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WWF-LED FISHERY IMPROVEMENT PROJECTS (FIPS)

UPDATES FROM THE WATER

MARCH 2023

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

A FIP draws together fishers, industry, researchers, government, and NGOs to address environmental challenges in a fishery, thereby improving ocean health. Through a transparent and rigorous approach, these projects harness the power of the private sector to incentivize fisheries to increase their level of sustainability. A FIP must have a publicly available workplan, and an associated comprehensive budget, with measurable indicators and milestones along a defined timeline designed to address deficiencies in the fishery.

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](#).



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ECUADOR MAHI MAHI

Gear Type: Longline

Volume: 6,000 MT

FIP Stage: Stage 5 (Improvements on the Water)

Progress Rating: C (Some Recent Progress)

Status: January 2010 (reinitiated May 2021)

Ecuador's mahi mahi fishery is one of its most ecologically and economically valuable artisanal fisheries. The fishery supports 25,000 fishers, and over half of its landings are exported—95% of which go to the United States. 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 toward MSC certification. Over that time, incentivized by mahi mahi buyers and government commitments to the FIP, 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.

At the last Inter-American Tropical Tuna Commission (IATTC) meeting in August 2022, some member countries, including the US, rejected a proposal by Ecuador and several other countries in the region to allow the IATTC science staff to update the regional mahi mahi stock assessment that was conducted in 2016. The Ecuadorian government is continuing to push for the approval of this important scientific mahi mahi work by the IATTC, and we are preparing a multi-buyer letter to send to representatives of the US government to urge them to reconsider the proposal, which we will share with buyers soon for their signatures. Additionally, a binational stock assessment between Peru and Ecuador, which was completed in 2022 and is currently being peer-reviewed, noted that the mahi mahi population status is healthy.

To continue to improve the monitoring of mahi mahi catch and bycatch in the fishery, we are working closely with the Ecuadorian government to increase the level of observer coverage in the longline fleet to 20% by 2024. In addition, an analysis of shark bycatch in the mahi mahi fishery was recently completed, and it showed that sharks make up less than 5% of the catch. These data collection efforts are important for identifying which species are being caught so that strategies can be put in place to reduce the capture of sharks and other vulnerable species, such as turtles. The FIP also continues to conduct capacity building trainings for mahi mahi crew members on best handling and release practices for vulnerable species.

In October 2022, the Binational Committee of Peru and Ecuador for the Sustainability of Mahi Mahi, which includes members of Conservation Mahi Mahi and the Peru Mahi Alliance (industry leads for the Ecuador and Peru mahi mahi FIPs), held its first in-person meeting. The committee began developing an action plan to 1) support the development of an updated regional or binational mahi mahi stock assessment and 2) establish an annual forum for both governments to discuss and agree to mahi mahi management and enforcement measures. The meeting helped build trust between the two industries by providing a forum for open discussion on sensitive issues, and the committee committed to continue working together to support fishery improvements in both countries and push their governments to collaborate to support mahi mahi sustainability.

Under a grant from the US Agency for International Development (USAID) to strengthen natural resources governance in Ecuador, WWF will launch a project this year to pilot onboard cameras, e-logbooks, and a full-chain-traceability system known as TransparenC on 33 mahi mahi longline vessels (three motherships and 30 skiffs). The new system will allow for better monitoring of the origin and processing of product that is exported, improving supply chain traceability while also facilitating the management of the fishery and complying with international traceability requirements. The project is helping change the thinking of fishers regarding the use of technology for the better, as they see it as an opportunity to demonstrate good fishing practices, show the fishing authorities that they are complying with the laws and regulations, and ultimately maintain their current business clients. In addition, the project empowers women in the communities who process the mahi mahi to sell to hotels, restaurants, and international clients.

During the last FisheryProgress FIP update in September 2022, the Ecuador mahi mahi FIP progress rating was decreased from A to C due to the lack of a recorded improvement in fishing practices or management within the past 12 months. However, management improvements have since occurred and will be reported on by FisheryProgress during the next FIP update in March 2023, which should once again bring the FIP progress rating to A. To comply with the FisheryProgress social policy, a public list of vessels engaged in the FIP was posted in September 2022, and a grievance reporting mechanism for fishers was established in November 2022.

Priority FIP activities over the next several months include implementing a strategy to convince the IATTC to update the regional mahi mahi stock assessment; continuing to increase onboard observers to achieve 20% coverage of the longline fleet; continuing to work toward joint management of mahi mahi between Peru and Ecuador through the binational industry committee; improving shark bycatch monitoring and mitigation; implementing the full chain traceability and e-monitoring pilot project; and complying with the new FisheryProgress social policy, including signing a human rights code of conduct between FIP participants and making fishers aware of their rights.

Current WWF-US FIP Participants:

[Costco Wholesale](#) | [D&E Import LLC](#) | [Hilo Fish Company](#) | [IncredibleFish Inc.](#) | [Inland Fresh Seafood Corp.](#) | [Royal Caribbean Cruises Ltd.](#) | [Sea Delight, LLC](#) | [Sysco Corporation](#) | [The Fishin' Company](#) | [The Kroger Co.](#)



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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: A (Advanced 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 exports were destined for the US, generating over US\$52 million. Over 1,500 fishers have been engaged directly in FIP efforts, and they have been motivated by the support they're receiving to complete the formalization process and get fishing permits, which has increased their market benefits, such as preferential purchasing, and improved their safety at sea through real-time vessel monitoring.

Since 2019, WWF has partnered with the Peru Mahi Alliance (PMA)¹ to advance the FIP. The PMA continues to grow, and it currently includes 14 member companies representing almost 80% of mahi mahi exports from Peru to the United States. The PMA was recently formalized as an independent industry association in Peru, and together with WWF and PromPerú, with support from USAID's "For Fish" project, held an event at Seafood Expo North America on March 13 that highlighted the scientific contributions of the mahi mahi FIP and included an open discussion forum on the opportunities for and challenges to achieving mahi mahi sustainability.

One of the key goals of the FIP is to improve the collection of bycatch data, as very little data currently exists and an onboard observer program with sufficient coverage has been difficult to implement due to the large size of the mahi mahi fleet, which consists of over 3,500 vessels.

¹ Current PMA companies: Altamar Foods, COINREFRI, Esmeralda Corp, Fernandez SRL, Fish Olg, Mai Shi Group, Oceano Seafood, Produpesca, SEAFROST, Sercosta, Spring Valley Fruit/Agropesca, and T&A Cordova.

To address these challenges, during the 2022–23 mahi mahi fishing season, WWF has been working with 10 artisanal mahi mahi vessels on an electronic monitoring pilot project to test the use of onboard cameras and TrazApp, an electronic catch data system, to help gather catch and bycatch data. Results are being analyzed and shared with the IMARPE (the Peruvian Institute of the Sea) to help inform its mahi mahi and species research efforts. WWF plans to begin testing the interoperability between the cameras and TrazApp over the next few months. The ultimate goal of this project is to test the feasibility of the onboard cameras combined with TrazApp as a full monitoring system that could complement or potentially replace an onboard observer program in the long term. In addition, under the mahi mahi fishery management regulation, all mahi mahi vessels are required to have at least one crew member certified in best handling and release practices for sea turtles by 2024. WWF is working with FONDEPES (the National Fund for Fisheries Development) to implement a course to train as many fishers as possible in handling and release practices before the regulation enters into force.

Finally, to comply with the FisheryProgress social policy, WWF worked with the PMA, CAPECAL (the Peruvian Giant Squid Chamber), and the Peruvian government to develop accurate vessel lists for the mahi mahi and squid fisheries (which share the same fleet). The mahi mahi vessel list will be published by FisheryProgress at the next FIP progress update in March. In addition, WWF is developing an information guide and interactive chatbot geared to fishers to help them understand their labor rights and access to grievance reporting mechanisms.

Priority activities expected to occur over the next several months include continuing to work toward joint management of mahi mahi by Peru and Ecuador through the binational industry committee; developing harvest control rules based on the binational stock assessment conducted between Peru and Ecuador; scaling up the electronic monitoring work to improve catch and bycatch data in the fishery; ensuring fishers are trained in sea turtle handling and release practices; working to strengthen the PMA's administrative processes and communications as a newly independent association; and complying with the new FisheryProgress social policy, including signing a human rights code of conduct between FIP participants and making fishers aware of their rights and available grievance reporting mechanisms.

Current WWF-US FIP Participants:

[AFFCO Trading, Inc.](#) | [Beaver Street Fisheries, Inc.](#) | [Channel Seafoods INT'L](#) | [Chicken of the Sea Frozen Foods/Thai Union](#) | [Confremar USA LLC](#) | [Costco Wholesale](#) | [D&E Import LLC](#) | [Global Marine Fish Co. LLC](#) | [Hilo Fish Company, Inc.](#) | [Marriot International](#) | [Pescanova USA](#) | [Royal Caribbean Cruises Ltd.](#) | [Sea Delight, LLC](#) | [Seattle Fish Co., LLC](#) | [Sysco Corporation](#) | [The Fishin' Company](#) | [The Kroger Co.](#)



NICARAGUA SPINY LOBSTER - TRAP FISHERY

Gear Type: Traps

Volume: 1,740 MT (2020 Whole Weight - Trap Only)

FIP Stage: COMPLETED -- in MSC full assessment

Progress Rating: A (Advanced 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 4,800 tons (whole weight) per year for the trap and dive fisheries, 1,700 tons of which comes from the industrial trap fishery that was involved in this FIP. The spiny lobster fishery in Nicaragua generated \$65.8 million from exports in 2019, making it one of the country's most important fisheries. More than 95% 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 was led at the national level by Nicaragua's Fisheries and Aquaculture Institute (INPESCA), fishers were mostly engaged via meetings to update them on management regulations and FIP's 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, 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.

After 10 years of working diligently to implement several improvements in the Nicaraguan spiny lobster trap fishery, the FIP was completed in June 2022. In September 2022, the fishery moved into the MSC full assessment process when the fishery clients, the Nicaraguan Chamber of Fisheries (CAPENIC), and INPESCA signed a contract with Control Union, the conformity assessment body (CAB) that will be assessing the fishery. WWF is working closely with the clients to guide them through the full assessment process and help gather information needed on the fishery to share with the CAB.

The CAB is in the first stage of the full assessment process, during which it is analyzing all relevant information about the fishery and using it to complete an initial scoring of the fishery's performance against the MSC standard and prepare the Announcement Comment Draft Report (ACDR). The ACDR is expected to be completed by March, when the client will review the information and decide whether to proceed with the announcement. If the client decides to proceed, then the CAB will announce to stakeholders that the fishery is undergoing full assessment and will publish the ACDR on the MSC website by April 2023.

The CAB will then continue with the MSC full assessment process, which will include periods for stakeholder input into the process, an in-person site visit and scoring of the fishery, client and peer review, public review, and development of the final report and determination. The entire full assessment process may take up to 18 months.

WWF-US FIP Participants:

[Arista Industries](#) | [Costco Wholesale](#) | [Darik Enterprises, Inc.](#) | [Red Lobster](#) | [Sysco Corporation](#) | [Tequesta Bay Foods, Inc.](#) | [The Kroger Co.](#)



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HONDURAS SPINY LOBSTER - TRAP FISHERY

Gear Type: Traps

Volume: 2,561 MT (2020 Whole Weight - Trap Only)

FIP Stage: Stage 5 (Improvements on the Water)

Progress Rating: A (Advanced 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 industrial trap fishery involved in this FIP. In 2019, the Honduras spiny lobster fishery generated \$46.7 million in exports. Approximately 90% of the catch is exported to the United States, so the leverage that buyers have on 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, whose 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 studies 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 the discarding of lobster traps, to reduce the fishery's impact on vulnerable marine habitats.

WWF has been leading the Honduras lobster FIP in collaboration with the General Directorate of Fisheries and Aquaculture (DIGEPESCA) for the past several years. Due to the transition of the new government administration last year and the recent changeover of the director of DIGEPESCA, many FIP actions have been on hold as WWF works to build relationships with the newly appointed officials and engage them in the FIP.

In February 2023, consultants were hired in Honduras to help advance the FIP work on the ground and with the government. FIP efforts have recently focused on complying with the FisheryProgress social policy. The newly hired consultants will work with the government to update the vessel list for the lobster trap fishery by July 2023 and establish grievance reporting mechanisms for fishers by September 2023.

In addition, a social risk self-evaluation for the Honduras lobster trap fishery completed in March 2022 identified the fishery as high risk due to transshipment occurring between large vessels (>12 m). As a result, the fishery will need to conduct a Social Responsibility Assessment (SRA) and develop a social FIP work plan. Due to the changeover in DIGEPESCA and lack of engagement, the development of the SRA is on hold until a new fisheries director is appointed since DIGEPESCA needs to help coordinate the SRA site visit and inform the fishing vessels about when it will take place and how they need to be involved. The SRA site visit involves interviewing fishers on their experiences onboard vessels and the hiring procedures they went through with the vessel owners. Due to the nature of this sensitive information, to receive buy-in from fishers in this process, it is necessary to get support from DIGEPESCA in order to directly engage and encourage fishers to participate in the assessment. That is why this process is on hold until the new DIGEPESCA director is appointed and willing to engage in and support the FIP.

Priority activities expected to occur over the next several months include reviewing the FIP Action Plan and identifying actions that the local consultants can undertake independently to advance the FIP and focusing on social aspects to comply with the FisheryProgress social policy, which includes finalizing the vessel list and grievance reporting mechanisms, signing a human rights code of conduct, making fishers aware of their rights, and scheduling the SRA site visit.

Current WWF-US FIP Participants:

[Arista Industries](#) | [Costco Wholesale](#) | [Netuno USA, Inc.](#) | [Red Lobster](#) | [Tequesta Bay Foods, Inc.](#) | [The Kroger Co.](#)



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PERU JUMBO SQUID

Gear Type: Squid Jig

Volume: 441,749 MT (2020)

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 to 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. The Peruvian National Chamber for Giant Squid (CAPECAL)² is currently co-leading the FIP with WWF. As CAPECAL is new to the FIP and the MSC, efforts are focused on building the technical capacity of CAPECAL members to implement the FIP and support communications, including the development of a website for CAPECAL and an informative FIP brochure.

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. WWF has hired field consultants in four regions of Peru (Tumbes, Piura, Lambayeque, and Arequipa), which together represent 80% of the landings of mahi mahi and giant squid, to continue to oversee the implementation of TrazApp and the training of new TrazApp users. Efforts to scale up the use of TrazApp across the squid fishery continue, with the goal of ensuring that it is interoperable with government systems. WWF is working to also update the squid fishery management regulation (ROP) and establish TrazApp as an official application for catch data collection that fishers can use to comply with the squid ROP requirements for electronic data collection as well as catch data requirements by the South Pacific Regional Fishery Management Organization (SPRFMO) for squid vessels that fish in international waters.

² CAPECAL is a group of 17 Peruvian squid processing and exporting companies representing over 60% of total squid exports. Current companies include Pacific Freezing Company, Sabanamar Pacífico, Océano Seafood, Peruvian Sea Food, Transmarina del Perú, Refrigerados Fisholig e Hijos, Marfrío Perú, COINREFRI, Produmar, Perupez, Seafrost, Fernández, Altamar foods, Dexim, Sakana, Peru Frost, and PROANCO.

To comply with the FisheryProgress social policy, WWF worked with the PMA, CAPECAL, and the Peruvian government to develop accurate vessel lists for the mahi mahi and squid fisheries (which share the same fleet). The updated jumbo squid vessel list will be published by FisheryProgress at the next FIP progress update in May. In addition, WWF is developing an information guide and interactive chatbot geared for fishers to help them understand their labor rights and access to grievance reporting mechanisms.

Priority activities expected to occur over the next several months include continuing to scale up the use of TrazApp across the squid fleet to improve catch data; developing a consultancy to review gear loss and potential for recycling squid jigs; demonstrating through data collection and a monitoring program that bycatch is limited in the fishery; supporting efforts to promote formality of the fleet; and complying with the FisheryProgress social policy, including developing a human rights code of conduct and making fishers aware of their rights and available grievance reporting mechanisms.

Current WWF-US FIP Participants:

[Beaver Street Fisheries, Inc.](#) | [Sysco Corporation](#) | [The Kroger Co.](#)



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VIETNAM YELLOWFIN TUNA

Gear Type: Handline

Volume: 4,000 MT

FIP Stage: Stage 5 (Improvements on the Water)

Progress Rating: A (Advanced Progress)

Start Date: April 2014

Yellowfin tuna is Vietnam's most valuable marine export, making it a critical source of jobs and income; 3,000 vessels and 9,000 fishers are engaged in the fishery. The Vietnam yellowfin tuna handline Fishery Improvement Project (FIP) is focused on reducing bycatch, improving stock management, and increasing traceability through engagement with fishers, government officials, and the private sector.

In October 2022, FIP stakeholders held a National Tuna Management workshop. Several key actions were discussed, including 1) the establishment and incorporation of limit reference points, 2) implementation of a revised harvest strategy that is fully compliant or aligned with Marine Stewardship Council (MSC)/Western and Central Pacific Fisheries Commission (WCPFC), and 3) the inclusion of a bycatch mitigation strategy for sharks and turtles.

The FIP also created and distributed materials on endangered, threatened, and protected (ETP) species identification and proper release techniques to all major yellowfin tuna ports. FIP stakeholders continued to advocate for a Fins Naturally Attached policy to protect shark species and are working on an interim voluntary agreement for processors and fishers to sign that calls for the avoidance of all forms of shark fishing and the proper application of shark release techniques. Lastly, to improve fishery data collection efforts, the FIP is expanding its crew-based catch monitoring program with a focus on gathering more information on ETP species interactions.

In the next six months, the FIP will continue the work outlined above and focus on meeting the FisheryProgress Human Rights and Social Responsibility Policy. These activities will include generating a fully compliant vessel list, completing awareness activities to inform fishers of their rights and the existence of a grievance reporting mechanism, and creating a public policy statement outlining a commitment to human rights and social responsibility.

Current WWF-US FIP Participants:

[Anova Food](#) | [Arista Industries](#) | [Beaver Street Fisheries, Inc.](#) | [Hilo Fish Company, Inc.](#) | [Northern Wind, LLC](#) | [Royal Caribbean Cruises Ltd.](#) | [Sea Delight, LLC](#) | [Seattle Fish Co., LLC](#) | [SouthFresh Aquaculture, LLC DBA SouthFresh Foods](#) | [The Kroger Co.](#) | [Western United Fish Co., DBA Annasea Foods Group](#)

JOIN THE FIP PARTICIPANT PROGRAM TODAY

to protect oceans and the food and livelihoods they can sustainably provide

To join the FIP Participant Program visit:

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

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 of millions of people who depend on them.

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WWF recognizes FIP participants on the industry website, 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.

For more information, please visit seafoodsustainability.org