

FUTURE PROOFING SHRIMP SUPPLY CHAINS



With \$32 billion in trade, farmed shrimp is one of the most valuable traded seafood commodities in the world.

Global farmed shrimp production has risen dramatically over the past several decades, with production surpassing 5 million metric tons in 2018, and it is expected to increase further as global seafood demand grows.

While this growth has generated substantial export value for many developing countries, the pressure of rapid increase in production has also resulted in degradation and depletion of critical natural habitats and biodiversity loss, and it has been linked to instances of illegal and forced labor. In addition, complexities that hinder traceability and transparency in both farmed shrimp and farmed shrimp feed supply chains has led to difficulty mitigating potential reputational, legal, financial, and regulatory risks for businesses.

World Wildlife Fund (WWF) believes there is a strong opportunity to stop this trend and halt negative impacts by leveraging private sector influence, and there are concrete steps that companies can take to ensure farmed shrimp products come from more environmentally and socially responsible sources. We believe that safeguarding our ecosystems, securing labor and human rights, and driving sector-wide change can be achieved through sector-wide partnerships with private sector actors.

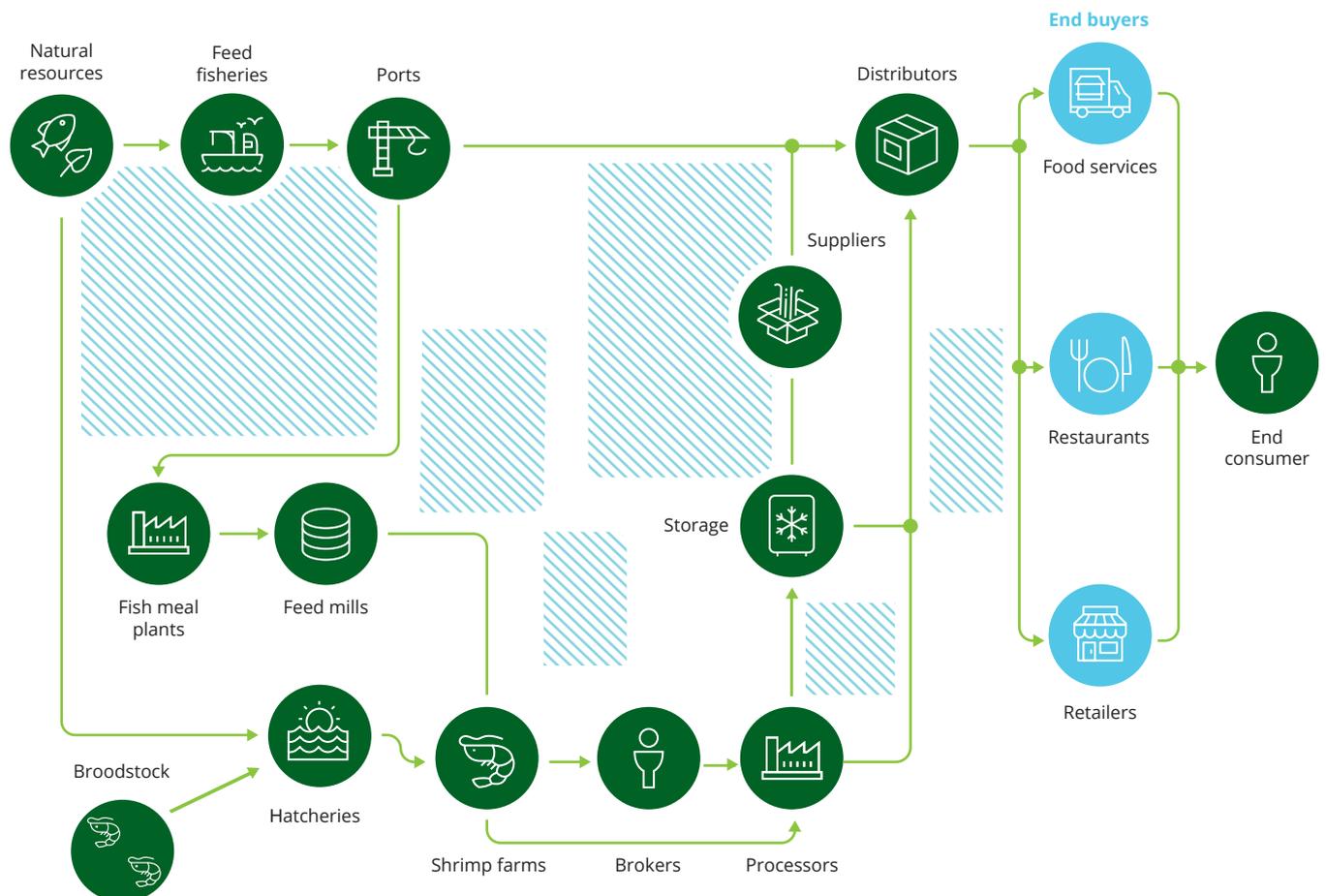


SAFEGUARDING HABITATS AND HUMAN RIGHTS

Farmed shrimp is often produced in complex and opaque global supply chains that can obscure the full social and environmental impacts of production.

In addition to driving habitat and biodiversity loss, some products have been linked to human trafficking, forced labor practices, and illegal, unreported, and unregulated (IUU) fishing by vessels that provide feed for shrimp farms. Any company operating in the farmed shrimp industry should conduct appropriate due diligence and ensure that traceability mechanisms are in place to identify, remediate, and eliminate negative environmental and social impacts from its supply chain.

Farmed shrimp supply chains are complex networks that involve thousands of farms, processors, traders, export/import companies, and buyers across the globe.



PRESERVING NATURAL ECOSYSTEMS

As the footprint for farmed shrimp production has rapidly expanded, it has often done so at the cost of mangrove forests in the major producing countries. Half of all mangroves worldwide have been lost since 1940, with farmed shrimp production accounting for 30% to 50% of the total losses. While clearing mangroves for farming is illegal in many producing countries, including Thailand, India, and Ecuador, the practice still occurs and continues to be a pressing issue.

22%



In Indonesia, about 22% of current shrimp pond area has been converted since 1999. In certain jurisdictions such as Kalimantan Timur and Kalimantan Utara, that number is over 50% of 2018 pond area. Conversion in the past 20 years has mainly been carried out by smallholder farmers.



Preserving these ecosystems and their functions is critical to mitigating the effects of climate change, protecting wildlife, and ensuring community livelihoods. Mangrove forests are a vital coastal ecosystem that stabilizes shorelines in the intertidal zones of sub-tropical countries. Beyond the thousands of rare, iconic, and threatened species that inhabit them, mangroves also provide many valuable ecological functions, including filtering water, protecting shores from erosion, and serving as a natural barrier against storms. They also store three to four times more carbon than tropical forests and may be one of our best defenses against climate change. It is critical that the future expansion of farmed shrimp does not drive the loss of additional intact mangrove ecosystems.



238,319 ha

of mangroves, an area equal to over 330,000 soccer fields, have been converted to shrimp ponds over the last two decades in key producing countries like Ecuador, Indonesia, India, Vietnam, and Thailand.

THE VALUE OF MANGROVE FORESTS:



Provide essential resources and income for over **100 million people**



Ecosystem services worth thousands of dollars per ha/year



Home to over 3000 fish species, marine mammals, turtles, birds, tigers



Global fish catches depend on them as nurseries



Protect coastlines against erosion and storms



Store three to four times more carbon than tropical forests

SECURING HUMAN RIGHTS

The human and labor rights of workers in farmed shrimp supply chains is of critical importance to regulators and consumers.

In recent years, several investigative journalists revealed that fishing vessels in Thailand providing fish for farmed shrimp feed mills were exploiting indentured and slave labor and engaging in human trafficking. The owners of these boats

also practiced IUU fishing by operating under false registration and intruding into neighboring countries' waters. Human rights and labor issues may be linked to many seafood products and are not restricted to fishmeal or Thailand alone.

Because labor and human right concerns persist today in the seafood supply chain, companies must conduct appropriate due diligence to identify and eliminate inappropriate practices and child or forced labor from their supply chains to avoid legal and reputational risks.

ABUSIVE LABOR PRACTICES

US and European retailers, food service, and pet food companies received heightened scrutiny after international media investigations by *Associated Press* and *The Guardian* in 2014 exposed the use of slave labor and other abusive labor practices in the fishing industry in Southeast Asia.



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A CALL FOR CORPORATE ACTION

Transforming global supply chains requires change in the organizations that control and can influence the production and movement of commodities around the world.

Investing in more responsibly farmed shrimp offers an opportunity for companies to demonstrate leadership and produce results that can advance food systems. There is a clear business case for supply chain action and growing stakeholder and consumer expectations for businesses to lead the way on improving farmed shrimp supply chains and mitigating social, legal, financial, and regulatory risks.

Meeting a Legal Obligation

Today, regulators are mandating retailers to be more accountable for the actions of upstream supply chain partners, ensuring operations are free of unlawful or unethical activities. In the United States, federal agencies such as the US Immigration and Customs Enforcement (ICE), the National Oceanic and Atmospheric Administration (NOAA), and the US Customs and Border Protection (CBP) are closely monitoring seafood products to ensure they are safe, legal, and free from human rights or labor violations. In the European Union (EU), legislation on mandatory human rights due diligence is imminent—the EU is already closely examining incoming seafood products for potential violations. Both the US and EU have implemented Seafood Import Monitoring Programs that require companies to demonstrate the identity and legal origin of seafood products.

Markets are Demanding Change

Investors are increasingly making decisions that incorporate Environmental, Social, and Governance (ESG) factors because they understand the business benefits of action, and the risks of inaction. Zero deforestation and conversion-free commitments are being incorporated into investment guidelines, and investments linked to forced and child labor or illegality, for example, are being taken increasingly seriously by the finance community, given the reputational risks involved.

Consumers, similarly, are increasing their engagement and understanding of ethical and responsible food production. A recent GlobeScan survey involving more than 20,000 people across 23 countries, found that 6 in 10 seafood shoppers (58%) have already made changes to the way they choose and buy seafood in order to protect fish in our oceans. This finding builds on a growing body of research that collectively suggest that conscious consumerism is on the rise and influencing purchasing trends.

The Ramsar Convention on Wetlands of International Importance (RAMSAR) is an intergovernmental treaty that provides the framework for the conservation and wise use of wetlands like mangroves and their resources. Almost 90% of UN member states, including the US and the EU, are legally obligated to respect the cutoff date of May 1999 beyond which no mangroves can be converted.



ENSURING RESPONSIBLY FARMED SHRIMP

End buyers are the external face of food supply chains and consequently inherit the accumulated risks of supply chain partners.

Ensuring future value requires retailers to take a leadership role within supply chains, collaborating with partners to set commitments, take action, and demonstrate progress to reduce risk, guarantee sustained shrimp supply, and increase efficiency and profitability—all while protecting people and the planet.



1. Set commitments – Make a public commitment to source traceable and conversion-free farmed shrimp.



2. Take action – Engage in precompetitive platforms. Source seafood certified by leading standards.



3. Demonstrate progress – Be transparent in reporting goals and efforts to achieve them. Ensure seafood products have strong traceability and transparency.



1. SET COMMITMENTS

Make a Public Commitment

To source responsibly farmed shrimp that is traceable to the source farm, free from deforestation and conversion of natural ecosystems after the cutoff date of May 1999, and produced in a manner that protects labor and human rights throughout supply chains.



2. TAKE ACTION

Engage in Precompetitive Platforms

Join precompetitive platforms to leverage industry momentum and tools for stronger oversight and faster transition towards more sustainable and responsible seafood. A leading example is the Seafood Task Force, an industry-led initiative formed in 2014 to address human rights and environmental issues for farmed shrimp, fishmeal, and wild-caught tuna. The Task Force is currently working in Thailand and planning to expand its efforts to Vietnam, India, and Indonesia.

The **Seafood Task Force** is one of the most influential and diverse coalition of stakeholders operating in Thailand on this issue. The platform has successfully mapped buyer supply chains, implemented track and trace systems to provide visibility, engaged with government and industry to upgrade codes of conduct and legislation, and supported the formation of fishery improvement projects (FIPs).

Source Seafood Certified by Leading Standards

Sourcing shrimp from farms that are certified by leading standards such as the Aquaculture Stewardship Council (ASC) provides assurance that a product was produced in accordance with leading environmental and social practices.

To become **ASC certified**, a farm must meet strict performance standards for environmental and social responsibility, including fair labor practices and a prohibition on conversion of mangroves or other wetlands. By getting certified, aquaculture producers reduce their impacts on the environment and the communities they work with and are able to tap into the growing national and global markets for responsibly produced seafood.

As of December 2019, four countries accounted for over 90 percent of ASC's certified shrimp farms: Vietnam (47.22%), India (24.07%), Ecuador (10.9%), and Thailand (9.09%).

Ensure Seafood Products have Strong Traceability and Transparency

Use available technologies to demonstrate a product is fully traceable to its source and require suppliers to do the same. Open source, publicly available tools enable companies to map their supply chains, identify risks, and trade with increased assurance that products are produced responsibly and in line with your corporate values.

TruTrace is an open-source, cloud-based smartphone app and web portal designed to automate and digitize product traceability data across complex supply chains. The system allows disaggregated participants (e.g. fisherman and farmers) in the supply chain to capture images, add key data elements, and link their product information to their suppliers and customers, providing an organized and interactive map for users.

Clark Labs Coastal Habitat Mapping tool identifies the ecosystem impacts of farmed shrimp operations by systematically cataloging mangrove land-use change over time. When combined with supply chain traceability data such as source farm geographic coordinates, this can help companies confirm whether their farmed shrimp product may have contributed to wetland/mangrove habitat loss since 1999.



3. DEMONSTRATE PROGRESS

Be Transparent

To source responsibly farmed shrimp that is traceable to the source farm, free from deforestation and conversion of natural ecosystems after the cutoff date of May 1999, and produced in a manner that protects labor and human rights throughout supply chains.

CHANGING THE NATURE OF BUSINESS

The challenges facing the farmed shrimp industry are interconnected, urgent, and too vast for any one organization to solve alone.

As the world's leading conservation organization, WWF is on a mission to build a future where people and nature thrive. But we cannot do it alone. We need to engage everyone—communities, governments, and companies—to create lasting change. That's why we are partnering with some of the world's leading corporations to meet big conservation challenges with an equally big response. One that's changing the nature of business.

Together we're transforming networks of suppliers, partners, consumers and employees into a powerful force for good. A force that drives sustainability up and down global supply chains. A force that mobilizes conservation investments in thousands of communities. A force that inspires millions of employees around the globe to champion conservation at work and at home. A force that drives billions of consumers toward greener choices. Our business partnerships have one goal: to create a more sustainable future for people and nature.

WWF has been working for more than 20 years with global seafood companies to drive long-term, transformational sector-wide change by sourcing more sustainable and responsible products and actively engaging current supply chain actors to drive these efforts. Today, WWF brings this expertise to bear on our 150+ partnerships with the industry's largest traders, processors, retailers, hoteliers, restaurants, and foodservice companies representing 30% of the global seafood market.





For more information visit
seafoodsustainability.org

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