”

Tran Linh, Vietnamese fishing boat captain –
Interviewed in April 2019.

Deficient portside checks have been acknowledged by the Vietnamese authorities, with the Deputy Director of the DoF Nguyen Quang Hung, saying at a meeting in April 2019 that actual implementation of new port inspection regulations was “very limited” and that “inspection and supervision of fishing vessels by the authorities in the province (of Ba Ria-Vung Tau) was insufficient and unable to control the leaving and docking of vessels”.¹²⁶

Without robust portside inspections of fishing boats before they leave and arrive back into port, it can be difficult for fisheries authorities to verify a vessel's identity and license, labour conditions on board, child labour, catch landings against the vessel's logbook, and that the vessel is not fishing over established fishing quotas. Inspections are also vital to check vessel monitoring systems are in place and that all required documents for legal fishing are present.

Informal labour situation

The workers that EJF spoke to in 2018 and 2019 described a fluid and informal recruitment process without the use of brokers or other recruitment agencies, usually finding jobs on vessels based in their home villages. Workers would approach vessel owners to enquire about vacancies on board or their friends would inform them of available positions. Those interviewed said they did not receive a formal written contract, but rather had made a verbal agreement to join their vessel. Although this practice increases vulnerability to forced labour and exploitation, the Vietnamese Labor Code permits employees to agree to work via a “verbal employment contract for temporary work of less than 3 months”.¹²⁷ Out of the 239 quantitative survey respondents, only 17 individuals reported having a written contract, which was kept in Vietnam by the vessel owner.

None of the vessels that EJF has observed had a crew manifest detailing crew names, identification numbers, or any other information. Both the 2003 and 2017 Law on Fisheries state that owners of fishing vessels shall “register crew members working on board their ships” and have crew directories and crew members' seabooks on board while fishing.^{128/129} None of the interviewees had ever had a passport but stated that they did have identity cards that were either kept at their own



The crew sit at the front of their arrested vessel while it is escorted back to Poseidon for processing (2019). © EJF

property in Vietnam or by the vessel owner - in contravention of Vietnamese labour laws.¹³⁰ Only one of the 45 interviewees had his identity card on his person.

The lack of an official crew manifest or crew identity cards on board the most recently impounded vessels is a clear violation of revised Vietnamese fishing regulations. More disturbingly, the issues identified in 2019 were almost identical to those found on vessels detained the previous year, prior to legal reforms. Although informal recruitment systems provide flexibility for potential crew members, they do little for fisheries transparency and increase the chances of worker exploitation, child labour, forced labour, human trafficking, and even murder while at sea. It also facilitates unauthorised and undetected transfers of crew while at sea. Although none of the vessel crews EJF has spoken to since April 2019 reported these practices taking place, as has been documented in Thailand.^{131/132}

Of the 45 individuals EJF interviewed, 15 were captains. They described an equally informal promotion process. Often vessel owners would simply ask returning crew members to be captain for an upcoming trip; or if the usual captain was sick, ask someone to take their place. In April 2019, EJF spoke to one captain who was 20 years old and had only received rudimentary training from his colleagues on how to operate the boat before setting out on his maiden voyage. He was captured by the Thai authorities two days after leaving port.

A lack of formal or certified training for commercial fishing vessel captains can make it difficult to verify that they are sufficiently skilled in controlling their vessel, navigation, and health and safety. The Fisheries Law (2017) states that commercial fishing vessels over 6 m must be crewed by a captain with a “degree or certificate prescribed by the Ministry of Agriculture and Rural Development”.¹³³ When asked about this certificate, none of the seven captains apprehended in April 2019 had ever heard of or received one.

Inadequate training for captains can also make intrusions into the waters of neighbouring countries more likely, as the vessel crew may be given a set of coordinates by the vessel owner without necessarily understanding the implications. One vessel captain from April 2019, for example, was illiterate and was not able to use the GPS plotting computer installed on his vessel.

“I can’t read, I don’t know how to look at the map. I just thought that if I kept on going further and further [from shore] I would make more profit.”

Dang Cuong, Vietnamese fishing boat captain –
Interviewed in April 2019.

Life on board and payment structures

Workers reported that vessels fish up to 24 hours a day, with workers taking breaks either when there is a lull in activity or whenever they can rotate their work with other crew members. This was especially true for sea cucumber fishers, who trawl almost constantly. They would only rest when the time came to refrigerate the sea cucumbers, a less labour-intensive task that meant that they could rest in shifts. However, refrigeration would only take up to two hours, whereupon they would resume fishing.

“The crew would fish [set the net] at 6am, then again just before lunch. I would cook for them. Then 3pm again and then a rest. Then again at 9pm.”

Vietnamese child fisher, 14 years old –
Interviewed in January 2018.



Crews risk not being paid anything if their vessel is forced to stay in port, the weather is bad or their vessel catch is poor (2019). © EJF

All individuals reported that there was adequate food and water aboard their fishing vessels. On inspection by EJF, however, many vessels only carried low-quality, expired, or even rotting food. None of the individuals EJF spoke to reported any verbal or physical abuse, nor had they ever heard reports of such acts against fellow fishers.

None of the interviewees had agreed a prearranged regular salary. This was echoed in survey responses. This is in contravention of Article 19 of the Vietnamese Labor Code which states that an employee's salary is agreed as per the labour contract (whether agreed in writing or verbally), and must be pre-determined, and paid in the form of time salary, product salary or package salary.¹³⁴ Most fishers and vessel captains reported being paid solely on a catch share basis. Once the catch is sold, vessel owners deduct receipts for food, water, fuel, and other expenses. They would then take approximately 70% of the profits and the remaining 30% would be divided amongst the captain and crew. For a successful fishing trip with "a lot of fish", vessel captains could expect to receive 10 million Dong (US\$430) while crew members could expect approximately three to four million Dong (US\$130-175). Average fishing trips for sea cucumber, fish and squid boats can last between 15 and 30 days, making the daily wage for crew members between US\$4.40-\$8.80.



Fishers wait to be processed by the Thai Police on-board Poseidon. © EJF



Squalid living conditions provide a grim glimpse into life on-board these fishing vessels (2018). © EJF

Drawing the short straw

A common theme for the interviewees was that their financial situations were often precarious. In addition, many of the fishing vessels observed by EJF were in poor condition with signs of rotten wood, squalid living conditions, and often contaminated or expired food and water by way of provisions.

Inadequate fisheries management and disproportionate penalties levied against small-scale fishers compared to commercial vessels are resulting in unequal access to and allocation of marine resources. According to testimony from interviewees larger vessels are often able to continue fishing illegally in restricted areas or closed seasons in Vietnamese waters without fear of serious repercussions, while smaller vessels are leaving in search of more lucrative and high-risk fishing grounds overseas.

Current financial sanctions may be so insignificant enough for large industrial vessel owners to pay and not warrant behaviour changes or renewed compliance but for smaller vessel operators they represent a disproportionate financial burden. Small vessel captains might earn just \$430 for a fishing trip lasting up to 30 days.

"We have closed areas in Vietnam but big boats still come to fish. Big boats have relationships with the marine police that allow them to catch what they want, where they want - with no consequences. Or if they are captured they pay only 5-10 million dong [US\$213-426] and then they are fine."

Hoang Tran, Vietnamese fishing boat captain –
Interviewed in May 2019.

Small-scale fishers are therefore being forced out of their own country's waters in order to earn enough to feed their families. This eventually results in their vessels being impounded overseas – yet another cost they cannot afford. Ultimately the poorest and most disenfranchised fishers are bearing the burden of uncontrolled fishing by their more powerful and successful commercial counterparts.

"Laws are only there in theory. Implementation doesn't happen. We can't do anything about it, we have no power."

Vinh Thanh, Vietnamese fishing boat captain –
Interviewed in May 2019.

The lack of a regular monthly salary means that if the vessel returns to port with no fish or a poor catch, workers and captains may not receive any remuneration following expense deductions. 48 survey respondents said that they were paid ‘depending on the quantity of catch’. This can result in workers being forced to borrow money from the vessel owner in order to buy food and supplies for themselves and their families. It also gives the whole crew an incentive to engage in illegal fishing and keep such information from the authorities. In 2018, 12 interviewees reported that they owed money to their vessel owner, ranging from two million dong (US\$87) to over 15 million dong (US\$655). All reported that they were not liable for interest on these loans, however, when asked if they were successfully working off their debts through these fishing trips, seven individuals asserted that this was not the case. In recent months, storms and low volumes of catch had resulted in these indebted workers being forced to borrow even more money to feed their families.

“If we cannot catch anything, we get nothing. There’s no money to divide.”

Tran Linh, Vietnamese fishing boat captain –
Interviewed in April 2019.

The lack of a regular salary, deductions for food and water, and gradually rising debts are all potential indicators of debt bondage whereby workers are bound to their employers until the debt is paid. Debt bondage itself is a strong indicator of forced labour.¹³⁵ Workers confirmed this, saying if they wished to switch jobs they would either have to pay off the debt in one lump sum or borrow money from their new employer to pay off their existing debts, essentially transferring the debt bondage to the new employer.

Conclusions

EJF’s analysis suggests that a lack of effective governance, inadequate fisheries management, and a vacuum of enforcement have led to steep declines in Vietnam’s fish stocks across its territorial waters.

Inadequate fisheries management has allowed for an explosion in the number of fishing vessels, which has contributed to massive overfishing and the rapid depletion of fish populations. As these stocks have declined, Vietnamese processors have been forced to import from neighbouring countries to mitigate a falling domestic supply. Importantly, this crisis in Vietnam’s domestic industry has been ‘exported’ as fishing operators have increasingly ventured outside of Vietnam’s waters in search of fresh populations for a wide range of species, including sea cucumbers, squid, and even the least valuable trash fish.

Fishers interviewed by EJF repeatedly argued that rampant overfishing in Vietnam has driven vessels such as their own to take ever greater risks and venture out into Thai, Malaysian, and Indonesian waters. Statements suggest that the practice of illegal overseas fishing is an open secret amongst operators. Vessel captains have spoken of how they were often encouraged by owners to venture into neighbouring countries’ waters and would openly discuss their upcoming trips into Thai waters amongst the crew even before leaving port.

EJF has observed Vietnamese vessels being impounded during four patrols since April 2018 with the most recent detentions occurring in May and July 2019. Disturbingly, the same issues were exhibited over a year later, indicating little sign of progress despite new laws being in place.



Women sort through trash fish for saleable fish in a port in Southern Vietnam. © EJF

Vessels continue to lack appropriate markings and national flags while fishing. Some of the fishers EJF spoke to in 2019 were even unable to remember the name of their own vessel. Vessel documents, including crew manifests, are still not carried on board – in direct violation of Vietnam’s revised regulations. It seems, therefore, that few of the EC’s recommendations for reforming Vietnam’s fisheries have been successfully implemented or enforced.

It appears that vessel inspections on departure and arrival into port amount to nothing more than a cursory document check and crew count. Such superficial investigations without identification card or passport verification allows unauthorised crew transfers to occur at sea. Similar tactics have been used to traffic fishers and imprison them at sea by rotating them between fishing vessels to prevent them from escaping.¹³⁶ Insufficient personnel monitoring – such as a lack of crew manifests, identity checks and on-board inspections – make it easier for other forms of exploitation, such as child labour, to occur.

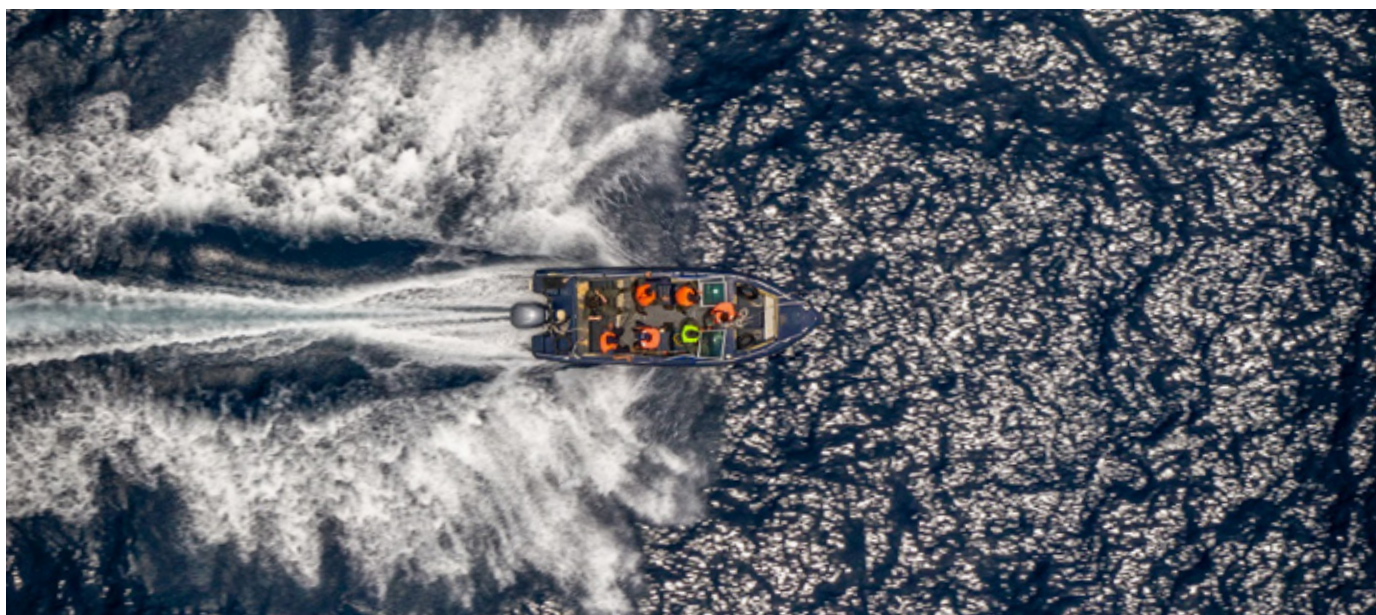
The lack of any semblance of catch documentation or verification system makes it extremely difficult to determine the origins of the seafood being caught by vessels similar to the ones EJF has observed and documented. This could mean that illegal seafood caught by bonded labourers and children is on supermarket shelves across the EU, UK, and US. EJF found child labour aboard 17% of the vessels surveyed, with children as young as 11 working in the dangerous environment of long-distance fishing.

Lack of transparency can also allow unscrupulous fishing boat operators to easily under-declare their catch or misreport catching location or time to circumvent fisheries regulations, evade taxes, or both. None of the fishers that EJF spoke to had ever used logbooks to document the seafood they caught, potentially facilitating the laundering of seafood into international supply chains.

Although an informal labour recruitment system does allow for extremely fluid and convenient part-time employment for fishers, it also increases the risk of unpaid labour, debt bondage, and forced labour. The Vietnamese Labor Code states that workers must receive agreed salaries and work set hours with established rest periods, however, as stated by 48 survey respondents they only receive payment ‘depending on the quantity of catch’. This could result in workers not being paid for several trips due to inclement weather, poor catches, or other complications.

Many of the indicators of IUU fishing and human rights abuse identified in 2018 continue to persist in 2019, suggesting that despite legal reform, implementation and enforcement continue to pose a challenge, 18 months after Vietnam received a formal warning from the European Commission in October 2017. Although it is encouraging to see that the DoF has taken preliminary steps towards reform through new legislation and training regimes, there is still a great deal of work that needs to be done to fully remedy the situation. Nationwide and standardised vessel checks, transparency measures, and improved portside inspection regimes are urgently needed.

IUU fishing is a transboundary issue. To fully address the scale of illegal fishing currently being conducted by Vietnamese vessels across the Asia-Pacific region, substantive international efforts will be required alongside those of the Vietnamese authorities. Regional associations, such as ASEAN, should expedite efforts to form an anti-IUU fishing taskforce that would enable information sharing, joint enforcement action, and shared vessel monitoring and surveillance mechanisms. Only through collaborative efforts can Vietnam hope to eradicate IUU fishing and rid itself of its currently tarnished international image. It remains to be seen whether the Vietnamese government is willing to fully acknowledge the challenges facing the country and whether this can translate into sustained reforms and greater regional cooperation in ending these pervasive issues.



The speedboat from Poseidon approaches a Vietnamese trawler that has cut its nets and is attempting to flee back into Vietnamese waters. © EJF



Recommendations

The following recommendations are designed to address issues identified through EJF's own field investigations in Vietnam and from recent interviews and focus groups carried out by EJF investigators. It should be noted that these recommendations are based on a series of limited observations and are not exhaustive.

Recommendations for the Vietnamese Government:

The Vietnamese Government should:

- Implement EJF's 10 principles for global transparency in fisheries as a matter of urgency.¹³⁷ Some of the most cost-effective and realistic initiatives from these principles are as follows:
 - All fishing vessels must carry easily identified markings including vessel name and registration number in line with existing regulations. This regulation must be enforced by DoF officials both at port and during at-sea inspections.
 - All Vietnamese fishing vessels should be equipped with a unique vessel identifier that will stay with the vessel for its entire lifespan. This will inhibit vessel owners from changing a vessel's name or markings.
 - Vessel monitoring systems should be fitted to fishing vessels according to strict regulations specifying placement location on board the vessel and must make use of anti-tampering devices to fix them in place. DoF inspectors must check regularly that vessel tracking units are fitted in accordance with these regulations and that anti-tampering devices have not been broken or removed.
 - EJF recommends that VMS positional data transmission frequency is at least once per hour to provide accurate data to monitoring agencies.
 - At-sea trans-shipment should be banned **permanently** for all coastal vessels. Trans-shipment should also be banned for distant water fishing vessels pending reforms. The practice can facilitate illegal fishing by allowing unscrupulous vessel operators to launder illegally caught fish with other catches, thereby tainting the whole supply. At-sea trans-shipment can also allow unauthorised crew transfers which could result in victims of forced labour or human trafficking being rotated amongst fishing vessels without returning to shore.
 - At-sea trans-shipments for the distant-water fleet should only ever be reinstated if vessels request authorisation in advance, DoF observers are on board receiving vessels, and electronic reporting or sensing technologies are installed on vessels to allow real-time monitoring of such activities.

- Implement a series of substantive and action-led regional and international efforts designed to build cooperation and enhance regional monitoring, control, and surveillance mechanisms for Vietnamese vessels.
- Engage with key regional partners including Thailand and Indonesia to facilitate information sharing and joint enforcement actions to facilitate IUU vessel detection and interception.
- Coordinate urgent action between the Vietnamese Ministry of Foreign Affairs and Asia-Pacific countries where fishing vessels have been impounded and fishers imprisoned to facilitate repatriations.
- Establish minimum standards for Vietnamese Embassies across the region to follow in order to expedite these repatriations.

Recommendations for the Vietnamese Directorate of Fisheries (DoF):

- The DoF must carry out a series of nationwide, multi-disciplinary and meticulous vessel inspections to 1) accurately determine the exact number of fishing vessels in the fishing fleet; 2) ensure that all commercial vessels are operating according to the statutes of the Law on Fisheries 2017; 3) brief vessel captains and crews of their compliance requirements regarding fishing practices and on-board documents.
- Fishing vessel licenses must clearly state the fishing gear of the vessel and vessels should be prohibited from using more than one fishing gear.
- The DoF must ensure that all fishing vessels are registered in a central, online database that is made public. Notable regional examples for good practice include Thailand's and Indonesia's online public license lists.^{138/139}
- Fishing vessels that are only allowed to operate in domestic Vietnamese waters should be visually distinguishable from



A small number of an approximate 50 Vietnamese vessels that had been arrested by the Thai authorities between December 2017 and June 2018. © EJF

distant-water vessels. This will facilitate vessel inspections and inhibit coastal vessels from straying into neighbouring countries' waters.

- The Vietnamese distant water fleet should be immediately recalled to Vietnam pending formal signed fishing agreements with relevant coastal states. Distant water vessels that fish in coastal states without formal agreement should be heavily sanctioned and their owners barred from registering or purchasing new fishing licenses. This punishment will break the current unbalanced cost to benefit ratio for IUU fishing that vessel owners currently exploit.
- Vessel owners who have previously been involved in IUU fishing should be listed as high-risk and their remaining vessels should receive meticulous portside inspections including analysis of their on-board vessel monitoring system, vessel documentation, logbook, and crew.
- The DoF must carry out inspections of fishing vessels before they leave and return to port according to a precautionary risk-based approach. Officials must check that the vessel is registered, has corresponding markings, and that relevant documentation such as fishing license, captain's training certificate, ship's logbook, crew list and crew identity documents are on board.
- The DoF should introduce a dedicated taskforce that can independently assess portside inspection regimes for their robustness and quality of inspection. This taskforce should operate separately from regular portside inspection regimes, conducting unannounced audits of DoF offices across the country in order to gather accurate information on regulatory compliance.
- The new Law on Fisheries 2017 states that all fishing vessels must fly the "national flag" of Vietnam while on fishing trips. DoF officials must check this is the case before and after fishing trips.
- Coastal fishing vessels should not be allowed to stay at sea for more than one month and distant water vessels not more than three months. Long periods at sea can increase the risk of illegal fishing and the likelihood of trans-shipment at sea.

Recommendations for the Vietnamese Ministry of Labour and Social Affairs:

- Vietnam should ratify, implement and enforce core ILO conventions fundamental to protecting labour rights and securing decent living and working conditions on board fishing boats. This must include the ratification of C188 'Work in Fishing' which will ensure that workers receive adequate labour protections, food and water, and medicines while employed on fishing vessels - a key area of concern as identified from vessels impounded in Thailand since early 2018.¹⁴⁰

- Work contracts for fishers should be in written form, signed by both parties and present on board the vessel. Contracts should clearly designate the contract length, terms, agreed salary, and payment schedule. Verbal contracts – although permissible for temporary work periods – can increase the chances of worker exploitation through forced labour, wage retention, and salary deductions. Crew members should be given a copy of their written contract to keep for their records.
- Fishing vessels must hold the following on board: full and updated crew list, crewmembers' seabooks, and workers' identity documentation. These documents should not be kept by the vessel owner, family member, or other individual while the worker is at sea. This is crucial to enabling both Vietnamese but also external authorities to verify the identities of workers quickly and effectively.
- Portside vessel inspections should ensure that the crew list is verified against crew identity papers before and after a vessel's fishing trip. This will minimise the chances of unauthorised workers or child labourers and crew transfers taking place while at sea.
- "Minor employees" under the age of 18 are prohibited from working on offshore fishing vessels. It is imperative that the DoF or the Ministry of Labour and Social Affairs verify that there are no minors during vessel inspections or when the vessel disembarks from port.
- Fishing vessels should be equipped with appropriate health and safety equipment including life jackets, a first aid kit, and other medical supplies. Crew members should know where these supplies are kept and receive basic training in how to use them.



A worker shovels trash fish into a basket. Much of this trash fish is destined to be processed into aquafeed for Vietnam's shrimp export industry. © EJF

Recommendations for seafood companies, retailers, processors:

Seafood companies, processors and retailers should:

- Support and endorse EJF's Charter for Transparency urging the Vietnamese government to implement the 10 principles for transparency in the Charter as a matter of urgency.
- Adopt due diligence measures that can mitigate the risks of vessels engaging in IUU fishing or associated labour abuses. The 2017 Code of Practice (PAS) 1550:2017 (*Exercising due diligence in establishing the legal origin of seafood products and marine ingredients*) is one such example of due diligence standard jointly developed by EJF, Oceana, The Pew Charitable Trusts, WWF, and British seafood industry partners.¹⁴¹
- Analyse their supply chains to ensure there are no cases of child labour. If seafood retailers do find incidences of child labour in their supply chain they must take immediate action to eradicate this in their supply chains and make the actions taken public.
- Similarly, seafood retailers and processors should verify and publicly state whether or not they can determine the true origin of seafood products caught by Vietnamese vessels or produced in Vietnam.

Recommendations for consumers:

- If consumers find products originating from Vietnam they should demand to know from their supermarket or retailer whether or not that product's supply chain is free from child labour.
- Consumers should also seek to understand from their supermarkets and retailers whether or not seafood products are being legally caught by Vietnamese vessels or produced in Vietnam.
- If retailers cannot guarantee that seafood products have been caught or produced sustainably and without human rights abuses then consumers should not buy them.
- Consumers should demand that their retailers sign up to EJF's Charter for Transparency.

Recommendations for the international community:

- Neighbouring countries and those currently affected by frequent vessel intrusions should seek to work constructively with the Vietnamese authorities towards eradicating IUU fishing and associated labour abuses from the Asia-Pacific region. This can be achieved through transboundary cooperation, enhanced transparency in enforcement action, and sharing of monitoring, control and surveillance mechanisms.
- Countries currently affected by frequent intrusions by Vietnamese fishing vessels should seek to enhance collaborative efforts in terms of joint enforcement action, processing, prosecution and repatriation of Vietnamese crews. This would maximise the effectiveness of finite and restricted enforcement resources.
- The Association of Southeast Asian Nations (ASEAN) should expedite the formulation of an ASEAN IUU fishing taskforce to bolster regional information sharing and monitoring, control and surveillance collaborations.

Appendix 1: Methodology

Between January 2018 and June 2019 EJF carried out interviews and focus group discussions with 45 individuals from 20 different Vietnamese fishing vessels. Out of these individuals EJF carried out one-to-one interviews with 24 fishers and conducted four focus group discussions with six, nine, three, and three individuals respectively. These were carried out during several visits to Suan Phlu Immigration Detention Centre in Bangkok, Pak Phanang Prison in Nakhon Si Thammarat, and Songkhla Provincial Prison. In April 2019 EJF carried out interviews with four individuals on-board Poseidon. All interviews were carried out with the full informed consent of all individuals concerned.

EJF has also collected quantitative survey results for 239 individuals from 41 vessels. Surveys were distributed to fishers as soon after their initial detention as possible. Surveys were sent to police stations and detention centres in

Bangkok, Narathiwat, Songkhla, and Pattani. EJF was unable to observe the actual survey completion by fishers which may be a limiting factor in terms of data accuracy.

All 41 surveyed vessels were detained in Thai waters between approximately December 2017 and July 2019.

The majority of the vessels apprehended by the Thai authorities and observed by EJF in April 2018 and 2019 operated out of Sông Đốc - a town of 50,000 people situated in Tran Van Thoi district on the west coast of Vietnam's southernmost province of Cà Mau. The rest of the vessels originated from the nearby provinces of Bạc Liêu and Bến Tre. Vessel captains stated that they would usually sell their catches at local coastal markets, rarely transferring catch at sea (trans-shipping) or visiting other provinces. None of the fishers knew where their product went after they finished unloading.

Appendix 2: Example of a completed survey form



BẢNG KHẢO SÁT

Bảng khảo sát này do Tổ chức Công lý môi trường (EJF) - một tổ chức phi chính phủ làm việc để tìm hiểu và giải quyết các vấn đề đánh bắt cá trên toàn thế giới

Bảng khảo sát sẽ hỏi những câu hỏi về thời gian của bạn trên tàu đánh cá. Câu trả lời của bạn sẽ giúp tổ chức EJF hiểu về những vấn đề đang xảy ra. Chúng tôi sẽ giữ câu trả lời của bạn riêng tư và bảo mật và chỉ có EJF được phép xem câu trả lời của anh.

Câu trả lời của các anh rất quan trọng. Chúng giúp chúng tôi có thêm bằng chứng và có thể thúc đẩy nhanh quá trình xét xử của sự việc, nhanh chóng đưa các thuyền đánh cá của Việt Nam trở về nước sớm nhất có thể.

Để trả lời các câu hỏi dưới đây, hãy viết câu trả lời với mức độ chi tiết nhất có thể. Nếu anh muốn nói thêm bất kể điều gì khác, anh hoàn toàn có thể sử dụng mặt sau của tờ giấy.

Dưới đây là ví dụ mẫu:

Anh đã làm nghề đánh cá này trong bao lâu rồi?	Tôi làm nghề này khoảng 3 năm rồi
--	-----------------------------------

Câu hỏi	Viết câu trả lời chi tiết ở dưới đây
Tên đầy đủ của anh là...?	[Redacted]
Anh bao nhiêu tuổi rồi?	30
Hiện tại, anh đang ở tỉnh nào ở Thái Lan?	Bến Tre Thái Lan
Ngày mà anh bị giữ lại tại Thái Lan?	5 Tháng 03 Thái Lan
Tên và số hiệu tàu đánh cá mà anh làm việc?	[Redacted]
Anh là thành viên trên thuyền kĩ sư tài công, chủ tàu hay có vai trò gì khác trên tàu?	Thuyền Viên

Câu hỏi	Viết câu trả lời chi tiết ở dưới đây
Nếu anh có vai trò khác trên tàu, vậy đó là vai trò gì? (Nếu không có, ghi "không")	Thuyền Viên
Anh đã làm nghề đánh cá này trong bao lâu rồi?	Khoảng 1 Năm
Độ dài tàu của anh là bao nhiêu mét?	16m
Có bao nhiêu thành viên trên tàu bao gồm tài công?	5 Thành Viên
Các anh đánh bắt hải sản gì? (ghi tên cụ thể của loài hải sản đó: cá ngừ, bào ngư...)	Cao bạch Long
Thuyền của các anh có treo cờ không? Đó là cờ gì? Nếu không phải cờ Việt Nam hãy mô tả một chút về nó.	Không Có Treo Cờ
Một chuyến đi biển của các anh thường kéo dài mấy tháng?	Khoảng 15 -> 20 ngày
Anh được trả bao nhiêu cho mỗi chuyến đi?	Trì Theo ít nhiều
Anh có kí hợp đồng đi biển này không?	Không Có
Nếu có ai là người kí hợp đồng với anh? (là tài công, chủ tàu hay ai khác)	Không
Với chuyến đi này, anh có biết là mình sẽ đi sang vùng biển của Thái Lan không?	Không biết

Appendix 3: Selection of media reports and government statistics on the detention of Vietnamese vessels across the Asia-Pacific Region (2018 - May 2019)

Reported date	Number of arrested Vietnamese vessels	Number of arrested fishermen	Place of arrest
14/4/2018 ¹⁴²	5	30	Gulf of Thailand (Poseidon EJF)
9/7/2018 ¹⁴³	2	21	Kuala Terengganu, Malaysia
17/8/2018 ¹⁴⁴	1	10	Kuala Bakam, Malaysia
30/8/2018 ¹⁴⁵	2	11	Songkhla, Thailand
25/9/2018 ¹⁴⁶	1	5	Palawan, Philippines
30/10/2018 ¹⁴⁷	3	14	Songkhla, Thailand
1/1/2019 ¹⁴⁸	1	10	Koh Kong, Cambodia
27/2/2019 ¹⁴⁹	4	-	Natuna, Indonesia
30/3/2019 ¹⁵⁰	1	5	Pulau Jambongan, Malaysia
8/4/2019 ¹⁵¹	2	11	Natuna, Indonesia
10/4/2019 ¹⁵²	4	24	Natuna/Malacca Strait, Indonesia
29/4/19 ¹⁵³	1	12	Natuna, Indonesia
30/4/19 ¹⁵⁴	6	63	Kuala Terengganu, Malaysia
2018 ¹⁵⁵	38	-	Indonesia
01/19 - 29/04/19 ¹⁵⁶	33	-	Indonesia
18/5/19 ¹⁵⁷	25	123	Kemaman, Malaysia
10/17 - 11/18 ¹⁵⁸	104	305	Thailand
2016 > 2019 ¹⁵⁹	21	-	FFA Countries
Total	254	644	

References

- 1 Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, Beddington JR, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. *PLoS ONE* 4(2): e4570. <https://doi.org/10.1371/journal.pone.0004570>
- 2 VNA (15 March 2019) Vietnam world's fourth biggest seafood exporter [https://en.vietnamplus.vn/vietnam-worlds-fourth-biggest-seafood-exporter/148362.vnp#targetText=Vietnam%20world's%20fourth%20biggest%20seafood%20exporter&targetText=Hanoi%20\(VNA\)%20%20%20%20Vietnam%20now,170%20countries%20and%20territories%20worldwide.](https://en.vietnamplus.vn/vietnam-worlds-fourth-biggest-seafood-exporter/148362.vnp#targetText=Vietnam%20world's%20fourth%20biggest%20seafood%20exporter&targetText=Hanoi%20(VNA)%20%20%20%20Vietnam%20now,170%20countries%20and%20territories%20worldwide.)
- 3 Nguyen, B. (11th December 2018) 12,000 fishing vessels monitored through VMS system <https://baomoi.com/12-000-tau-ca-duoc-quan-ly-thong-qua-giam-sat-hanh-trinh/c/28559018.epi>
- 4 EJF (2018) Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing <https://ejf.org/foundation.org/reports/out-of-the-shadows-improving-transparency-in-global-fisheries-to-stop-illegal-unreported-and-unregulated-fishing>
- 5 Dao, T. (15 February 2019) Vietnam sets goal of USD 10.5 billion in seafood exports for 2019 <https://www.seafoodsource.com/news/supply-trade/vietnam-sets-goal-of-usd-10-5-billion-in-seafood-exports-in-2019>
- 6 Nguyen, B. (11th December 2018) 12,000 fishing vessels monitored through VMS system <https://baomoi.com/12-000-tau-ca-duoc-quan-ly-thong-qua-giam-sat-hanh-trinh/c/28559018.epi>
- 7 Nguyet, N (1st August 2018) Offshore fishing vessels will be fitted with tracking equipment before October 2018 <https://tongcucthuysan.gov.vn/en-us/capture-fisheries/doc-tin/011192/2018-08-17/offshore-fishing-vessels-will-be-fitted-with-tracking-equipment-before-october-2018>
- 8 For the purposes of this briefing, 'coastal vessels' will refer to vessels fishing within Vietnam's Exclusive Economic Zone (EEZ) while 'distant water vessels' will refer to vessels fishing outside of this zone.
- 9 Nguyen, B. (11th December 2018) 12,000 fishing vessels monitored through VMS system <https://baomoi.com/12-000-tau-ca-duoc-quan-ly-thong-qua-giam-sat-hanh-trinh/c/28559018.epi>
- 10 Nguyet, N (1st August 2018) Offshore fishing vessels will be fitted with tracking equipment before October 2018 <https://tongcucthuysan.gov.vn/en-us/capture-fisheries/doc-tin/011192/2018-08-17/offshore-fishing-vessels-will-be-fitted-with-tracking-equipment-before-october-2018>
- 11 Nguyen, B. (11th December 2018) 12,000 fishing vessels monitored through VMS system <https://baomoi.com/12-000-tau-ca-duoc-quan-ly-thong-qua-giam-sat-hanh-trinh/c/28559018.epi>
- 12 Tuan, A., Nga, T. (9 September 2017) Speeding up reforms to the trawling sector <https://nhandan.com.vn/xahoi/item/34042702-day-nhanh-viec-chuyen-doi-nghe-gia-cao-tren-bien.html>
- 13 Tuan, A., Nga, T. (9 September 2017) Speeding up reforms to the trawling sector <https://nhandan.com.vn/xahoi/item/34042702-day-nhanh-viec-chuyen-doi-nghe-gia-cao-tren-bien.html>
- 14 DVSC (2016) Ca Mau: Depleted coastal fisheries resources <https://www.dvsc.com.vn/TinTuc/TinKinhTe/171676/ca-mau-can-kiet-nguon-loi-thuy-san-ven-bo.aspx>
- 15 VASEP (2018) Vietnam's fisheries industry overview <http://vasep.com.vn/1192/OneContent/tong-quan-nganh.htm>
- 16 Nguyet, N. (27th July 2018) Ca Ma: In 2019, fishing vessels which are not equipped with monitoring equipment will not be allowed for offshore fishing <https://tongcucthuysan.gov.vn/en-us/capture-fisheries/doc-tin/011089/2018-07-31/ca-mau-in-2019-fishing-vessels-which-are-not-equipped-with-monitoring-equipment-are-not-allowed-for-offshore-fishing>
- 17 DVSC (2016) Ca Mau: Depleted coastal fisheries resources <https://www.dvsc.com.vn/TinTuc/TinKinhTe/171676/ca-mau-can-kiet-nguon-loi-thuy-san-ven-bo.aspx>
- 18 Tuan, A., Nga, T. (9 September 2017) Speeding up reforms to the trawling sector <https://nhandan.com.vn/xahoi/item/34042702-day-nhanh-viec-chuyen-doi-nghe-gia-cao-tren-bien.html>
- 19 Tainguyen & Moi Truong (18 February 2019) Strengthening enforcement against illegal fishing in lagoons and coastal areas <https://baotainguyenmoitruong.vn/phap-luat/thua-thien-hue-tang-cuong-xu-ly-tinh-trang-khai-thac-gia-cao-tren-bien-va-dam-pha-1265736.html>
- 20 Tuan, A., Nga, T. (9 September 2017) Speeding up reforms to the trawling sector <https://nhandan.com.vn/xahoi/item/34042702-day-nhanh-viec-chuyen-doi-nghe-gia-cao-tren-bien.html>
- 21 VASEP (2018) Vietnam's fisheries industry overview <http://vasep.com.vn/1192/OneContent/tong-quan-nganh.htm>
- 22 VASEP (2018) Vietnam's fisheries industry overview <http://vasep.com.vn/1192/OneContent/tong-quan-nganh.htm>
- 23 Tuan, A., Nga, T. (9 September 2017) Speeding up reforms to the trawling sector <https://nhandan.com.vn/xahoi/item/34042702-day-nhanh-viec-chuyen-doi-nghe-gia-cao-tren-bien.html>
- 24 USDA (2018) Vietnam Oilseeds and Products Annual https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Oilseeds%20and%20Products%20Annual_Hanoi_Vietnam_4-11-2018.pdf
- 25 USDA (2018) Vietnam Oilseeds and Products Annual https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Oilseeds%20and%20Products%20Annual_Hanoi_Vietnam_4-11-2018.pdf
- 26 Nga, M. (3 January 2019) Vietnam mulls fishing ban as seafood resources dwindle <https://e.vnexpress.net/news/news/vietnam-mulls-fishing-ban-as-seafood-resources-dwindle-3862706.html>
- 27 The Guardian (14 August 2017) 'We are jobless because of fish poisoning': Vietnamese fishermen battle for justice <https://www.theguardian.com/global-development/2017/aug/14/vietnamese-fishermen-jobless-fish-poisoning-battle-justice>
- 28 The Vietnamese (8 November 2017) Timeline: The Formosa Environmental Disaster <https://www.thevietnamese.org/2017/11/timeline-the-formosa-environmental-disaster/>
- 29 Ibid
- 30 Reuters (29 May 2017) Formosa steel plant in Vietnam restarts after toxic spill <https://www.reuters.com/article/us-vietnam-environment-formosa-plastics/formosa-steel-plant-in-vietnam-restarts-after-toxic-spill-idUSKBN18P186>
- 31 Asianews (16 April 2018) Vinh diocese holds vigil for the victims of the Formosa environmental disaster <http://www.asianews.it/news-en/Vinh-diocese-holds-vigil-for-the-victims-of-the-Formosa-environmental-disaster-43632.html>
- 32 The Vietnamese (8 November 2017) Timeline: The Formosa Environmental Disaster <https://www.thevietnamese.org/2017/11/timeline-the-formosa-environmental-disaster/>
- 33 The New York Times (8 June 2016) Toxic Fish in Vietnam Idle a Local Industry and Challenge the State <https://www.nytimes.com/2016/06/09/world/asia/vietnam-fish-kill.html>
- 34 The Vietnamese (8 November 2017) Timeline: The Formosa Environmental Disaster <https://www.thevietnamese.org/2017/11/timeline-the-formosa-environmental-disaster/>
- 35 VNexpress (1 October 2016) Vietnam's unemployment rises in third quarter after fish death disaster <https://e.vnexpress.net/news/business/vietnam-s-unemployment-rises-in-third-quarter-after-fish-death-disaster-3477058.html>
- 36 International Business Times (30 April 2016) Vietnam Dead Fish Crisis: Critics Blast Formosa Plastics As Environmental Disaster Devastates Region <https://www.ibtimes.com/vietnam-dead-fish-crisis-critics-blast-formosa-plastics-environmental-disaster-2362144>
- 37 Kissel, M. (26 April 2018) The Formosa Spill and Violation of Freedom of Speech in Vietnam <https://www.msuilr.org/msuilr-legalforum-blogs/2018/4/26/the-formosa-spill-and-violation-of-freedom-of-speech-in-vietnam>
- 38 Tuoi Tre News (26 April 2016) Beleaguered Taiwanese firm tells Vietnam to choose between factory and marine life <https://tuoitrenews.vn/society/34498/beleaguered-taiwanese-firm-tells-vietnam-to-choose-between-factory-and-marine-life>
- 39 The New York Times (30 June 2016) Taiwan-Owned Steel Factory Caused Toxic Spill, Vietnam Says <https://www.nytimes.com/2016/07/01/world/asia/vietnam-formosa-ha-tinh-steel.html>
- 40 Reuters (14 November 2016) Broken rules at \$11 billion Formosa mill triggered Vietnam spill, report says <https://www.reuters.com/article/us-vietnam-environment-formosa-plastics/exclusive-broken-rules-at-11-billion-formosa-mill-triggered-vietnam-spill-report-says-idUSKBN1380WH>
- 41 Radio Free Asia (24 January 2018) Fishermen Again Protest in Central Vietnam Over 2016 Toxic Spill Payout <https://www.rfa.org/english/news/vietnam/formosa-protests-01242018163710.html>

- 42 UCA News (12 April 2018) Vietnamese fishermen still victims of marine disaster <https://www.ucanews.com/news/vietnamese-fishermen-still-victims-of-marine-disaster/82028>
- 43 South China Morning Post (24 December 2016) Vietnam says recovery from Formosa industrial disaster could take a decade <https://www.scmp.com/news/asia/southeast-asia/article/2056953/vietnam-says-recovery-formosa-industrial-disaster-could>
- 44 EJF (2019) Crew testimonies and interviews.
- 45 *ibid.*
- 46 Cairns Post (12 February 2016) Illegal fishermen from Vietnam are serial offenders in far northern waters <http://www.cairnspost.com.au/news/cairns/illegal-fishermen-from-vietnam-are-serial-offenders-in-far-northern-waters/news-story/5b08b7adbe3e22ab1bedee760412feb?nk=67c904490392d15cec92ef8fc405a140-1489487424>
- 47 Chanveasna, R (6 February 2018) Vietnamese fishing boat escapes chase <http://www.khmertimeskh.com/50106696/vietnamese-fishing-boat-escapes-chase/>
- 48 VNExpress (13 March 2017) Malaysia detains more Vietnamese fishermen on illegal fishing charges <http://e.vnexpress.net/news/news/malaysia-detains-more-vietnamese-fishermen-on-illegal-fishing-charges-3554288.html>
- 49 VN Express (25 November 2016) Another 25 Vietnamese fishermen captured for illegal fishing off Thailand and Malaysia <http://e.vnexpress.net/news/news/another-25-vietnamese-fishermen-captured-for-illegal-fishing-off-thailand-and-malaysia-3504455.html>
- 50 Cullwick, J. (12 December 2016) Blue boats – a new illegal fishing threat to Vanuatu http://dailypost.vu/news/blue-boats-a-new-illegal-fishing-threat-to-vanuatu/article_51940aed4-79f9-589d-9a8f-e53a41682649.html
- 51 Jakarta Post (12th May 2019) More than half of 539 sunk fishing ships come from Vietnam <https://www.thejakartapost.com/news/2019/05/12/more-than-half-of-539-sunk-fishing-ships-come-from-vietnam.html>
- 52 EU Commission (23 October 2017) Commission warns Vietnam over insufficient action to fight illegal fishing http://europa.eu/rapid/press-release_IP-17-4064_en.htm
- 53 Macfadyen, G et al (2019) The IUU Fishing Index <https://globalinitiative.net/wp-content/uploads/2019/02/IUU-Fishing-Index-Report-web-version.pdf>
- 54 *ibid.*
- 55 Ojamaa, P. (2018) Research for PECH Committee – Fisheries in Vietnam [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU\(2018\)629175_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU(2018)629175_EN.pdf)
- 56 Radio New Zealand (14 March 2017) 70 Vietnamese boats in New Caledonian waters illegally <http://www.radionz.co.nz/international/pacific-news/326573/70-vietnamese-boats-in-new-caledonia-waters-illegally>
- 57 Blaha, F. (2015) Illegal fishing in the central and south Pacific http://www.spc.int/DigitalLibrary/Doc/FAME/InfoBull/FishNews/151/FishNews151_21_Blaha.pdf
- 58 *ibid.*
- 59 EJF (2019) Crew testimonies and survey results
- 60 Food and Agriculture Organization of the United Nations (ND) High value and overexploitation: a need for better management of sea cucumber fisheries <http://www.fao.org/3/a-br816e.pdf>
- 61 Lee, N., Polan, S. (9 January 2019) Sea cucumbers are so valuable that people are risking their lives diving for them <https://www.businessinsider.com/why-sea-cucumbers-so-expensive-seafood-2019-1>
- 62 Food and Agriculture Organization of the United Nations (ND) High value and overexploitation: a need for better management of sea cucumber fisheries <http://www.fao.org/3/a-br816e.pdf>
- 63 Bodbar, S. (10 October 2011) High-Value Components and Bioactives from Sea Cucumbers for Functional Foods—A Review <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3210605/>
- 64 Dharmananda, S. (NA) Sea Cucumber: Food and Medicine <http://www.itmonline.org/arts/seacucumber.htm>
- 65 Michelin Guide (12 February 2018) All About Sea Cucumbers <https://guide.michelin.com/en/article/features/ingredient-sea-cucumber>
- 66 Lee, N., Polan, S. (9 January 2019) Sea cucumbers are so valuable that people are risking their lives diving for them <https://www.businessinsider.com/why-sea-cucumbers-so-expensive-seafood-2019-1>
- 67 Fabinyi, M et al (15 June 2017) Chinese trader perceptions on sourcing and consumption of endangered seafood <https://www.frontiersin.org/articles/10.3389/fmars.2017.00181/full>
- 68 Food and Agriculture Organization of the United Nations (2004) <http://www.fao.org/3/y5501e/y5501e00.htm>
- 69 SEAFDEC (2006) Vietnam Sea Cucumber Fisheries <http://firms.fao.org/firms/fishery/509/en>
- 70 Steven W. Purcell and David H. Williamson (May 2018) Chinese market prices of beche-de-mer: Implications for fisheries and aquaculture <https://www.sciencedirect.com/science/article/pii/S0308597X17308035>
- 71 Chen, S. (5 August 2015) More valuable than gold, but not for long: genetically-modified sea cucumbers headed to China's dinner tables <https://www.scmp.com/tech/science-research/article/1846481/more-valuable-gold-not-long-genetically-modified-sea-cucumbers>
- 72 Lee, N., Polan, S. (9 January 2019) Sea cucumbers are so valuable that people are risking their lives diving for them <https://www.businessinsider.com/why-sea-cucumbers-so-expensive-seafood-2019-1>
- 73 Fabinyi, M et al (15 June 2017) Chinese trader perceptions on sourcing and consumption of endangered seafood <https://www.frontiersin.org/articles/10.3389/fmars.2017.00181/full>
- 74 Lee, N., Polan, S. (9 January 2019) Sea cucumbers are so valuable that people are risking their lives diving for them <https://www.businessinsider.com/why-sea-cucumbers-so-expensive-seafood-2019-1>
- 75 South China Morning Post (20 May 2017) The sea cucumber smuggling scheme that made US family millions by shipping them to Asia <https://www.scmp.com/news/world/united-states-canada/article/2095036/sea-cucumber-scheme-made-american-family-millions>
- 76 Field, M. (27 February 2017) Vietnamese poachers plunder South Pacific sea cucumbers <https://asia.nikkei.com/Economy/Vietnamese-poachers-plunder-South-Pacific-sea-cucumbers>
- 77 National Geographic (14 November 2018) Sea cucumbers are being eaten to death <https://www.nationalgeographic.com/animals/2018/11/sea-cucumber-eaten-to-death/>
- 78 The University of Sydney (30 January 2012) Sea cucumbers could be key to preserving coral reefs <https://sydney.edu.au/news-opinion/news/2012/01/30/sea-cucumbers-could-be-key-to-preserving-coral-reefs.html>
- 79 Lim, L. (6 December 2017) Of Sea Cucumbers and Men <https://chinachannel.org/2017/12/06/sea-cucumbers/>
- 80 Ligaiula, P. (10 December 2018) Pacific steps up its fight against illegal, unregulated and unreported fishing with call to powerful fishing nations <http://www.tunapacific.org/2018/12/08/pacific-steps-up-its-fight-against-illegal-unregulated-and-unreported-fishing-with-call-to-powerful-fishing-nations/>
- 81 FAO (2003) Annex D. Regional MCS: The South Pacific Forum Fisheries Agency experience <http://www.fao.org/3/Y4411E/y4411e0e.htm>
- 82 Radio New Zealand (14 March 2017) 70 Vietnamese boats in New Caledonian waters illegally <http://www.radionz.co.nz/international/pacific-news/326573/70-vietnamese-boats-in-new-caledonia-waters-illegally>
- 83 Regional expert advisor (2019) Vessel arrests by FFA authorities
- 84 Rika, N. (7 December 2017) Bad boy: Vietnam earns villain status <http://www.tunapacific.org/tag/blue-boats/>
- 85 Ewing, I. (10 September 2016) In Micronesia, illegal Vietnamese fishing has terrible impact <https://www.newshub.co.nz/home/world/2016/09/in-micronesia-illegal-vietnamese-fishing-has-terrible-impact.html>
- 86 PNA Media (7 December 2018) FFA, PNA combine to combat IUU fishing in the region <http://www.tunapacific.org/2018/12/08/ffa-pna-combine-to-combat-iuu-fishing-in-the-region/>
- 87 VNS (24 April 2019) Drastic measures needed to lift yellow card <https://vietnamnews.vn/society/519066/drastic-measures-needed-to-lift-yellow-card.html#x2lgiS1jJBu6pxr2.97>
- 88 National Assembly (2003) Fisheries Law <http://extwprlegs1.fao.org/docs/texts/vie40534.doc>
- 89 Undercurrent News (11 December 2017) Vietnam passes revised law on fisheries to tackle IUU <https://www.undercurrentnews.com/2017/12/11/vietnam-passes-revised-law-on-fisheries-to-tackle-iuu/>

- 90 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 91 Tra, H. (11 April 2018) Kien Giang province: Announcement of the vessel monitoring appliance installation on fishing vessels <https://tongcucthuysan.gov.vn/capture-fisheries/doc-tin/010467/2018-05-04/kien-giang-province-announcement-of-the-vessel-monitoring-appliance-installation-on-fishing-vessels>
- 92 Nguyen, T (27 January 2018) Does Vietnam escape a yellow card? <http://customsnews.vn/does-vietnam-escape-a-yellow-card-5845.html>
- 93 VoV (6 March 2018) Vietnam resolves to make EU lift 'yellow card' on seafood <http://english.vov.vn/economy/vietnam-resolves-to-make-eu-lift-yellow-card-on-seafood-369828.vov>
- 94 Ojamaa, P. (2018) Research for PECH Committee – Fisheries in Vietnam [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU\(2018\)629175_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU(2018)629175_EN.pdf)
- 95 Ojamaa, P. (2018) Research for PECH Committee – Fisheries in Vietnam [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU\(2018\)629175_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/629175/IPOL_STU(2018)629175_EN.pdf)
- 96 Vietnam News (7 May 2018) Zero cases of illegal fishing since 2018 beginning <http://vietnamnews.vn/economy/427519/zero-cases-of-illegal-fishing-since-2018-beginning.html>
- 97 VN Express (16 March 2018) Philippines arrests 14 Vietnamese sailors for illegal fishing <https://e.vnexpress.net/news/news/philippines-arrests-14-vietnamese-sailors-for-illegal-fishing-3723818.html>
- 98 VNA (16 April 2018) Indonesia seizes 26 illegal fishing boats since January <https://en.vietnamplus.vn/indonesia-seizes-26-illegal-fishing-boats-since-january/129609.vnp>
- 99 National News Bureau of Thailand (7 May 2018) Thai authorities arrest crews of Vietnamese trawlers for illegal fishing http://thainews.prd.go.th/website_en/news/news_detail/WNSOC6105070010023
- 100 VNS (24 April 2019) Drastic measures needed to lift yellow card <https://vietnamnews.vn/society/519066/drastic-measures-needed-to-lift-yellow-card.html#x2lgiSijjBu6pxr2.97>
- 101 Dao, T. (14th May 2019) Illegal fishing heats up diplomatic exchanges between Vietnam, Malaysia, and Indonesia <https://www.seafoodsource.com/news/supply-trade/illegal-fishing-heats-up-diplomatic-exchanges-between-vietnam-malaysia-and-indonesia>
- 102 VNS (24 April 2019) Drastic measures needed to lift yellow card <https://vietnamnews.vn/society/519066/drastic-measures-needed-to-lift-yellow-card.html#x2lgiSijjBu6pxr2.97>
- 103 EJF (2019) Crew testimonies and interviews. Please also refer to Appendix 3 for further references
- 104 RTG (2018) Poseidon vessel captures for 2018
- 105 National Assembly (2003) Fisheries Law <http://extwprlegs1.fao.org/docs/texts/vie40534.doc>
- 106 Achavanuntakul, S. et al (2014) Mapping Shrimp Feed Supply Chain in Songkhla Province to Facilitate Feed Dialogue, Oxfam & Sal Forest https://www.academia.edu/8159369/Mapping_Shrimp_Feed_Supply_Chain_in_Songkhla_Province
- 107 Dinh, T. (2018) Improving the efficiency of shrimp value chain in Ca Mau, Vietnam https://www.theseus.fi/bitstream/handle/10024/152086/Dinh_Tuan.pdf?sequence=1
- 108 Dinh, T. (2018) Improving the efficiency of shrimp value chain in Ca Mau, Vietnam https://www.theseus.fi/bitstream/handle/10024/152086/Dinh_Tuan.pdf?sequence=1
- 109 Confidential source (2019) Trade data and company profile data analysis.
- 110 DG SANCO (2019) List of third country approved establishments https://webgate.ec.europa.eu/sanco/traces/output/VN/FFP_VN_en.pdf
- 111 Seafish Directory (2019) Bien Tay Seafood Company Ltd profile <http://www.seafishdirectory.com/directory/2011/bien-tay-seafood-co-ltd/>
- 112 Ngoc Chanh (19 July 2017) Ca Mau: Penalties for many factories and processing plants for violating the environment <http://www.sggp.org.vn/ca-mau-phat-nhieu-nha-may-che-bien-bot-ca-thuy-san-vi-pham-ve-moi-truong-456434.html>
- 113 Ramsden, N. (4 June 2019) US congressman calls for Minh Phu investigation over alleged mislabelling of Indian shrimp <https://www.undercurrentnews.com/2019/06/04/us-congressman-calls-for-minh-phu-investigation-over-alleged-duty-evasion/>
- 114 EJF (2018) Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing <https://ejfoundation.org/reports/out-of-the-shadows-improving-transparency-in-global-fisheries-to-stop-illegal-unreported-and-unregulated-fishing>
- 115 EJF (2018) Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing <https://ejfoundation.org/reports/out-of-the-shadows-improving-transparency-in-global-fisheries-to-stop-illegal-unreported-and-unregulated-fishing>
- 116 Hethongphapluatvietnam (2017) Law No. 95/2015/QH13 dated November 25, 2015, the Vietnam Maritime Code <http://hethongphapluatvietnam.net/law-no-95-2015-qh13-dated-november-25-2015-the-vietnam-maritime-code.html>
- 117 National Assembly (2003) Fisheries Law <http://extwprlegs1.fao.org/docs/texts/vie40534.doc>
- 118 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 119 National Assembly (2003) Fisheries Law <http://extwprlegs1.fao.org/docs/texts/vie40534.doc>
- 120 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 121 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 122 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 123 EJF (2018) Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing <https://ejfoundation.org/reports/out-of-the-shadows-improving-transparency-in-global-fisheries-to-stop-illegal-unreported-and-unregulated-fishing>
- 124 Ministry of Labour, Invalids and Social Affairs (2013) Labor Code of the Socialist Republic of Vietnam <http://www.ilo.org/dyn/natlex/docs/MONOGRAPH/91650/114939/F224084256/VNM91650.pdf>
- 125 ILO (1999) Fishing among the most dangerous of all professions, says ILO https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_071324/lang-en/index.htm
- 126 Mai, L. (24th April 2019) Ba Ria-Vung Tau will install fishing vessel monitoring system soon <https://tongcucthuysan.gov.vn/en-us/capture-fisheries/doc-tin/012832/2019-05-02/ba-ria-vung-tau-will-install-fishing-vessel-monitoring-system-soon>
- 127 Ministry of Labour, Invalids and Social Affairs (2013) Labor Code of the Socialist Republic of Vietnam <http://www.ilo.org/dyn/natlex/docs/MONOGRAPH/91650/114939/F224084256/VNM91650.pdf>
- 128 National Assembly (2003) Fisheries Law <http://extwprlegs1.fao.org/docs/texts/vie40534.doc>
- 129 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 130 Vietnamese Government (1999) Decree No. 05/1999/ND-CP of February 3, 1999 on the people's identity card http://www.moj.gov.vn/vbqp/en/lists/vn%20bn%20php%20lut/view_detail.aspx?itemid=1200
- 131 EJF (2015) Pirates and slaves: How overfishing in Thailand fuels human trafficking and the plundering of our oceans https://ejfoundation.org/resources/downloads/EJF_Pirates_and_Slaves_2015_o.pdf
- 132 EJF (2015) Thailand's seafood slaves: Human trafficking, slavery and murder in Kantang's fishing industry <https://ejfoundation.org/reports/thailands-seafood-slaves-human-trafficking-slavery-and-murder-in-kantangs-fishing-industry>
- 133 National Assembly (2017) Law On Fisheries <http://extwprlegs1.fao.org/docs/pdf/vie171855.pdf>
- 134 Ministry of Labour, Invalids and Social Affairs (2013) Labor Code of the Socialist Republic of Vietnam <http://www.ilo.org/dyn/natlex/docs/MONOGRAPH/91650/114939/F224084256/VNM91650.pdf>
- 135 ILO (2012) ILO Indicators of Forced Labour http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_203832.pdf
- 136 EJF (2013) Sold to the sea https://ejfoundation.org/resources/downloads/Sold_to_the_Sea_report_lo-res-v2.compressed-2.compressed.pdf

- 137 EJF (2018) Out of the shadows: Improving transparency in global fisheries to stop illegal, unreported and unregulated fishing <https://ejfoundation.org/reports/out-of-the-shadows-improving-transparency-in-global-fisheries-to-stop-illegal-unreported-and-unregulated-fishing>
- 138 Thai Department of Fisheries (2019) Whitelist of approved commercial fishing vessels https://bi.md.go.th/fisheries_whitelist
- 139 MMAF (2019) Statistics on the number of fishing vessels <http://trvia.kkp.go.id/data-kapal>
- 140 ILO (2017) C188- Work in Fishing Convention, 2007 (No.188) https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C188
- 141 British Standard Institute (2017), Code of Practice PAS 1550:2017, Exercising due diligence in establishing the legal origin of seafood products and marine ingredients. Importing and processing, <https://shop.bsigroup.com/ProductDetail?pid=0000000003037167>
- 142 The Diplomat (14 April 2018) The Thai Sting: A Fishing Raid in the South China Sea <https://thediplomat.com/2018/09/the-thai-sting-a-fishing-raid-in-the-south-china-sea/>
- 143 New Straits Times (9 July 2018) 21 Vietnamese held for illegal fishing in Terengganu <https://www.nst.com.my/news/nation/2018/07/389093/21-vietnamese-held-illegal-fishing-terengganu-nsttv>
- 144 Kamaran Malik (17 August 2018) Illegal fishing crew arrested in Malaysia, boat confiscated <https://cms.ati.ms/2018/08/illegal-fishing-crew-arrested-in-malaysia-boat-confiscated/>
- 145 Bangkok Post (30 August 2018) Two Vietnamese trawlers caught fishing off Songkhla <https://www.bangkokpost.com/news/general/1531090/two-vietnamese-trawlers-caught-fishing-off-songkhla>
- 146 VNExpress (25 September 2018) Philippines detains 5 Vietnamese fishermen, boat <https://e.vnexpress.net/news/news/philippines-detains-5-vietnamese-fishermen-boat-3814341.html>
- 147 The Nation (30 October 2018) Three Vietnamese fishing boats seized, 14 crew arrested in Gulf of Thailand http://www.nationmultimedia.com/detail/around_thailand/30357522
- 148 Phnom Penh Post (1 January 2019) Vietnamese fishermen caught in Cambodian waters <https://www.phnompenhpost.com/national/vietnamese-fishermen-caught-cambodian-waters>
- 149 The Jakarta Post (27 February 2019) Indonesia slams Vietnam for disrupting arrests <https://www.thejakartapost.com/seasia/2019/02/27/ri-slams-vietnam-for-disrupting-arrests.html>
- 150 The Star (31 March 2019) Five Vietnamese fishermen nabbed in Sabah waters, fish worth RM700k seized <https://www.thestar.com.my/news/nation/2019/03/31/five-vietnamese-fishermen-nabbed-in-sabah-waters-fish-worth-rm700k-seized/#VuqEQIW0Xc67XBYz.99>
- 151 Fish Stock Exchange (8 April 2019) In Indonesia two Vietnamese-flagged fishing vessels has been arrested <https://fishstockexchange.com/news/730/in-indonesia-two-vietnamese-flagged-fishing-vessels-has-been-arrested.html>
- 152 The Jakarta Post (10 April 2019) Six foreign vessels arrested in Natuna, Malacca Strait <https://www.thejakartapost.com/news/2019/04/10/six-foreign-vessels-arrested-in-natuna-malaccastrait.html>
- 153 <https://www.bangkokpost.com/news/asean/1669012/indonesia-detains-12-fishermen-after-sea-clash-with-vietnam>
- 154 Baird Maritime (30 April 2019) Malaysia Detains Six Vietnamese Boats for Illegal Fishing <https://www.bairdmaritime.com/fishing-boat-world/regulation-and-enforcement/5328-malaysia-detains-six-vietnamese-boats-for-illegal-fishing>
- 155 MMAF (2019) Vessel arrests by Indonesian authorities
- 156 *ibid.*
- 157 The Star (13 May 2019) Navy vessel KD Pahang detains Vietnamese fishing trawler for intrusion near Kemaman <https://www.thestar.com.my/news/nation/2019/05/13/navy-vessel-kd-pahang-detains-vietnamese-fishing-trawler-for-intrusion-near-kemaman/>
- 158 Regional expert advisor (2018) Vessel arrests by Thai authorities
- 159 Regional expert advisor (2019) Vessel arrests by FFA authorities

“The rest of the crew said that we would get a lot of money, they said that we would be going to Thailand. The crew said that the owner’s other boat (a squid boat) got caught in Thailand and then we got caught as well.”

Hyun Sik, Vietnamese fishing boat crewmember,
interviewed in January 2018.

“I want to go home but please don’t let me go home alone. My mother works in a different village. No one waits for me at home.”

Vietnamese child fisher, 14 years old,
interviewed in July 2019.

“I want to go to school but I can’t go to school if I have no food.”

Vietnamese child fisher, 15 years old,
interviewed in July 2019.

“We are poor, we have no choice.”

Vietnamese child fisher, 17 years old,
interviewed in July 2019.

