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UPDATES FROM THE WATER

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Stay up to date with the exciting progress WWF Fishery Improvement Projects (FIPs) are making!

Across the seafood supply chain, WWF is working with retailers, food service companies, manufacturers, and suppliers, to responsibly source seafood from fisheries that have met the standard requirements of the [Marine Stewardship Council \(MSC\)](#). By encouraging non-certified fisheries to improve their practices and ultimately meet the MSC standard, seafood buyers can help increase the performance of their source fisheries and decrease negative impacts on the water.

* Note: FIP stages and Progress Ratings are based on [FisheryProgress.org](https://fisheryprogress.org).

New FIP Social Policy

FisheryProgress launched a Human Rights and Social Responsibility Policy on May 12, 2021. The objective of the policy is to help FIPs reduce the risk of human and labor rights abuses and to provide a common framework for reporting on social performance in fisheries. All FIPs reporting on FisheryProgress.org are required to comply with the policy according to the phased implementation timeline outlined in the policy. You can learn more about the policy and supporting resources by visiting <https://fisheryprogress.org/social-responsibility>.



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ECUADOR MAHI MAHI

Gear Type: Longline

Volume: 10,319 MT (average 2009-2019)

FIP Stage: N/A

Progress Rating: Not Yet Available

Status: Comprehensive FIP

Ecuador's mahi mahi fishery is one of its most ecologically and economically valuable artisanal fisheries. The fishery supports 25,000 fishers and 95% of its exports go to the U.S., so the leverage that buyers have upon the fishery is significant. In addition to providing nutrition for people, mahi mahi is an important part of the marine ecosystem, providing food for many top marine predators such as sharks and dolphins. Since 2010, WWF has worked closely with the Ecuadorian government and mahi mahi exporters on a comprehensive FIP to move the fishery towards MSC certification. Over that time, more than 10,000 fishers have been engaged in FIP efforts through training on fishing regulations and best fishing practices, adopting bycatch reduction tools, welcoming onboard observers, and piloting a digital traceability system to test electronic logbooks and cameras onboard their vessels.

In February 2019, the fishery entered the MSC full assessment process but had to withdraw unfortunately in December 2020 due to the lack of joint management between Peru and Ecuador of the shared mahi mahi stock. In April 2021, WWF Ecuador signed an MOU with Conservation Mahi Mahi¹ to support the reinitiating and implementation of a comprehensive mahi mahi FIP. FIP implementation led by Conservation Mahi Mahi began in May 2021, and the FIP was recently published on [FisheryProgress.org](https://fisheryprogress.org).

Ecuador has focused much of its recent efforts on improving both national and international management of the mahi mahi fishery. In the updated National Action Plan for the Conservation and Management of Mahi Mahi 2019-2024 (PAN Dorado) and the new FIP Action Plan, one of the main objectives is to develop a binational action plan with Peru for the management of mahi mahi.

¹ Conservation Mahi Mahi is a group of leading Ecuadorian mahi mahi exporters made up of the following companies: Propemar S.A., Frigolab San Mateo CIA. LTDA., Transmarina C.A., Fresh Fish del Ecuador CIA. LTDA., and Frigolandia S.A.

Since May 2021, Ecuador and Peru have been holding monthly workshops to share experiences related to mahi mahi research, management, community outreach, traceability, and enforcement, to eventually develop and analyze potential joint management measures that could be adopted by both countries. In addition, to improve fishery management within Ecuador, in 2019 an evaluation of the governance scheme was conducted, and a new participatory governance scheme was proposed to involve fishers and the seafood industry in decision-making processes. The proposed scheme is currently being socialized across different fisheries including mahi mahi and is expected to be adopted by the end of the year.

Additionally, a pilot traceability project was conducted on 15 artisanal “fibras” (skiffs) in two fishing communities to test the use of on-board cameras, electronic logbooks, and QR codes to collect data on catch volume, bycatch, fishing method, and landing location that can then be downloaded by restaurants, consumers, and end retailers through the QR codes to learn the origin of the fish. The traceability system was implemented successfully with the hope that the government will replicate the project throughout the mahi fishery and expand it to other fisheries as well.

Priority FIP activities over the next several months include working to ensure that: Inter-American Tropical Tuna Commission (IATTC) scientists will continue to support regional mahi mahi research, data collection, and stock assessments; the Ecuadorian government will adopt the proposed participatory management scheme; the e-monitoring and traceability program will be expanded across the mahi mahi fleet to have the onboard cameras complement the current human observer program; the collection of shark bycatch data is improved, and Peru and Ecuador continue working towards the development of a joint management plan for this highly migratory species.



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PERU MAHI MAHI

Gear Type: Longline

Volume: 42, 868 MT (average 2015-2020)

FIP Stage: Stage 4 (Improvements in Fishing Practices or Fishery Management)

Progress Rating: B (Good Progress)

Start Date: November 2013

Peru's mahi mahi fishery supports over 10,000 fishers and serves as a key link in the marine food chain, providing sustenance for sharks, dolphins, and other ocean predators. Peru is also a leading source of the world's mahi mahi and, like Ecuador, a top exporter to the United States. In 2020, 61% of Peru's mahi mahi was exported to the U.S., generating over USD 52 million. Over 1,500 fishers have been engaged directly in FIP efforts, motivated by the support they're receiving to complete the formalization process and get fishing permits, increased market benefits such as preferential purchasing, and improved safety at sea through real-time vessel monitoring.

After several months of development, in July, the Ministry of Production (PRODUCE) published the mahi mahi fishery management regulation (ROP), which establishes specific conservation and management measures for the fishery and is a key milestone for the FIP. Before its final approval, PRODUCE, with the support of WWF, socialized the draft regulations with different groups of artisanal fishermen through virtual workshops, intending to gather feedback under a more participatory approach. The ROP establishes a seasonal fishing quota, provisions for the protection of endangered species such as sea turtles, and the strengthening of traceability through improved monitoring efforts.

To date, 11 mahi mahi exporting companies² representing almost 80% of Peru's mahi mahi exports have joined the Peru Mahi Alliance (PMA), a pre-competitive collaboration to advance the FIP through activity implementation, political advocacy efforts, and funding. Under its workplan developed with WWF, PMA members conducted several FIP activities including donating 32 mahi mahi samples to the

² Current PMA companies: COINREFRI, Fish Olg, Altamar Foods, Spring Valley Fruit/Agropesca, Mai Shi Group, Produpesca, DEXIM, SEAFROST, Oceano Seafood, Sercosta, and Peruvian Seafood

Peruvian Institute of the Sea (IMARPE) to use for biological research; training 212 artisanal fishers across 46 vessels on best practices for handling and release of sea turtles and distributing bycatch reduction toolkits³ to 44 vessels; providing feedback to PRODUCE on the new ROP and its importance for the mahi mahi fishery; and learning how to use TrazApp, WWF's mobile electronic catch documentation and traceability system, so that companies will be able to digitally receive at their processing plants all catch and fishing data being inputted by fishers. Starting in October, the second phase of the TrazApp pilot project will be launched, when PMA companies will transfer the data received to the US importing companies and ensure it complies with Seafood Import Monitoring Program (SIMP) and [Global Dialogue on Seafood Traceability \(GDST\) standards](#).

Priority activities expected to occur over the next several months include: working with IMARPE on a pilot electronic monitoring program that uses cameras in the place of human observers on smaller artisanal vessels to generate improved catch and bycatch data; training all PMA companies to conduct sea turtle handling and release training for fishers before the start of each fishing season; continuing the mahi mahi sample collection program between the PMA and IMARPE to support scientific research on the status and health of the stock in Peru; implementing key FIP actions under the recently adopted mahi mahi ROP including ensuring that all artisanal vessels have turtle release equipment on board and qualified crew to carry out turtle handling and release procedures; and strengthening the PMA and expanding its membership.

³ The bycatch reduction toolkits include tools fishers can use to help release entangled and hooked sea turtles safely, including: dehookers, safe handling nets, and line cutters.



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NICARAGUA SPINY LOBSTER - TRAP FISHERY

Gear Type: Traps

Volume: 3,347 MT (2018-2019 Whole Weight - Trap Only)

FIP Stage: Stage 5 (Improvements on the Water)

Progress Rating: C (Some Recent Progress)

Start Date: January 2012

Nicaragua is the eighth largest lobster producer in the world and the largest in Central America, with an average production of over 4,300 tons (whole weight) per year for the trap and dive fisheries, 3,300 tons of which comes from the trap fishery alone. The spiny lobster fishery in Nicaragua generated \$65.8 million from exports in 2019, making it one of the country's most important fisheries. About 90% of Nicaragua's lobster is exported, mostly to the US (51%) and EU (36%). The industrial trap fleet is made up of 64 vessels that employ 767 fishers. As the FIP is led at the national level by Nicaragua's Fisheries Institute (INPESCA), fishers are mostly engaged via meetings to update them on management regulations and FIP progress. Since the start of the FIP in 2012, fishers and fishing communities have benefited from stable catches and increasing lobster prices locally and internationally. The FIP has helped generate new information about the impact of the fishery on the lobster population, the habitat, and ecosystem, which has helped the Nicaraguan government to improve its management measures to ensure the long-term sustainability of the fishery and minimize its impact on the environment.

FIP efforts have been focused on completing the first-ever binational stock assessment for spiny lobster—a stock shared with Honduras. The joint assessment, which is required for the Honduras and Nicaragua lobster fisheries to meet the MSC standard, was recently finalized in August 2021. The results indicated that the spiny lobster fisheries in both Honduras and Nicaragua are fully exploited and overfishing is not occurring, but the scientists cautioned that it is important to ensure that fishing effort does not increase and recommended that additional management measures should be taken to increase control of fishing effort through implementing and enforcing catch quotas in both countries; better monitor traps including the number deployed, their location, and ensuring they are removed from the water in the closed season to prevent ghost fishing, and strengthen enforcement to ensure fishers are complying with the regulations. The Nicaraguan lobster fishery management plan, which is still pending official authorization, includes measures to put a cap on fishing licenses, establish a lobster catch quota, and improve the monitoring and control of the artisanal fleet. A Honduras spiny

lobster fishery management plan is currently being drafted and is expected to include similar measures as well.

Priority activities expected to occur over the next several months include Conducting an external scientific review of the binational stock assessment; Conducting an external assessment of the fishery management system; developing a strategy to combat illegal, unregulated, and unreported (IUU) fishing; and developing a complete description of harvest control rules and tools for the Nicaraguan lobster fishery.



HONDURAS SPINY LOBSTER - TRAP FISHERY

Gear Type: Traps

Volume: 2,765 MT (average 2010-2020 Whole Weight - Trap Only)

FIP Stage: Stage 5 (Improvements on the Water)

Progress Rating: C (Some Recent Progress)

Start Date: July 2012

Honduras is the second-largest lobster producer in Central America after Nicaragua with an average production of over 3,700 tons (whole weight) per year for the trap and dive fisheries, 2,765 tons of which come from the trap fishery alone. In 2019, Honduras spiny lobster generated \$46.7 million in exports. Approximately 90% of the catch is exported to the United States, so the leverage that buyers have upon the fishery is significant. The industrial trap fleet is made up of 91 vessels that employ approximately 1,500 fishers. Fishers are engaged in the trap FIP mainly through the industrial fishing associations APESCA and APICAH, where representatives attend FIP meetings to get updated on the latest management regulations and FIP actions. The FIP has helped fishers to better understand the fishery management regulations and improve their catch data collection efforts by learning what information is required to inform the stock assessment. Under the FIP, studies have been conducted to evaluate the impact of the fishery on the habitat. The research found that there is a risk that the fishery is negatively impacting deep coral reefs (deeper than 25 m) and in response, the government is considering new measures such as improving the monitoring of coral reef distribution and prohibiting discards of lobster traps to reduce the fishery's impact on vulnerable marine habitats.

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lobster fishery management plan is currently being drafted and is expected to include similar measures as well.

Priority activities expected to occur over the next several months include Conducting an external scientific review of the binational stock assessment; finalizing the Honduras lobster fishery management plan by December 2021; and implementing updated logbooks to improve the collection of bycatch data in the trap fishery.



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PERU JUMBO SQUID

Gear Type: Squid Jig

Volume: 362, 232 MT (2018)

FIP Stage: Stage 4 (FIP Implementation)

Progress Rating: A (Advanced Progress)

Start Date: February 2018

The jumbo squid fishery is one of Peru's most important artisanal fisheries, employing more than 11,000 fishers and 105,000 Peruvians across the industry and providing low-cost, high-quality protein too much of the population. It is also one of the largest squid export fisheries globally and generated \$614 million in exports in 2020.

The Peruvian jumbo squid FIP is the first comprehensive squid FIP in the world. WWF worked closely with Sustainable Fisheries Partnership (SFP), the Peruvian government, and the private sector to develop a comprehensive plan to help the fishery meet the MSC standard. Seventeen exporting companies representing over 50% of total squid exports have formed the Peruvian National Chamber for Giant Squid (CAPECAL), which was recently registered in Peru and will publicly launch in October 2021 at the Conxemar exhibition in Vigo, Spain in coordination with WWF and SFP. The independent industry association will promote the conservation and management of giant squid in Peru and is working with WWF to develop an annual workplan to advance the FIP, focusing on improved monitoring and traceability of the fishery.

Approximately 1,500 fishers across three cooperatives have engaged directly in FIP efforts, mainly through piloting WWF's mobile electronic catch documentation and traceability system, TrazApp, to improve the collection and transparency of catch data, make it easier to receive fishing permits, and improve safety at sea by allowing vessels to be monitored in real-time. In this first phase of the TrazApp pilot, efforts are focused on improving the collection of fisheries data and its transfer down the supply chain from the point of landing to the processing plants, while identifying critical issues and adapting TrazApp as needed. Ten percent of Peru's squid catch is currently being registered by fishers using TrazApp, and WWF is continuing to train more fishers, middlemen, and suppliers on the use of TrazApp to increase uptake across the squid and mahi mahi fisheries.

In January 2021, a Conservation and Management Measure (CMM) for jumbo flying squid issued by the South Pacific Regional Fisheries Management Organization (SPRFMO) went into effect which regulates the capture of jumbo flying squid in international waters and is an important first step toward addressing some of the key science and management deficiencies in the fishery. Legalization of the Peruvian unregulated artisanal fleet is the mandatory first step toward complying with other guidelines of the CMM, including preparation of catch reports per vessel, design of a biological monitoring system for research purposes, increased observer coverage, and installation of satellite equipment for vessel monitoring systems. WWF and SFP have been working closely with fishers and the Peruvian government to improve the permitting process so that artisanal squid fishers can receive their legal fishing permits more quickly. Two of the formalized artisanal squid vessels were recently added to the SPRFMO vessel registry, allowing them to fish for squid in international waters under the SPRFMO jurisdiction. These vessels must now comply with the squid CMMs. WWF and SFP are continuing to work with the government to streamline and improve the legal permitting process so that more vessels can be added to the SPRFMO fishing registry and adopt the squid CMMs, which will help promote more sustainable fishing practices across the fishery.

Additional activities expected to occur over the next several months include working with SFP to lead workshops for CAPECAL member companies on the FIP and MSC process and review how the industry can support the FIP to ensure it continues to advance; working with authorities and key stakeholders to update the squid fishery management regulation; and continuing to scale up the use of TrazApp with fishers, landing sites, government, processors, and importers.



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SURAT THANI (THAI) BLUE SWIMMING CRAB

Gear Type: Gillnet and Traps

Volume: 12,000 MT

FIP Stage: 4 (Improvements in Fishing Practices or Fishery Management)

Progress Rating: A (Advanced Progress)

Start Date: February 2017

The Surat Thani blue swimming crab FIP has continued to make progress over the last six months despite the challenges provided by the COVID-19 pandemic. The fishery volume was reduced because of the lockdown restrictions implemented in Thailand, but accurate numbers for the volume are currently not available. Despite the imposed reductions in fishing activity, the FIP still managed to make progress on some of the activities specified in the Action Plan.

The Governor of Surat Thani province signed off on a conservation area for the blue swimming crab nursery grounds, which had been agreed to through a stakeholder consultation process. This recommendation will now be submitted to the Minister for Fisheries and will then become an official regulation with appropriate restrictions able to be enforced in this area. A stakeholder consultation process also completed an evaluation of impacts on bycatch in the blue swimming crab fishery. The final report on this work will be released in October 2021.

In addition, the Department of Fisheries conducted an internal revision of the blue swimming crab Fishery Management Plan and will initiate a stakeholder consultation process as part of the next steps for this plan. Research on the impacts of ghost gear was also undertaken in three different areas of Surat Thani, differing in fishing intensity and resources. The work is being done to evaluate the impacts of ghost gear on the environment as well as target species.

Over the past several months, there has been a strong interest to expand the FIP to include Chumphon to the north and Nakhon Sri Thammarat to the south; however, this has been put on hold until the COVID-19 situation is resolved.



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VIETNAM YELLOWFIN TUNA

Gear Type: Handline

Volume: 16,500 MT

FIP Stage: 5 (Improvements on the Water)

Progress Rating: B (Good Progress)

Start Date: April 2014

Yellowfin tuna is Vietnam's most valuable marine export making it a critical source of jobs and income with over 1800 vessels and 9000 fishers engaged in the fishery. The Vietnam yellowfin tuna handline FIP is focused on reducing bycatch, improving stock management, and increasing traceability through engagement with fishers, government officials, and the private sector.

In March 2021, the government of Vietnam officially endorsed the creation of a Tuna Public Private Partnership (Tuna PPP) and invited WWF to co-chair this important initiative. The Tuna PPP will provide a key platform for direct industry-to-government dialogue on several important tuna management measures, including the development of reference points and harvest strategy. Collectively, these will ensure that tuna catches do not exceed sustainable levels. The PPP will also be an important vehicle for implementing digital traceability and addressing related anti-IUU measures.

In the past six months, the FIP stakeholders piloted a Global Dialogue on Seafood Traceability-compliant app (VINASTA) with Vietnam's tuna processing sector, that digitizes the Vietnam Yellowfin FIP trace code using standardized data formats and key data elements (KDEs). VINASTA has been tested in five processing facilities to date and has proven capable of collecting and transferring relevant KDEs to downstream supply chains. This represents an important milestone towards implementing full digital traceability of FIP eligible products for the Vietnam Yellowfin Tuna FIP. Relatedly, the FIP continues to expand the piloting of an electronic logbook (e-logbook) on the water, with 40 fishers engaged in training and 10 vessels testing the e-logbook at sea. Critically, the Directorate of Fisheries (D-FISH) has publicly voiced support in principle for e-logbook development under the FIP.

Priority activities expected to occur over the next several months include the Inception meeting and formal work planning of the Tuna PPP; further expansion of both the e-logbook and the GDST programs; and technical studies (e.g., risk assessment, compliance review) in cooperation with key government departments. In addition, the FIP stakeholders intend to review the FIP action plan with an external consultant to ensure all identified activities remain relevant and to reprioritize critical activities as the FIP nears its projected end date of January 2023.

Sign up to become a FIP Participant today by visiting:

<https://seafoodsustainability.org/fisheries/fishery-improvement-projects-signup>

Help conserve marine ecosystems, protect livelihoods, and increase the number of sustainable fisheries and the overall supply of sustainable seafood.

Being a WWF FIP Participant provides a pre-competitive space for companies to engage with fisheries in their supply chains and leverage power across multiple companies to drive fishery improvements forward. By signing on to support a FIP, you are joining forces with other leaders in the industry that seek to help conserve marine ecosystems and advance the livelihoods for millions of people who depend on them.

WWF recognizes FIP participants on the industry website, [SeafoodSustainability.org](https://seafoodsustainability.org). WWF also works with FIP participants to communicate the benefits of FIPs among key buyers, sustainable business leaders, employees, environmental activists, and other key constituencies.

Together we can protect oceans and the food and livelihoods they can sustainably provide.

For more information, please visit seafoodsustainability.org