



Ongoing Environmental Abuses Cast Fresh Doubt on the TPP's Weak Conservation Terms

EXECUTIVE SUMMARY

Detailed analysis by leading academics,¹ environmental law experts,² and environmental organizations like the Sierra Club³ has already shown that the environment chapter of the Trans-Pacific Partnership (TPP) is too weak to compel meaningful environmental protection.

As further evidence of this, our new research finds that TPP countries are continuing to permit and even facilitate serious environmental degradation in the very conservation areas that the TPP seeks to address. In some TPP countries, these environmental abuses are actually increasing. The fact that TPP countries are acting as if the deal would require no reduction in such abuses casts further doubt on the notion that the TPP would lead to increased environmental protection.

Indeed, the more likely result would be increased degradation in the conservation areas mentioned by the TPP, given that the deal's weak environmental provisions fail to compensate for conservation threats posed by TPP tariff cuts on sensitive goods like shark fins, palm oil, elephant ivory, and fish.

Key Findings: TPP countries continue to lead the world in critical environmental abuses

Some TPP countries are among the world's worst offenders with respect to conservation of fisheries, marine life, biodiversity, and endangered species. While these are the very conservation areas that the TPP seeks to address, these TPP countries have not shown signs that they intend to alter their consistent pattern of serious abuses, even as they prepare to ratify the deal. That may be due to the fact that the TPP's weak language, in most instances, does not require them to take such corrective action, and in the few exceptions, is unlikely to be enforced. The sheer scale of the unabated abuses should give lawmakers pause. For example:

- **Fishery subsidies:** Japan remains by far the world's largest provider of subsidies that drive overfishing. Instead of reducing its subsidies in preparation for the TPP, Japan is now planning to introduce *new* subsidies to boost fish exports. The government actually cites the TPP's tariff cuts as a reason for the subsidies *increase*.
- **Illegal wildlife trade:** Vietnam and Malaysia have been ranked by the World Wildlife Fund as the worst and third-worst countries among those involved in illegal wildlife trade for their failure to protect at-risk tigers, rhinos, and elephants in line with the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Vietnam is now the subject of a public hearing before the Hague-based Wildlife Justice Commission for largely ignoring 5,000 pages of evidence, presented in January 2016, which revealed more than \$50 million of illegal wildlife trade in just one town in Vietnam.

- **Whales:** Japan stands alone in killing hundreds of whales each year under the pretense of “scientific” research – a practice that the International Court of Justice ruled against in 2014. But Japan has continued its whaling program. In early 2016, a Japanese expedition killed 333 more whales.
- **Sea turtles:** Mexico and Peru are responsible for some of the highest sea turtle bycatch rates in the world. Mexico accounts for almost half of all recorded illegal turtle deaths, while Japan remains a major source of demand for illegal turtle shells to produce handicraft.
- **Sharks:** In December 2015, Japan and New Zealand blocked an international effort to ban the deadly practice of shark finning in the Pacific. Only four of the 12 TPP countries have full shark finning bans in place, and Peru remains the world’s fifth-largest shark fin exporter.

This paper explores the threats posed by the TPP, the TPP’s weak provisions, and the unabated abuses in TPP countries with respect to three critical environmental areas: marine megafauna, conservation and trade, and fisheries subsidies. TPP countries’ ongoing environmental abuses in these areas present fresh evidence that the deal, on net, would negatively impact at-risk animals and ecosystems, offering further reason to oppose the TPP.

Ongoing abuses reflect the weakness of the TPP environment chapter

The weaknesses of the TPP’s environment chapter can be summarized in four points:

- The provisions **lack ambition**, and in many cases call for a degree of environmental protection that falls short of existing laws.
- The language is often **non-binding**, with provisions describing what countries “should” do, not what they “shall” do. Such hortatory statements are not enforceable.
- The language is often **non-specific**, with provisions asking or requiring countries to take undefined “measures” to address an environmental problem. This sets the bar so low for compliance that the TPP could not be used to compel meaningful action.
- There is little evidence to suggest that provisions would be enforced, even where legally possible. The TPP replicates the same **failed enforcement mechanism** included in the last four U.S. trade deals for environmental provisions. The U.S. has never once brought a case against another country under any of these deals for environmental violations, despite widely documented abuses.

1. MARINE MEGAFUNA

Threats posed by the TPP

Under the TPP, Vietnam and Malaysia, which are among the world's top 10 shark fin importers, would eliminate shark fin tariffs – currently at 20 percent and 7 percent respectively – on major shark fin exporters like Peru and Mexico.⁴ The TPP also would eliminate the 2.5 percent tariffs that Japan (the world’s sixth-largest importer of frozen shark meat) places on shark meat from TPP countries like the U.S. and New Zealand (the world’s fourth and ninth-largest exporters of frozen shark meat, respectively).⁵ The tariff cuts, by stimulating demand for shark products, would encourage increased killing of at-risk sharks. Similarly, the TPP’s elimination of fish tariffs in major fish-importing countries would pose increased threats to sea turtles and marine mammals by encouraging more fishing in waters where those animals face high bycatch rates.

The TPP's weak provisions

The TPP text regarding marine life conservation fails to establish obligations that are both binding and specific. One provision states that countries “shall promote the long-term conservation of sharks, marine turtles, seabirds, and marine mammals, through the implementation and effective enforcement of conservation and management measures.”⁶ This language, while binding, does not specify the “conservation and management measures” TPP countries must implement to meet the vague obligation to “promote...long-term conservation.”

The subsequent sentence in the TPP text is more specific, but not binding. It states, “[s]uch measures should include, as appropriate,” conservation measures such as “finning prohibitions” for sharks and “fisheries bycatch mitigation measures” for marine turtles and mammals.⁷ The use of “should,” rather than “shall,” makes clear that this is a hortatory statement, not a binding obligation. And the “as appropriate” loophole would give TPP countries even further latitude to simply disregard this suggested list of conservation measures.

Unabated abuses in TPP countries

Shark finning: Of the 12 TPP countries, only the U.S., Canada, Mexico, and Chile have full shark finning bans in place.⁸ Peru, which is the world’s fifth-largest shark fin exporter,⁹ has no shark finning ban in place.¹⁰ In December 2015, Japan and New Zealand blocked an international effort to ban at-sea shark fin removal in the Pacific.¹¹ All TPP countries permit shark fins to be removed and sold once the shark has been killed and landed at port.

Shark catch limits: Japan, the world’s largest producer of shark meat,¹² has very few shark management measures in place, and Peru, the top shark fishing nation in the Southeast Pacific, has no catch quotas.¹³ Vietnam, Brunei, and Singapore have zero shark management measures.¹⁴

Marine mammal bycatch: Marine mammals are commonly killed in fishing operations off the coast of Peru (via longline fishing), New Zealand (via trawl nets), and Australia and Mexico (via gillnet fishing).¹⁵ In 2016, the International Whaling Commission expressed “grave concern” about the impact of New Zealand’s commercial fishing on a rare dolphin, noting that New Zealand’s bycatch mitigation measures fall short of what has been recommended.¹⁶ In Peru, the use of large mesh driftnets is responsible for a large number of dolphin deaths.¹⁷ Despite signing up to the U.N. moratorium on high-seas driftnets, Japan still allows the use of driftnets of up to 13 kilometers in length in its own waters, posing a large bycatch threat to marine mammals.¹⁸

Marine mammal protection under international agreements: Japan continues to flout the International Convention for the Regulation of Whaling (ICRW) to which it is a party. Since the ICRW established a moratorium on commercial whaling in 1985, Japan has been issuing itself “scientific” whaling permits to kill hundreds of whales each year. In 2014, the International Court of Justice ruled that Japan’s whaling program was commercial, not scientific, in nature and should therefore be cancelled under the terms of the ICRW. After a brief suspension of whaling activities, Japan announced in late 2014 that it would continue issuing itself scientific whaling permits under revised criteria. In early 2016, a Japanese expedition killed 333 additional whales.¹⁹ In fact, Japan actually has been increasing its support for whaling activities. Japan’s subsidies for the whaling industry rose from \$9 million in 2007 to \$50 million in 2014, in an effort to compensate for declining domestic demand for whale meat.²⁰ The subsidies contribute to the operating costs of the whaling fleet and security measures against anti-whaling groups.²¹

Sea turtle bycatch: Fishing vessels off the coasts of Mexico and Peru are responsible for some of the highest sea turtle bycatch rates in the world,²² with tens of thousands caught and killed in small-scale fisheries in Peru, and over one thousand deaths reported annually for just one lagoon in northwest Mexico.²³

Sea turtle protections: Unlike the U.S., which protects all turtle species in its waters under the Endangered Species Act, Mexico, Chile, Japan and Australia are among TPP countries that permit the catching and killing of sea turtles. Meanwhile, the Pacific coast of Mexico accounts for almost half of all recorded turtle fishing in the world that is not permitted by law.²⁴ In Japan, for decades the principal importer of turtle shells to produce handicraft (known as “bekko”),²⁵ demand for turtle shell is reportedly on the rise.²⁶ A 2012 investigation revealed the government’s ongoing failure to tackle the country’s burgeoning and illegal trade in sea turtle parts used for the production of bekko.²⁷ There is little evidence to suggest that Japan has rectified its non-enforcement of sea turtle protections in recent years.

2. CONSERVATION AND TRADE

Threats posed by the TPP

On the first day of the TPP, Japan would be required to eliminate its 5 percent tariff on elephant ivory imports, inviting increased shipments from significant ivory-exporting TPP countries like Canada.²⁸ Such increased ivory demand would undermine efforts to reduce elephant poaching.

The TPP would eliminate or reduce tariffs that seven TPP countries impose on imports of palm oil,²⁹ including Mexico, the world’s seventh-largest importer of crude palm oil.³⁰ This would encourage increased production of palm oil in Malaysia, the world’s second-largest producer³¹ and exporter of palm oil.³² This poses a threat to Malaysia’s disappearing forests, as oil palm expansion is already the leading cause of the country’s widespread tropical deforestation.³³

The TPP’s weak provisions

The previous four U.S. trade agreements have required signatory countries to “adopt, maintain and implement” policies to fulfill their commitments under *seven* multilateral environmental agreements (MEAs). But the TPP only includes this obligation for *one* MEA – CITES.³⁴

The TPP requires that “each Party shall take measures to combat, and cooperate to prevent, the trade of wild fauna and flora that, based on credible evidence, were taken or traded in violation of that Party’s law or another applicable law, the primary purpose of which is to conserve, protect, or manage wild fauna or flora.” However, the subsequent paragraph states that “each Party retains the right to exercise administrative, investigatory and enforcement discretion in its implementation” of this commitment.³⁵ This language offers TPP governments a broad loophole to avoid combating illegal wildlife trade at their “discretion.”

The TPP requires countries to “take appropriate measures to protect and conserve wild fauna and flora that it has identified to be at risk within its territory.”³⁶ But “appropriate measures” is undefined, leaving room for countries to avoid taking the measures necessary to protect at-risk fauna and flora.

Unabated abuses in TPP countries

Failure to implement CITES: A 2012 assessment by the World Wildlife Fund of countries' compliance with, and enforcement of, CITES commitments for tigers, rhinos, and elephants found that Vietnam was the least compliant out of 43 countries assessed, and Malaysia was third least compliant.³⁷ Vietnam remains a key domestic market for elephant ivory, rhino horn, and tiger bone, whereas Malaysia is a key transit country for elephant and tiger parts. In January 2016, the Hague-based Wildlife Justice Commission delivered 5,000 pages of evidence to Vietnam documenting the country's illegal trade in CITES Appendix I species (those threatened with extinction) including a \$53 million trade in rhino horn, elephant ivory, and tiger parts and products observed in one town over a 12-month period.³⁸ However, the Vietnamese government has failed to act on this evidence, and is now the subject of a public hearing in The Hague.³⁹

Beyond Vietnam and Malaysia, Japan “has systematically failed to comply with CITES obligations” regarding elephant ivory trade, according to a 2016 report by the Environmental Investigation Agency.⁴⁰ Japan permits a legal ivory trade and is one of the world's largest importers of legal ivory.⁴¹ However, this legal trade has greatly facilitated the laundering of illegal ivory due to weak legislation and poor enforcement. For example, of ivory “hankos” sold in Japan (seals used to conduct business), up to 87 percent are made with illegal ivory.⁴² Japan's CITES violations include failure to verify the legality of elephant tusks, failure to register and enact effective controls over raw and worked ivory, failure to regulate the online ivory trade, and failure to control illegal exports to China and Thailand.⁴³ Humane Society International has called Japan's ivory market a “key driving force behind Africa's poaching epidemic.”⁴⁴

Failure to combat illegal trade in flora and fauna: Vietnam's failure to combat trade in rhino horn violates not only CITES rules, but Vietnamese law, which bars the sale, purchase, and transport of rhino parts.⁴⁵ A majority of the rhino horns smuggled into Vietnam also were taken in violation of South African laws against rhino poaching. Similarly, the weakness of Japan's Law for the Conservation of Endangered Species of Wild Fauna and Flora (LCES) – which permits unregistered ivory tusks from unknown sources to be registered⁴⁶ – fails to combat the trade in ivory that is taken in violation of the laws of countries where elephants are poached.

Failure to protect at-risk flora and fauna: Between 2000 and 2014, Malaysia lost over 19 percent of its forest cover – the highest rate of forest loss in the world.⁴⁷ This forest loss has been concentrated in Malaysian Borneo, one of the most biodiverse places on earth, where an estimated 80 percent of rainforests have been heavily impacted by logging.⁴⁸ Consequently, 14 percent of Malaysia's mammals are now listed as endangered – from the Bornean Pygmy elephant to the Sumatran rhinoceros to the tiger. It is difficult to identify measures taken by Malaysia to protect its flora and fauna from this relatively recent acceleration of forest loss, driven largely by demand for palm oil and wood products. Many of Malaysia's land and forest laws still date from the 1950s to the 1980s.⁴⁹ At the same time, enforcement of existing environmental laws is weak.⁵⁰ Unlike many Southeast Asian countries with high rates of forest loss, from Indonesia to Vietnam to Papua New Guinea, Malaysia has not recently developed a dedicated national forest protection plan – its National Forest Policy was last updated in 1992.⁵¹ Nor is Malaysia engaged in key multilateral programs to reduce deforestation.⁵²

3. FISHERIES SUBSIDIES

Threats posed by the TPP

The TPP would increase the global trade in fish through the reduction of tariffs, increasing pressure on overfished stocks. The United States and Japan are the first and second largest fish importers in the world and the TPP countries together import 35 percent of the world's fish.⁵³ The top seven fish exporters include the United States, Vietnam, Canada, and Chile, and the TPP countries together export 23 percent of the world's fish.⁵⁴

The TPP's weak provisions

The TPP text requires that no country grants or maintains "subsidies for fishing that negatively affect fish stocks that are in an overfished condition."⁵⁵ This is a welcome measure to withdraw fishing subsidies for the 28.8 percent of fish stocks that are fished at a biologically unsustainable level. But it does not apply to the 61.3 percent of fish stocks that are already fully fished. Some environmental law experts have pointed out that this would allow for the maintenance of subsidies that could push fully fished stocks into an overfished condition.⁵⁶

The TPP text also prohibits subsidies for fishing vessels listed, by the flag state or a Regional Fisheries Management Organization (RFMO), for illegal, unreported, and unregulated (IUU) fishing.⁵⁷ The value of this provision is limited by the fact that many RFMOs already go further, for example, by requiring countries to take all necessary measures to eliminate IUU fishing.⁵⁸

Unabated abuses in TPP countries

A 2016 study shows that Japan has the highest level of harmful subsidies (those that lead to overfishing) in the world, at \$3 billion.⁵⁹ According to the same source, an estimated 63 percent of Canada's fishing subsidies are either harmful or "ambiguous."⁶⁰ The study also indicates that Chile and Peru have increased their levels of harmful subsidies in recent years.⁶¹ Vietnam's fishing subsidies are small compared to Japan's, but "have had many negative consequences" according to the World Wildlife Fund, with direct and indirect impacts on overfishing.⁶²

Despite the fact that the TPP calls for eliminating fishery subsidies that negatively affect overfished fish stocks, there are signs that key TPP members are actually planning to move further in the opposite direction by ramping up fishery subsidies. In fact, Japan's government has cited the TPP's planned tariff cuts as a reason for introducing new subsidies to boost fish exports and fish processing and distribution.⁶³

At the same time, it is unclear what measures, if any, key TPP countries are taking to ensure subsidies do not end up with fishing fleets engaged in IUU fishing. This is concerning given that 73 percent of Mexico's fishing, and 40 percent of Vietnam's fishing, is estimated to be illegal, unreported, or unregulated.⁶⁴

CONCLUSION

There is no persuasive case to support the TPP on the grounds that it would increase environmental protection. The TPP's weak environmental provisions entirely fail to compensate for the increased environmental threats posed by the deal's tariff eliminations. This reality undercuts the assertion by the Office of the United States Trade Representative that the TPP

creates “an historic opportunity to advance conservation and environmental protection across the Asia-Pacific.” The fact that many TPP countries are still failing to take meaningful action in the very conservation areas that the TPP seeks to address – in some cases from a very low starting point as the world’s worst performers – offers further evidence that the deal would not compel environmental protection.

The TPP comes at a time when the international community is forging ahead with international agreements to protect the biosphere. Trade agreements could and should bring trade policies into alignment with this international push for stronger environmental protection. Given the scale of the environmental challenges in the Pacific area, the TPP could have been a vehicle to do just that. Instead, the TPP represents both a missed opportunity and an increased threat to our environment. It should be rejected as such.

ENDNOTES

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- ¹ Chris Wold, “[Empty Promises and Missed Opportunities: An Assessment of the Environmental Chapter of the Trans-Pacific Partnership](#),” January 4, 2016.
 - ² Center For International Environmental Law, “[The Trans-Pacific Partnership and the Environment: An Assessment of Commitments and Trade Agreement Enforcement](#),” November 2015.
 - ³ Sierra Club, “[TPP Text Analysis: Environment Chapter Fails to Protect the Environment](#),” November 2015.
 - ⁴ Office of the U.S. Trade Representative, [Vietnam TPP Tariff Elimination Schedule](#) and [Malaysia TPP Tariff Elimination Schedule](#), accessed October 2016.
 - ⁵ United Nations, [Comtrade Database](#), accessed October 2016.
 - ⁶ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.16.4.
 - ⁷ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.16.4.a and Article 20.16.4.b.
 - ⁸ Pew Environment Group, “[Navigating Global Shark Conservation: Current Measures and Gaps](#),” Appendix 3, pp. 26-51, July 2012.
 - ⁹ United Nations, [Comtrade Database](#), accessed October 2016.
 - ¹⁰ Grant D. Adams, et al., “[Spatial Ecology of Blue Shark and Shortfin Mako in Southern Peru: Local Abundance, Habitat Preferences and Implications for Conservation](#),” *Endangered Species Research*, Vol. 31, pp.19–32, September 5, 2016.
 - ¹¹ World Wildlife Fund, “[Tuna Fishing Countries Fail Again to Ensure that Shark Finning Does Not Occur in the Western and Central Pacific](#),” December 10, 2015.
 - ¹² Food and Agriculture Organization of the United Nations, [Fishery Commodities Global Production and Trade database](#), accessed October 2016.
 - ¹³ Grant D. Adams, et al., “[Spatial Ecology of Blue Shark and Shortfin Mako in Southern Peru: Local Abundance, Habitat Preferences and Implications for Conservation](#),” *Endangered Species Research*, Vol. 31, pp.19–32, September 5, 2016.
 - ¹⁴ Pew Environment Group, “[Navigating Global Shark Conservation: Current Measures and Gaps](#),” Appendix 3, pp. 26-51, July 2012, at 31, 46 & 51.
 - ¹⁵ Rebecca L. Lewison, et al., “[Global Patterns of Marine Mammal, Seabird, and Sea Turtle Bycatch Reveal Taxa-Specific and Cumulative Megafauna Hotspots](#),” *Proceedings of the National Academy of Sciences of the United States of America*, vol. 111 no. 14, Figure 1, April 8, 2014.
 - ¹⁶ “[NZ Urged to Protect Rare Dolphin](#),” *Otago Daily Times*, July 10, 2016.
 - ¹⁷ Randall R. Reeves, et al., “[Marine Mammal Bycatch in Gillnet and Other Entangling Net Fisheries, 1990 to 2011](#),” *Endangered Species Research*, vol. 20: 71–97, March 2013.
 - ¹⁸ Zak Smith, et al., “[Net Loss: The Killing of Marine Mammals in Foreign Fisheries](#),” National Resources Defense Council, January 2014, at 28.
 - ¹⁹ Elahe Izadi, “[A Japanese Fleet Killed 333 Whales for ‘Research’](#),” *The Washington Post*, March 25, 2016.
 - ²⁰ Mari Yamaguchi, “[Big Threat to Japan Whaling: Declining Appetites](#),” *The Seattle Times*, March 27, 2014.
 - ²¹ International Fund for Animal Welfare, “[The Economics of Japanese Whaling: A Collapsing Industry Burdens Taxpayers](#),” February 2013; and Greenpeace, “[Japan’s Whaling Subsidies: The Collapse of the Whale Meat Market](#),” March 2012.
 - ²² Rebecca L. Lewison, et al., “[Global Patterns of Marine Mammal, Seabird, and Sea Turtle Bycatch Reveal Taxa-Specific and Cumulative Megafauna Hotspots](#),” *Proceedings of the National Academy of Sciences of the United States of America*, vol. 111 no. 14, Figure 1, April 8, 2014.
 - ²³ Frances Humber, et al., “[So Excellent a Fish: A Global Overview of Legal Marine Turtle Fisheries](#),” *Diversity and Distributions*, vol. 20, pp.579–590, February 2014.
 - ²⁴ Frances Humber, et al., “[So Excellent a Fish: A Global Overview of Legal Marine Turtle Fisheries](#),” *Diversity and Distributions*, vol. 20, pp.579–590, February 2014.
 - ²⁵ World Wildlife Fund, “[Marine Turtles](#)” accessed October 2016.

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- ²⁶ Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia, "[Illegal Take And Trade Of Marine Turtles In The Iosea Region](#)," MT-IOSEA/SS.7/Doc. 10.1, August 28, 2014, at para.3.
- ²⁷ Timothy Lam, et al., "[An Examination of Marine Turtle Trade in China and Japan](#)," Traffic East Asia, March 2012.
- ²⁸ Convention on International Trade in Endangered Species of Wild Fauna and Flora, [CITES Trade Database](#), accessed October 2016.
- ²⁹ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016.
- ³⁰ United Nations, [Comtrade Database](#), accessed October 2016.
- ³¹ Malaysian Palm Oil Board, "[Malaysian Palm Oil Industry](#)," accessed October 2016.
- ³² United Nations, [Comtrade Database](#), accessed October 2016.
- ³³ Wetlands International, "[New Figures: Palm Oil Destroys Malaysia's Peatswamp Forests Faster than Ever](#)," February 1, 2011.
- ³⁴ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.17.2.
- ³⁵ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.17.5 and Article 20.17.6.
- ³⁶ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.17.4.a.
- ³⁷ World Wildlife Fund, "[Wildlife Crime Scorecard: Assessing Compliance with and Enforcement of CITES Commitments for Tigers, Rhinos and Elephants](#)," March 2012. Performance is scored according to the following indicators: domestic ivory market score, law enforcement ratio, total weight of ivory seizures, organized crime indicator, tiger seizures, and end use destination/poaching levels of rhino horn.
- ³⁸ Wildlife Justice Commission, "[Viet Nam Wildlife Crime Investigation: Public Hearing Announced](#)," September 15, 2016.
- ³⁹ "[Conservationists to Take Vietnam to Public Hearing over Wildlife Trafficking](#)," *Xinhua News Agency*, September 29, 2016.
- ⁴⁰ Environmental Investigation Agency, "[The Dirty Secrets of Japan's Illegal Ivory Trade](#)," September 2016.
- ⁴¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, [CITES Trade Database](#), accessed October 2016.
- ⁴² Environmental Investigation Agency, "[Blood E-Commerce: Rakuten's Profits from the Slaughter of Elephants and Whales](#)" March 2014.
- ⁴³ Environmental Investigation Agency, "[The Dirty Secrets of Japan's Illegal Ivory Trade](#)," September 2016.
- ⁴⁴ Michael Szabo, "[Online Ivory in Japan Threatens African Elephants – Activists](#)," *Reuters*, March 19, 2014.
- ⁴⁵ Vietnam Ministry of Agriculture and Rural Development, [Report to the CITES Secretariat on Viet Nam's Compliance with Resolution Conf. 9.14](#), January 31, 2014; and Vietnam Government, [Government Decree 32/2006/ND-CP on Management of Endangered, Precious, and Rare Species of Wild Plants and Animals](#), March 30, 2006, accessed October 2016 (translation).
- ⁴⁶ Environmental Investigation Agency, "[Blood E-Commerce: Rakuten's Profits from the Slaughter of Elephants and Whales](#)," March 2014.
- ⁴⁷ Global Forest Watch, "[Malaysia](#)," accessed October 2016.
- ⁴⁸ Rhett A. Buttler, "[80% of Rainforests in Malaysian Borneo Logged](#)," *Mongabay*, July 17, 2013.
- ⁴⁹ Forest Legality Alliance, "[Malaysia](#)," accessed October 2016.
- ⁵⁰ Carol Yong, "[Deforestation Drivers and Human Rights in Malaysia](#)," Forest Peoples Programme, December 4, 2014.
- ⁵¹ The REDD Desk, "[National Forestry Policy \(Malaysia\)](#)," accessed October 2016.
- ⁵² Climate Investment Funds, "[Forest Investment Program](#)," accessed October 2016; and Forest Carbon Partnership Facility, "[REDD+ Countries](#)," accessed October 2016.
- ⁵³ Own calculation from International Trade Centre, [Trade Map database](#), accessed October 2016.
- ⁵⁴ Own calculation from International Trade Centre, [Trade Map database](#), accessed October 2016.
- ⁵⁵ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.16.5.a.
- ⁵⁶ Chris Wold, "[Empty Promises and Missed Opportunities: An Assessment of the Environmental Chapter of the Trans-Pacific Partnership](#)," January 4, 2016.
- ⁵⁷ Office of the U.S. Trade Representative, [TPP Full Text](#), accessed October 2016, Article 20.16.5.b.
- ⁵⁸ Chris Wold, "[Empty Promises and Missed Opportunities: An Assessment of the Environmental Chapter of the Trans-Pacific Partnership](#)," January 4, 2016.
- ⁵⁹ Rashid U. Sumaila, et. al., "[Global Fisheries Subsidies: An Updated Estimate](#)," *Marine Policy*, DOI:10.1016/j.marpol.2015.12.026, January 2016. Capacity-enhancing or "harmful" subsidies include all forms of capital inputs and infrastructure investments from public sources that reduce cost or enhance revenue. They are defined by the authors as "subsidy programs that lead to disinvestments in natural capital assets once the fishing capacity develops to a point where resource exploitation exceeds the Maximum Economic Yield (MEY)." Although not all of these subsidies contribute to the fishing of overfished stocks, given the subsidies in question (capital inputs such as fuel subsidies and infrastructure investments), it would be impossible for Japan to isolate and eliminate the portion that violates the TPP requirement.
- ⁶⁰ Ambiguous subsidy programs "can lead to positive impacts such as resource enhancement programs or to negative impacts such as resource overexploitation." One example is vessel buyback programs.
- ⁶¹ Rashid U. Sumaila, et al., "[A Bottom-Up Re-Estimation of Global Fisheries Subsidies](#)," *J Bioecon*, DOI 10.1007/s10818-010-9091-8, August 18, 2010.
- ⁶² Tuong Phi Lai, et al., "[Fisheries Subsidies, Supply Chain and Certification in Vietnam](#)," World Wildlife Fund and Vietnam Ministry of Agriculture and Rural Development, September 2009.
- ⁶³ Japan Ministry of Agriculture, Forestry, and Fisheries, Public Offering [K2](#) and [K3](#), accessed October 2016 (translated).
- ⁶⁴ Michael Gravitz, et al., "[Plundering the Seas: The Damage from Pirate Fishing on US Fishermen & Communities](#)," Marine Conservation Institute, September 2014.