Peru anchovy - small scale purse-seine
Three-Year Evaluation Report

Version 1.3, November 2022

Purpose

The three-year evaluation report template was developed by FishChoice. The objectives of the three-year evaluation report are:

1. *To assess the fishery's MSC performance indicator scores*
2. *To verify the results of the FIP's environmental workplan progress as reported on* FisheryProgress
3. *Optional: To provide recommendations to the FIP on environmental workplan actions that should be modified, including recommendations for additional actions/tasks that should be taken or suggested changes to timelines, to help the FIP achieve their stated objectives.*

FIP Information

Target species scientific name(s) and common name(s) [state target stock(s), if relevant]	Anchoveta - Peruvian anchovy (*Engraulis ringens*), Northern-Central stock
Fishery location	Anchoveta - Peruvian anchovy (Engraulis ringens), Northern-Central stock
Gear type(s)	Purse seine
Estimated FIP Landings (weight in tons)	12,900 metric tons
Vessel type(s) and size(s)	Artisanal fleet (<10 cubic meters GRT) and small-scale fleet (10-36.2 cubic meter GRT)
Number of vessels	32 vessels
Management authority	Ministerio de la Producción del Perú (PRODUCE)

Assessor name(s)	Antonio Gomez
Assessor Organization/Affiliation	Independent Consultant
Date of report completion	June 26th, 2023

Stakeholder Consultation & Meetings

To better understand the current status of MSC Performance Indicators (PIs) and the status of progress on the FIP action plans we hold a series of interviews with fishery key stakeholders. The communications with stakeholders occurred through scheduled virtual meetings. The table below provides information about the meetings, including person's names, organization, date, and main topics discussed.

Name	Affiliation	Date and Subjects Discussed
Phd **Marilú Bouchón Corrales**	IMARPE General Director of Research in Pelagic Resources	June 17th , 2023 • Fishery and environmental research • Species P2 • Habitat and environmental impacts • Quota recommendations • Fishery fleet overview
Noe Augusto Balbín Inga	Ministry of Production of Peru (PRODUCE) General Director of the General Directorate of Fisheries for Direct and Indirect Human Consumption	June 13th, 2023 • Fishery objectives • Fishery management • Harvest Control Rules • Decision-making processes • Enforcement and Compliance
Ernesto Godelman	CeDePesca	June 20th, 2023 • FIP overview and workplan • Key stakeholders review • Fishery Overview

		• Improvement plans, actions, and tasks
Isabel Valcárcel	Compañía Americana de Conservas (Grupo Consorcio)	<u>June 20th, 2023</u> • Harvest Control Rules • Decision-making processes • Enforcement and Compliance • On-Board Observer Program Overview • FIP workplan overview
Fiorella Solimano	CeDePesca	<u>June 13th, 2023</u> • On-Board Observer Program Overview • Data collection efforts • Species and habitat P2
Maira Palacios	CeDePesca	<u>June 15th, 2023</u> • On-Board Observer Program scope • Data collection efforts • Species and habitat P2 • FIP Fleet Overview
Frank Altamirano,	CeDePesca	<u>June 6th, 2023</u> • On-Board Observer Program Overview • Data collection efforts • Species and habitat P2

Summary of Findings and Recommendations

The present audit report was based on the Peru anchovy - small scale purse-seine Fishery Improvement Project Work Plan (from January 2020 to March 2023). The FIP profile will be updated in July 2023, so some updates are still missing in the FIP profile, which could include some of the recommendations presented in this report.

COVID-19 had a great impact on the fisheries, impacting the normal performance of the FIP workplan, including modifications in some of the tasks. Although, FIP partners adapted to the situation and continue working.

Since January 2020, FIP partners have been working on:

-Advocating for/and monitoring the fishery's compliance with MSC standards. They engaged an independent consultant to assess its performance for principle 1 (aligned with ecosystems needs). Based on the consultant's findings, FIP partners determined that the fishery meets MSC standards for both stock status and harvest strategy/management. IMARPE published a document analyzing the role of Peruvian anchovy in the ecosystem and the trophic needs of its predators, supporting that the fishery considers ecosystem needs.

- FIP partners extended the workplan to enhance clarity on management objectives, harvest strategy, and rules. This expansion led to the addition of new tasks (2.3.A, 2.4, 2.5) aimed at achieving these objectives. The partners actively engaged with PRODUCE officials through virtual meetings to understand the assessment of the management system and advocated for improved management of court decisions and appeals. They also worked with authorities to introduce explicit objectives for the fishery, particularly regarding P1 and P2, into the DHC Fisheries Management Regulations. The Government of Peru issued a decree (Decreto Supremo N° 024-2021-PRODUCE) mandating the use of traceability and geo-referencing systems, aligning with the FIP partners' long-standing advocacy for stronger control and surveillance in the Peruvian fisheries.

- FIP partners advocated for the active involvement of the Peruvian Government's Executive Branch in combating illegal activities in the fishing sector, as regulated by Legislative Decree N°1393-2018. Despite challenges posed by the Covid-19 pandemic, the partners aimed to conduct a workshop to provide updates on the implementation of the Law of Interdictions and SITRAPESCA. FIP partners successfully encouraged government stakeholders to disclose the methodology used to estimate unreported catches in the DHC fishery, leading to the issuance of Directive N°061-2020-PRODUCE/DGSFS-PA by PRODUCE. This directive established guidelines for reporting illegal and undeclared fishing data to IMARPE, which is then considered in the Total Allowable Catch (TAC) recommendations. Additionally, the partners advocated for a transparent mechanism to define quotas in the IHC and DHC sub-fisheries, aligning with IMARPE's recommended catch levels. As a result of their efforts, PRODUCE issued a resolution to address this matter

- Implementing and continuing developing a private On-Board Observer Program with four trained observers currently working within the FIP fleet. Annual reports are produced to gather data and analyze the fishery's impact on ETP species, their status, and habitat interactions. Workshops for skippers and crew members promote a mitigation measure aimed at reducing habitat interaction, explaining a maneuver to minimize impacts on benthic species and habitat.

Recommendations

-Take into account the consultant's observations on Principle 1, which include incorporating ecosystem parameters related to low trophic level species in the protocol and considering the definition of ecosystem reference points. Additionally, mention that the paper by Tam et al. (2020) could be peer-reviewed externally.

-It is recommended to conduct a Productivity Susceptibility Analysis (PSA) for Samasa specifically for the small-scale and artisanal fleet of the FIP to verify the scores in P 2.2.1.

-Some interaction of the net with the habitat has been identified. Although it is unlikely that the UoA is having an impact, we courage FIP members to continue gathering data to better understand if there is a potential impact and consider (if needed) conducting a Consequence Spatial Analysis to assess the impact on the habitat (P 2.4.1).

-Concerning P2, it is important to emphasize activities aimed at reviewing measures to minimize bycatch, impacts on ETP species, and habitat impact. Additionally, analyze the effectiveness of the maneuver to reduce habitat impact and determine the number of vessels implementing it.

-Regarding the onboard observer program, it is recommended to highlight the proportion of total trips (or a similar measure) undertaken by the FIP fleet that is being monitored. This will provide a better understanding of the overall coverage of the program.

-Regarding the PI 3.2.3. A more detailed review of how sanctions that underwent judicial proceedings were resolved (and if there is a deterrent effect), and evidence of the effectiveness of the entire system to reduce IUU fishing could help increase the SI's scores

-When reporting tasks, ensure consistency in the numbering of different tasks. For example, refer to task 2.1 instead of 3.1 in some activities. This will help readers better follow the progress.

-Lastly, keep in mind that if the fishery aims to achieve MSC certification, the new version 3.0 of the fishery standard is now in effect. The project will need to adapt to the new changes and requirements.

Summary of MSC Performance Indicator Scores
The table was filled referring to the MSC Fisheries Standard v2.01.

Principle	Component	Performance Indicator		Previous Score [2023]	Current Score [2023]	Rationale or Key Points
1	Outcome	1.1.1	Stock status is at a level which has a low probability of serious ecosystem impacts	>80	>80	Ecosystem reference points have not been established for the N-C anchovy fishery. IMARPE established a target reference point (TRP) of 6 million mt and a target reference point (LRP) of 4 million mt, with a precautionary level between the two that took into consideration annual fluctuations due to changes in oceanographic conditions. In 2019, the aim was to

maintain SSB at a minimum of 5 million mt (Fish Source, 2023).

The biannual setting of TACs for the upcoming fishing season uses a decision tree that incorporates an estimation of abundance by size and biomass of the stock. This is updated according to the potential oceanographic conditions in the short term (6 months). It recognizes that the environmental variability for anchovy is high and that an F-based management approach is preferable to biomass-based reference points which have little meaning in the context of wide interannual variations in sea temperatures and other parameters (Report 2020b).

The most recent stock assessment report (IMARPE 2022) shows in early 2022, B was above 9780370 mt which was substantially greater than the TRP of 5 million mt.

The exploitation rate of 0.35 used to establish the quota, which represents fishing mortality between 0.43 and 0.69 in the best and worst scenarios, is well below the status quo level of 0.784. The maximum E of 0.35 is expected to maintain biomass substantially above the TRP. It is currently double that figure and has not been less than 20% above since the year 2000. The risk is measured and reviewed with the decision tree (Report 2020b).

MSC allows the default needs in relation to LTL species of 75% of SSB to be lowered to a minimum of 40%SSB if the defined level: (i) does not impact the abundance levels of more than 15% of the other species and trophic groups by more than 40% (compared to their state in the absence of fishing on the

target LTL species); and does not reduce the abundance level of any other species or trophic group by more than 70%. (MSC, 2018).

The available evidence indicates the consistent application of E=0.35 over recent years. Since 2000, the biomass has been substantially above the TRP of 5 million mt and just once in the

						past 26 years has fallen below the LRP of 4 million mt. Biomass and landings reflect fluctuations due to ENSO variability (Report 2020b). In addition, Tam et al., 2020 assessed the ecosystem impacts of fishing the Peruvian anchovy in the Northern Humboldt Current Ecosystem. This analysis highlighted "at the status quo fishing mortality (F = 0.784) and level of anchovy depletion (around 19 % B0), does not impact the abundance levels of more than 15 % of the other species and trophic groups by more than 40%, and also does not reduce the abundance level of any other species or trophic group by more than 70 %". Altogether, a) it considered that the stock is highly likely that the stock is above the point where serious ecosystem impacts could occur, and b) the stock is at or fluctuating around a level consistent with ecosystem needs. SG80 is likely to be met
		1.1.2	Stock rebuilding	NA	NA	Teams shall only score this PI when Stock Status PI 1.1.1 does not achieve an 80 score. (MSC, 2018)
	Management	1.2.1	Harvest Strategy	>80	>80	The anchovy fishery in Peru is managed in two parts: the industrial Indirect Human Consumption (IHC) fishery and the Direct Human Consumption (DHC) fishery, which includes small-scale and artisanal vessels. Both sectors are regulated through licensing, mesh size restrictions, and minimum landing sizes. Additionally, there is a Total Allowable Catch (TAC) and quota system, as well as a spatial and temporal closure system, which differs between the IHC and DHC fisheries. The Ministry of Production (PRODUCE) has the authority to implement temporary and/or spatial closures when the proportion of juvenile anchovies in the catch is too high or for reproductive purposes. The decision to close the entire fishery is based on the percentage of juveniles and is made on a season-

by-season basis. Real-time catch reporting and observer programs are used to monitor the percentage of juveniles on a set-by-set basis. In some cases, exceptionally high recruitment of juveniles has resulted in the cancellation of the second fishing season, which has occurred four times in the last decade.

The percentage of juveniles is reported for each haul in the electronic logbooks submitted to PRODUCE, reducing the reliance on sanction systems and prioritizing data collection. This real-time data reporting system is primarily used in the IHC fishery and not as extensively in the DHC fishery. However, the DHC fishery has a restriction that limits the landing of juveniles to no more than 10%. Violations of this limit may result in temporary closures of the fished area. Landings in the DHC fishery are monitored by PRODUCE inspectors in port. It is worth noting that the system for closing the artisanal fishery when juvenile catches are high is not as quick or well-structured as the IHC system.

a)

The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving the goals to protect the stock and the ecosystem as discussed by Tam et al (2020).

SG80 is likely to be met

b)

Trends in biomass, catch and harvest rates indicate that, while the stock fluctuates due to natural environmental variability, the harvest strategy appears to be achieving the objective to maintain the stock above the target reference point. The strategy is currently achieving its objectives and has been tested in the past through low biomass situations, and measures have always come into effect to protect the stock.

SG80 is likely to be met

			1.2.2	Harvest control rules and tools	60-79	60-79	

c)

Ongoing monitoring of anchoveta catches and landings is conducted to ensure compliance with regulations. This involves the use of satellite monitoring systems, onboard observers, and inspections at landing points.

SG80 is likely to be met

d)

SG80 is met by default.

e)

Shark finning is not taking place.

SG80 is likely to be met

a)

The HCRs in place are well-defined and ensure that the exploitation rate is reduced as the PRI is approached. The lack of explicit consideration of anchovy as an LTL species means that the fishery does not meet SG80 (Report 2020b).

SG60 is likely to be met

b)

Cedepesca 2017 concluded that (i) the HCR stems from the decision tree and is adaptive to variations in oceanographic conditions and the juvenile proportion of the stock; and (ii) the harvest of IUU fishing is taken into account in the stock assessments. In addition, DHC FIP Review 2020 concluded the same if there was evidence of that the stock assessment takes uncertainty into account

SG80 is likely to be met

						c)
						"the healthy stock status and previous management responses to risk of over fishing and to protect the juvenile element present evidence that the tools in use are appropriate to control harvest by the IHC fleet. While it has not been demonstrated the available tools would be effective at reducing harvest by the DHC fleet, the entire fishery has been closed to safeguard juveniles. It may be concluded that the HCTs are effective at achieving the exploitation level required" (DHC FIP Review 2020). I concur with the statement. SG80 is likely to be met
	1.2.3	Information and monitoring	>80	>80		IMARPE employs various methods to monitor the anchovy stock. They conduct two independent surveys at sea each year before the fishing season begins. In addition, they gather data from mandatory sampling on board vessels, including biometric information, as well as data from the satellite vessel tracking system (SISESAT). The IHC fleet is required to sample 100 fish from each catch and report the catch and biological data to IMARPE and PRODUCE daily via radio or telephone. IMARPE collects catch and size data from all landings of the artisanal fleet at the landing ports. IMARPE has time series of the main reproductive indexes (sexual proportion, spawning frequency, fertility, and average female weight) that allow them to identify any changes in the anchovy spawning cycle, and to estimate spawning biomass and potential production of eggs. This allows them to predict recruitment in the coming season. IMARPE runs an observer program to collect scientific data. Scientific reports are published on the IMARPE website. 5% of trips are observed by the IMARPE program. a)

			1.2.4				Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.

| | | | | | | | Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data are available to support the harvest strategy.

SG80 is likely to be met

b)

Cedepesca 2017 concluded that stock abundance is monitored regularly and supports the HCR. The condition of the anchovy is monitored through the measurement of several parameters, also oceanographic conditions are monitored.

SG80 is likely to be met

c)

There are estimations available of unregistered catch, which range from between 2% - 4% of the landings (Report 2020b), and unreported catch estimation is taken into account in the stock assessment.

It is expected that SITRAPESCA systems will reduce IUU.

Although there are some unregistered catches, there is a big certainty about all the removals from the stock.

SG80 is likely to be met |

| | | 1.2.4 | Assessment of stock status | >80 | >80 | a)

Previous assessments concluded "The population assessment is carried out using direct and indirect methods, which allow for the estimation of total biomass, spawning biomass, and size structures of the stock. Additionally, it is possible to estimate all the biological indicators and fishery characteristics through the onboard observer program." (CeDePesca, 2017). "The stock assessment uses as an integrated population model assessment and calculates indicators such as CPUE |

biomass, abundance, age, size, spawning biomass, and recruitment. From this, they estimate spawning stock biomass and other biological indicators." (DHC FIP Review 2020).

The assessment is appropriate for the stock and for the harvest control rule.

SG80 is likely to be met

b)

TRP and LRP together with E (35%) are defined for the SSB.

Although reference points are not in terms of ecosystem needs and impacts, from Tam et al., 2020, we can infer that the assessment is appropriate for the LTL stock.

It is recommended better describe how the anchovy biological reference points "are appropriate" reference points for LTL species (in terms of ecosystems impacts and needs).

SG80 is likely to be met

c)

In CeDePesca 2017"The assessment takes into account uncertainty about the reliability of acoustic surveys during EL Nino events that lead to changes in anchovy aggregations.". The 3rd annual FIP audit (Report 2020b) concluded "The assessment takes into account changes in catchability used in acoustic surveys in El Nino events as anchovy tends to hyper-aggregate. The protocol for determining the stock incorporates uncertainty by generating abundance replicas of the size and biomass estimates using the bootstrap method which incorporates multiple sources of uncertainty. It is assumed that the

						main sources of uncertainty come from sampling. Confidence limits are estimated. While the evidence is needed, the assessment claims to take unreported catch into account".

All together we can conclude that the assessment takes uncertainty into account.

SG80 is likely to be met

d)

SG80 is likely to be met by default

e)

IMARPE has a review internal process before publishing. So, all the work published is peer review internally

SG80 is likely to be met |
| **2** | Primary species | 2.1.1 | Outcome | >80 | >80 | a, b)

The private observer program specific to the FIP fishery determined a bycatch of 1.87% (% bycatch /total catch) (Report, 2022)

There were no main primary species in the fishery (above 5% in relation to total catches, or above 2% for less resilient species). See Table 1.

Bycatch varies depending on sessions and years, but Jack mackerel (*Trachurus picturatus murphyi*) and mackerel (*Scomber japonicus peruanus*), represented an average of 0.004% and 1.243% of total landings respectively (they are considered minor primary species).

SG80 is likely to be met for all Scoring issues by default. |

		2.1.2	Management strategy	>80	>80	a, b, c, e) There are no main primary species, therefore SG80 is met by default.
		2.1.3	Information	>80	>80	a, b, c) There is a comprehensive private onboard observation program that covers a portion of the FIP fleet, systematically monitoring the catch, bycatch and associated species from 2017-2018 to the present. Additionally, IMARPE monitors catches on ports. SG80 is likely to be met for all Scoring issues.
	Secondary species	2.2.1	Outcome	>80	>80	In previous reports, the samasa (*Anchoa nasus*) was classified as the main secondary species due to in some years, the historical data showed that landings were up to 5%, or even the 40 % in 1998 (DHC FIP Review 2020). Its occurrence is occasional and related to the influx of warm waters from the north off the coast of Peru during El Niño events. Due to the negative correlation in abundance or availability between the two species, conservation measures for anchovy indirectly protect the samasa (CeDepesca 2017). Currently, the samasa is included in the anchovy extraction quota, although is not the primary target specie of the fishery using, Reference points are established for the Peru anchovy (there are no specific reference points for samasa). The private observer program specific to the FIP fleet determined an average of 0.341% (% bycatch /total catch) for the samasa. There were no main secondary species in the fishery (above 5% in relation to total catches, or above 2% for less resilient species).

						a) There are long periods where samasa does not reach 5% of the total landing. However, as a precautionary approach, it will be considered as a main specie. There was no information available to confirm that the samasa is above biological limits. Biomass assessments revealed significant interannual variation (DHC FIP Review 2020). A PSA analysis conducted by CeDePesca in 2017 assessed the samasa as a main species and yielded two different scores (93.4 – 79.6), depending on the spatial overlap of the fishery (10-30%). It is worth noting that this analysis was conducted on the industrial fleet, and one would expect higher scores for the assessment of the FIP fleet (which is smaller and expected to have less overlap) Agreeing with the previous revision, it is recommended to analyze spatial overlap to re-enforce the decision of >80 scoring. SG80 is likely to be met b) SG80 is likely to be met by default.
		2.2.2	Management strategy	60-79	60-79	a, b) There are no samasa specific measures in place that are expected to maintain the samasa population within acceptable biological limits or ensure that the ecosystem is not hindering its recovery. Samasa catches are included within the overall quota set for anchovy and samasa, the assessment solely focuses on anchovy. Furthermore, when the availability of samasa is high during warm events, the total catch quota is significantly reduced due to the low availability of anchovy, which seems to act as an effective indirect measure. On the other hand, when the anchovy quota is high, the

						availability of samasa used to be very low, sometimes even negligible, thus the high anchovy quota would not affect the abundance of samasa (CeDePesca, 2017). Estimated biomass based on IMARPE surveys conducted from 2000 to 2016 (see CeDePesca, 2017) showed that the anchovy fishery has not prevented the samasa biomass from remaining within certain biological limits, considering the large variation in availability associated with environmental variability. Control measures implemented for anchovy seem to work to protect samasa.

However, further evidence is needed to determine with more confidence if the existing management measures are effectively maintaining the stock above the PRI.

SG60 is likely to be met

c)

The management measures for anchovy, which include the TAC, licensing, mesh size, closed areas, and seasons, may also protect the samasa stock to some extent. Evidence from the anchovy fishery shows that these measures are being implemented successfully.

SG80 is likely to be met.

d) N/A

e)

We can not consider samasa as an unwanted catch.

Review for unwanted juvenile catch for anchovy may apply for samasa (if they have similar sizes).

SG60 is likely to be met

| | | 2.2.3 | Information | >80 | >80 | a, b, c) |

						There is a comprehensive private onboard observation program that covers a large portion of the FIP fleet, systematically monitoring the catch, bycatch, and associated species from 2017-2018 to the present. In addition, IMARPE monitors catches on ports. SG80 is likely to be met for all Scoring issues.
	ETP species	2.3.1	Outcome	60-79	>80	The private onboard observation program quantifies the interaction between the FIP fleet with birds, mammals, and reptiles. The interactions vary over the years. The April-December 2021 season had the highest reported interactions with the fishery (Other reports showed less interaction). For birds, out of 50,986 interactions, 161 interactions were direct interactions (0.32%). The most common birds were the Peruvian Pelican - *Pelecanus thagus* (listed as Near-threatened in the IUCN red list), Franklin's Gull - *Leucophaeus pipixcan* (listed as least concern in the IUCN red list), and Kelp Gull - *Larus dominicanus* (listed as least concern in the IUCN red list). (see Table 2 for more information). For mammals, there were 25,984 interactions, of which 64 were direct interactions (0.25%), mainly with the South American Sea Lion - *Otaria flavescens* In Peru, there is significant legislation for the protection of marine ETP species, including the prohibition of hunting sea lions, the protection of birds associated with guano production, and the national system of marine protected areas around islands, islets, and guano points. However, this legislation does not yet include biological limits for these species (CedePesca, 2017). a) N/A

						b) Direct effects of the UoA are highly likely to not hinder the recovery of ETP species (CHD only represents a small fraction of the whole fishery). c) Indirect effects would be the removal of anchovy as a food resource. Tam et al., 2020 developed an ecosystem model to determine the impacts of the fishery over the food web (including ETP species), concluding that were no relevant impacts. SG80 is likely to be met for all Scoring issues.
		2.3.2	Management strategy	60-79	60-79	Peru recognizes different ETP species susceptible to direct or indirect interactions with the anchoveta fishery. Anchoveta is considered a key prey species of some ETP species of the Humboldt Current ecosystem. On the other hand, the fishery interacts with ETP species such as seabirds or marine mammals. National legislation declares a list of protected species and prohibits the capture of protected species (seabirds, turtles and marine mammals) for commercial purposes (DS 034-2004-AG), including Peruvian Diving Petrel, Humboldt penguin, Guanay cormorant, Peruvian pelican, Peruvian booby, green sea turtle, South American sea lion and Southern fur seal. The commercial catch, processing and marketing of small cetaceans (Law 26585), and sea turtles (D.S 026-2001-PE) are prohibited by national regulations (Fish Source, 2023). On the other hand, there is a national system of marine protected areas around islands, islets, and guano points. Furthermore, fishers actively avoid capturing ETP species (e.g., sea lions, dolphins) by stopping or even canceling fishing operations if they observe several individuals around the net. Additionally, any entangled birds that can

						be safely released are set free (stakeholder personal communication).
						a, b)
						As detailed above, there are measures in place that minimize the UoA-related mortality of ETP species, and they are expected to ensure the UoA does not hinder the recovery of ETP species. Although there is all these measures in place, they cannot be considered and strategy altogether.
						SG60 is likely to be met
						c)
						The measures are considered likely to work, based on the specific FIP fleet specific information that indicates that there is little to no UoA-related mortality of the vulnerable ETP species. Although there are many interactions, most individuals are released alive and in good condition.
						SG60 is likely to be met
						d)
						60 is met by default.
						Vessels comply with VMS showing that any spatial or seasonal measures, relevant to ETP species, are being complied with.
						SG80 is likely to be met
						e)
						There has been some review of alternative measures to minimize UoA-related mortality of ETP species. But not a regular revision (CeDePesca, 2018).
						SG60 is likely to be met

		2.3.3	Information	>80	>80	a, b, c) There is a comprehensive private onboard observation program that covers a large portion of the FIP fleet, systematically monitoring the catch, bycatch and associated species since 2017-2018 to present. On ETP species, as some birds and marine mammals, the monitoring protocol identifies indirect and direct interactions. 'Direct interaction' indicates that an animal was trapped; "Indirect interaction" indicates that an animal was observed but not trapped. If the interaction is direct, the data records whether they were released unharmed, harmed, seriously harmed, or dead. SG80 is likely to be met for all Scoring issues.
	Habitats	2.4.1	Outcome	60-79	60-79	Peruvian anchoveta fishing utilizes purse seine nets, which would typically suggest minimal interaction with the seafloor. However, in the Bay of Sechura (and to a lesser extent in Chimbote), the Peruvian anchoveta fishery, intended for direct human consumption, directly interacts with the seafloor (through the Onboard Observer Program). Seafloor interaction data were collected using observer inference (when the gear height exceeded the seafloor depth), the presence of sediment in the net, and information provided by the fishing skipper during net deployment (through the Onboard Observer Program). Additionally, studies conducted by IMARPE have characterized the seafloor of the Bay of Sechura, where some vessels operate. These studies highlight the presence of sandy, silt-sandy, and clayey-sand bottoms (IMARPE 2007). The observer program recorded the type of sediment present in the net, revealing a high percentage of sand and mud-clay.

		2.4.2	Management strategy	60-79	60-79	

(row 1 — top cell, PI blank)

a, b)

Due to the nature of the seabed described above is unlikely that the UoA is

reducing the structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm. It seems that the fishery does not operate on VME. However, not all areas are covered by the observer program, and VMEs have not been explicitly mapped and considered.

SG60 is likely to be met

c)

Only assessed for SG100

(row 2 — 2.4.2)

Fishing is prohibited around specific islands to preserve their ecological status as important habitats for birds or marine mammals. This conservation measure serves to minimize habitat interactions in these areas, further safeguarding their ecological integrity. In addition, fishing operations occur after 3nm from shore.

Furthermore, between April and December 2021, collaborative efforts were undertaken with vessel skippers within the FIP fleet to develop a fishing maneuver specifically for shallow waters. This maneuver involved promptly retrieving the purse seine net once it was closed, aiming to minimize the interaction of the net with the seafloor. The objective was to reduce the impact of the net on the marine bottom. To facilitate knowledge sharing, this effective tactic was disseminated to other boat skippers through the use of audiovisual materials within the Onboard Observer Program. There is no evaluation of the effectiveness of this maneuver.

a, b)

						Due to the low habitat interaction and the nature seafloor, measures are considered to work, and not to reduce the structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm. SG60 is likely to be met c) Only assessed for SG80 d) Vessels carry VMS, they do not fish in MPA. SG80 is likely to be met.
		2.4.3	Information	>80	>80	a, b, c) There is a comprehensive private onboard observation program that covers a portion of the FIP fleet, systematically monitoring the catch, bycatch, associated species, and impacts over the habitat (including GPS data) from 2017-2018 to the present. The program has developed an effort to gather information on marine habitat fishery impacts and seabed composition. IMARPE had studies (e.g.: IMARPE 2007) sobre fondo marino en parte donde la flota CHD opera. SG80 is likely to be met.
	Ecosystem	2.5.1	Outcome	60-79	>80	Northern Humboldt Current System (NHCS) is one of the most productive seas due to its coastal upwelling producing a high abundance of zooplankton that supports the large biomass of the Peruvian anchoveta and other species of ecological importance *(Gonzalez-Pestana et al.*

						2022) Anchoveta biomass is strongly affected by the oceanographic conditions; periodically, the upwelling that drives the Humboldt Current Large Marine Ecosystem's productivity, where the fishery operates, is disrupted by El Niño-Southern Oscillation (ENSO) events (Fish Source, 2023). The greatest impact of this fishery is the potential reduction of anchoveta availability as important prey for the rest of the food web, with a lot of species depending on it. a) Tam et al., 2020 develop a specific analysis of fishery impacts over trophic levels using ecosystem models, concluding that the anchovy fishery did not have any major impact on the food web. So, it is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be serious or irreversible harm. SG80 is likely to be met.
		2.5.2	Management strategy	60-79	60-79	a) Anchovy populations are highly monitored and regulated. The DHC TAC is not set based on the needs of the ecosystem, although they are established with a precautionary approach. The fishery does not allow more than 5% of bycatch, Several regulations (including MPA) protect ETP species. These measures take into account the potential impacts of the UoA on the ecosystem. However, they cannot be considered a partial strategy for the DHC fishery. SG60 is likely to be met. b)

						IMARPE monitors several of the key elements of the fishery (fishery stock, P2 species, and some ETP species). Recently, an ecosystem model determined the low impact of the fishery along the food web under several scenarios and conditions. Based on that information there is some objective basis for confidence that measures are working. SG80 is likely to be met. c) There is compliance with the regulations on protected areas (vessels must have VMS) and fishing quotas. SG80 is likely to be met.
		2.5.3	Information	>80	>80	a, b, c, d, e) IMARPE monitors all levels of the ecosystem, from algae up to marine macro-fauna, top predators, marine mammals and birds. The main functions of the different ecosystem components are known. Data is also collected by a private observer program. In addition, Tam et al., 2020 develop a specific analysis of fishery impacts over trophic levels (that is considered in the P1.1.1 for LTL species) that required abundant information about trophic levels and interactions in the ecosystems. SIs are likely to meet SG80.
3	Governance and Policy	3.1.1	Legal and customary framework	>80	>80	a, b, c) The General Fisheries Law serves as the foundation of the legislative framework for fisheries management. Various mechanisms such as laws, decrees, regulations,

						etc., have been employed to develop and enhance this law. Fishing activities take place within the national territory in the Exclusive Economic Zone (EEZ). PRODUCE collaborates with various public and private organizations to promote the development of fisheries in Peru. This is strong evidence that the dispute mechanism exists (i.e. consideration within the legal framework) is transparent for the resolution of legal disputes and has been tested and proven to be effective (Report 2020a) In overall terms, small-scale/artisanal fishers are protected through the allocation of their quota and with exclusive fishing rights Art 6.2 of DS 002-2017-PRODUCE states: (a) PR0DUCE will define laws and policies related to the artisanal fishery, (b) develop and approve national plans and actions reacted to the sustainable development of the artisanal fishery, (c) provide funds for the artisanal activities (f)supervise, monitor and control compliance in the artisanal sector. SG80 is likely to be met. No changes in this PI
		3.1.2	Consultation, roles and responsibilities	>80	>80	a) PRODUCE is the competent organization in the areas of fisheries, aquaculture, domestic industry, and trade, and is exclusively responsible for fisheries management, industrial fishing, large-scale aquaculture, industrial standardization, and regulated product management (Legislative Decree No. 1047 - Law on the organization and functions of the Ministry of Production). The LD95 is the law governing IMARPE, defining its roles and functions.

						Other entities in the fisheries sector include the National Fisheries Development Fund (FONDEPES), Fisheries Health Agency (SANIPES), Technological Institute of Production (ITP), National Institute of Quality (INACAL), National Program To Eat Fish, INNÓVATE PERÚ Program, Innovation Program in Fisheries and Aquaculture, and Program of Productive Diversification b) There is a 'Forum for sustainable fisheries and aquaculture' (http://www.fpas.pe/) whose objective is to promote dialogue and research among the different actors in fisheries and aquaculture in Peru. Forum members include regulators, NGOs, companies, and academics. The forum organizes multiple meetings per year both in Lima and regionally to discuss relevant topics such as management issues. There is also an electronic suggestions platform. This forum has increased the ability for all parties to be involved (CeDepesca, 2018). Withal, the management system includes consultation processes that regularly seek and accept relevant information. The management system demonstrates consideration of the information obtained. c) The management system incorporates both informal and formal mechanisms to actively involve stakeholders. Engaging stakeholders in sharing proposals, and meetings with the government are a regular practice within the system. SG80 is likely to be met for all SI's. No changes in this PI
		3.1.3	Long term objectives	>80	>80	General Fisheries Law in its: Article 1: The purpose of this Law is to regulate fishing activity in order to promote its sustainable development as a source of food, employment, and income, and to ensure

						responsible utilization of hydrobiological resources, optimizing economic benefits in harmony with environmental preservation and biodiversity conservation.

Article 11: The Ministry of Fisheries, according to the type of fishery and the status of the exploited resources, shall establish a management system that reconciles the principle of sustainability of fishery resources or long-term conservation with the attainment of the greatest economic and social benefits.

Therefore, there are clear long-term objectives where the precautionary approach is explicitly stated in the management policy.

SG80 is likely to be met. No changes in this PI |
| | Fishery specific management system | 3.2.1 | Fishery specific objectives | 60-79 | 60-79 | a)

The management system implemented for this specific fishery includes clear protocols for establishing the Total Allowable Catch (TAC) with the aim of keeping the stock within sustainable biological limits, in accordance with Principle 1. However, there are no explicit short- and long-term objectives related to P2, or about ecosystem needs (important for LTL fishery in P1).

SG60 is likely to be met |
| | | 3.2.2 | Decision making processes | >80 | >80 | a)

It is clear that there is a decision-making process on the key issues related to the regulation of the fishery and responses to achieve fishery-specific objectives. The information gathered ensures that the decision uses robust scientific information to support decisions that are updated measures before each season, while allowing for in-season modifications when the quota is fished, or/and there is too high a proportion of juveniles. |

The decision table used by IMARPE to establish the TAC for the anchovy stock is published and transparent. In addition, the PRODUCE established (Resolution N° 306-2020-PRODUCE) how to determine the TAC for the DHC fleet.

SG80 is likely to be met.

b)

Decision-making processes respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.

Quotas for DHC and IHC are set each year and released one time. There is real-time management of the fishery. This process is transparent, timely, and adaptive and takes into account wider implications.

e.g.: the percentage of juveniles is monitored at ports, and a high presence of juvenile become spatial-temporal closures.

SG80 is likely to be met.

c)

Decisions are made based on the best available information and follow the recommendations of IMARPE which uses a precautionary approach.

SG80 is likely to be met.

d)

There is evidence that the information is available upon request, and a significant portion of the information is public. IMARPE publishes its studies, and PRODUCE issues its resolutions. In addition, Peru established Law

						27806 (Transparencia y Acceso a la Información Publica). The state will adopt basic measures to guarantee and promote transparency in the actions of the public sector and is obliged to provide any information requested (http://www.produce.gob.pe/ConsultasEnLinea/consultas.web/general/tupas). In previous assessments, there were some concerns about how DHC was allocated, which RM 00306-2020 solved (RM 306). SG80 is likely to be met. e) The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges. Previous assessments highlighted an example of this point (e.g.: 2015). SG80 is likely to be met.
		3.2.3	Compliance and enforcement	60-79	60-79	An electronic log system was implemented for all fleets to enforce controls and satellite monitorization is in place (SISESAT). Several measures are in place for intensive monitoring and inspection by IMARPE and PRODUCE (on port and on board). In 2021, it was also implemented a mandatory registry of information in mobile systems (Sistema de Trazabilidad de Pesca y Acuicultura - SITRAPESCA - and in the Sistema Georreferenciado de Pesca y Acuicultura - SIGPESCA) to ensure the traceability of the resources (Fish Source, 2023). a) The legal framework exists. In addition, PRODUCE published Legislative Decree No. 1393 which establishes measures to combat illegal activities in fishing. Likewise, at the beginning of 2019, PRODUCE published the Protocol (No. 054-2019-MP-FN) that aims to establish the procedure that must be developed to execute interdiction

operations against the illegal activities related to the extraction and illegal prosecution of aquatic species, arranged by the prosecutor in charge of the investigation (FP, 2023).

There is a mandatory satellite VMS and staff from PRODUCE at the legal landing points (focus mainly on IHC, personal communication). Altogether, it can be considered as a system, and due to the high level of control of the IHC fleet, there is a reasonable expectation that it is effective for DHC.

SG80 is likely to be met.

b)

The law of Inspection and Sanction for the Activities of Fishing and Aquaculture 017-2017-PRODUCE, set the sanctions with non -compliance, and there is evidence that sanctions are applied.

However, they are applied through long judicial processes that tend to prescribe, there is not a sufficient deterrent effect (CeDePesca, 2017)

SG60 is likely to be met.

c)

Generally speaking, it is believed that the fishermen belonging to the DHC fleet adhere to the regulations of the fishery management system (stakeholder personal communication) (SG60). Furthermore, there have been measures implemented to address and rectify irregularities in recent years, thereby hindering the operation of illegal activities (e.g.: D LEGISLATIVO Nº 1393, SITRAPESCA). Evidence demonstrating the effectiveness of the MCS systems may increase SI scores.

						SG60 is likely to be met. d) There are some concerns about anchoveta for direct human consumption sold to fishmeal processing plants, which is not allowed (e.g. Grillo et al., 2019, De la Puente, 2020). These concerns may prevent achieving SG80. SG60 is met by default.
		3.2.4	Management performance evaluation	60-79	>80	a, b) In recent years, the available evidence strongly indicates that the management system has undergone continuous reviews as the government has endeavored to address the challenges that have historically affected the sector. Some of the challenges include significant fluctuations in annual harvests, illegal fishing, and insufficient research for a fishery as substantial and intense as the anchovy fishery (see Report P3, 2020). Regular internal reviews are conducted, along with occasional external reviews. In addition, a fishery-specific Management Strategy Evaluation (MSE) was performed by IMARPE (Although it is not clear what implementation/modifications were done). SG80 is likely to be met.

Table 1. Average proportion of bycatch by species in relation to total landings during 2018-2022 (Report, 2022).

Especie	Captura promedio anual (t)	Porcentaje de captura total (anchoveta + captura incidental)
Caballa - *Scomber japonicus peruanus*	282.80	1.243%
Samasa - *Anchoa nasus*	77.53	0.341%
Espejo - *Selene peruviana*	29.53	0.130%
Munida - *Pleuroncodes monodon*	14.69	0.065%
Lorna - *Sciaena deliciosa*	12.38	0.054%
Cabrilla - *Paralabrax humeralis*	2.99	0.013%
Malagua - *Chrysaora plocamia*	1.15	0.005%
Jurel - *Trachurus picturatus murphyi*	0.88	0.004%
Cachema - *Cynoscion analis*	0.88	0.004%
Raya águila hocicuda - *Myliobatis longirostris*	0.57	0.003%

(*)*Paralabrax humeralis* should be considered only at the level of its generic name (genus) as *Paralabrax spp*.

Table 2. Example of interactions with birds during onboard observers for Sechura, April-December 2021

ESPECIE	Interacción Indirecta (No sufrieron daños) Se encontraban presentes durante toda la faena, pero no sufrieron ningún daño.			Interacción Directa (Sufrieron daños)			Post-Captura (Sufrieron daños) Estado en el que quedaron los individuos después de sufrir daños			Total Individuos
	Nadando o Sobrevolando de la embarcación	Posados en la embarcación	Atacaban el cardumen y/o evadieron la red pero escaparon ilesos	Antes - Mientras se extiende el cerco	Durante - Cuando se inicia el cierre del cerco y se procede a llevar la red a bordo	Después - Cuando la red se encuentra a bordo y empieza a envasar la captura hasta que se termina la faena	Muerto	Liberado sin daños	Liberado con heridas leves	
	I-N/S	I-P/E	I-A/E	D-A2	D-D1	D-Ds1	P-C1	P-C2	P-C3	
Pelicano peruano - *Pelecanus thagus*	7,569	23	11,727	1	47	98	25	120	1	19,465
Gaviota de frankiln - *Larus pipixcan (Leucophaeus pipixcan)*	5,942		7,499							13,441
Gaviota dominicana - *Larus dominicanus*	2,962	6	5,043		10				10	8,021
Fragata magnífca - *Fregata magnificens*	1,435	627	1,136							3,198
Gaviota peruana - *Larus belcheri*	1,617	5	900							2,522
Zarcillo - *Larosterna inca*	806	2	860							1,668
Piquero peruano - *Sula variegata*	496		472		3		3			971
Gaviotín peruano - *Sternula lorata*	381		370							751
Cormorán guanay/Guanay - *Phalacrocorax bougainvilii*	466		214		2		1		1	682
Piquero de pata azul - *Sula nebouxii*	100		102							202
Pardela común /gris - *Ardenna grisea (Puffinus griseus)*	45		20							65
Total de individuos	21,819	663	28,343	1	62	98	29	120	12	50,986

Environmental Workplan Results

Please note, in gray are actions considered completed.

Result	Related Action on FisheryProgress	Related MSC Performance Indicator	Explanation
1.2 Published the document "Ecosystem impacts of fishing the low trophic level Peruvian anchovy in the Northern Humboldt Current Ecosystem" by IMARPE. The document analyzed whether the fishery complies fully with the MSC requirements for LTL species. 1.3 Independent assessment of the performance report of the Peruvian anchovy fishery against MSC PI 1.1.1A (stock status for key LTL species). Increase in BMT score 1.1.1 1.4. Report analyzing the current performance of the fishery's harvest strategy against the MSC	Action 1. Demonstrating that the management system considers the ecosystem's needs	1.2.1, 1.1.2, 1.1.1, 2.5.3, 2.5.1	March 2020 1.2 IMARPE published the document "Ecosystem impacts of fishing the low trophic level Peruvian anchovy in the Northern Humboldt Current Ecosystem", this study analyzed the role of anchovy in the ecosystem and the trophic needs of species that prey on it. FIP partners have been a long time advocating for the need of the verify that the fishery was complying with the ecosystem's needs defined by the MSC standard. Task Completed August 2020 1.3. FIP Partners decided to contract a consultant to perform an independent assessment of the performance of the fishery as a whole against MSC PI 1.1.1A (stock status for key low tropic level species). In the opinion of the external consultant, the Peruvian anchovy fishery would meet the MSC standard for PI 1.1.1A with a score of 90. Task Completed August 2020 1.4 FIP partners decided to add this task to the Action Plan, and requested an independent analysis of the current performance of the fishery against the four performance indicators that comprise MSC Component 1.2 (Harvest Strategy / Management). In the opinion of the specialist, the analysis of the performance of the fishery in relation to the PIs that comprise C1.2, indicates that the fishery would meet

requirements for component 1.2 (Harvest strategy / Management).			the MSC standard for Principle 1 at the SG80 level, although three PIs in C1.2 are expected to attain scores above 60, but below 80 points. Task Completed
2.1 Workplan extended with new activities. 2.2. BMT score increases in 2.1.2; there are no main primary species for this UoA. 2.3.A. PRODUCE updated the implementation status of the Supreme Decree N° 005-2017-PRODUCE. 2.4. Government officials better understand what will be expected from them in relation to the future assessment of PIs 3.2.3 and 3.2.4, and to identify what evidence will be needed to support any claims made during full assessment. PRODUCE has shared internet links to evidence - already available to the public- regarding its handling of court decisions and appeals	Action 2. Promoting improvements for the Management System.	1.2.2, 1.2.1, 1.2.3, 2.3.2, 2.5.2, 2.4.2, 2.1.2, 2.2.2, 3.2.3, 3.1.2, 3.2.1, 3.2.4	July 2020 2.1 Draft a proposal that ensures that harvest control rules under a low biomass scenario and the management objectives regarding the ecosystem are explicitly considered. FIP partners extended their workplan to improve clarity on management objectives, harvest strategy and rules. Because of this task, the workplan added new tasks (2.3.A, 2.4, 2.5, 3.6) Task Completed April 2020 2.2. Promote the adoption of differentiated catch quotas or similar measures for longnose anchovy during the El Niño warm events. After long consideration by FIP partners, it was found that adopting a differentiated catch quota for longnose anchovy is not indispensable to achieve a certifiable status, focusing their work on ensuring the information for conducting PSA analysis. Longnose anchovy is considered secondary main specie. Task Completed March 2021 2.3.A. Work with PRODUCE to understand and make public the procedures to evaluate the performance of the DHC Fisheries Management Regulation (FMR). The Supreme Decree 005-2017-PRODUCE contains fishing regulations for the DHC fishery. During the second semester of 2020, several virtual meetings were held with

| | | | | PRODUCE officials to understand how PRODUCE is currently assessing the performance of the management system, sharing indicators and related expected products. PRODUCE is aware of the information needed to successfully assess PI 3.2.4 during a full assessment.

Task Completed

April 2021

2.4. [MODIFIED] Hold meetings with officials and authorities to encourage the implementation of measures in line with the proposals and to understand how PRODUCE manages appeals and court decisions.

The working group has been advocating with government officials, holding meetings to better understand how PRODUCE manages court decisions and appeals to its rulings.

The officials shared several internet links to webpages where the rulings of the Council for the Appeal of Sanctions, and the Registry of Sanctions in the Fisheries and Aquaculture sector, are made available to the public

Task Completed

Present

2.5. Work with the authorities to encourage the introduction of explicit objectives for the fishery concerning P1 and P2, into the DHC Fisheries Management Regulation (FMR) or other legal instruments.

FIP partners are advocating, holding several meetings with authorities, and sharing proposals about modifications needed, in fisheries regulations, to explicitly establish objectives regarding P1 and P2.

Task ongoing |
| --- | --- | --- | --- | --- |

			On 16 November 2021, the Government of Peru issued Supreme Decree N° 024-2021-PRODUCE, which mandates the use of the traceability system SITRAPESCA for fishing activities, and the geo-referencing system SIGPESCA for the transport of fish. The decree aimed to strengthen control and surveillance in the Peruvian fisheries, including the Peruvian anchovy small-scale fishery, and to curb illegal and unreported fishing, as well as illegal processing of Peruvian anchovy. The adoption of this measure constituted a major step for the FIP, as FIP partners had been advocating for measures for several years.
3.1. Legislative Decree N°1393-2018 regulates interdictions in the fishing sector. 3.6. Publication of the R.D. N° 061-2020-PRODUCE/DGSFS-PA, establishing guidelines for PRODUCE to provide IMARPE with data on illegal and undeclared fishing in the Peruvian anchovy fishery. 3.7. Publication of Resolution N° 306-2020-PRODUCE establishes the guidelines for calculating the total allowable catch for the DHC sub-fishery	Action 3. Promoting actions to minimize unreported fishing and the number of illegal vessels in the fishery.	1.2.2, 1.2.1, 1.2.3, 3.2.3, 3.1.2	March 2020 3.1 Legislative Decree N°1393-2018 regulates interdictions in the fishing sector. This law strengthens interinstitutional actions from the Public Ministry, the National Police, the captaincies of each jurisdiction (DICAPI), PRODUCE and public prosecutors from Regional Governments to combat illegal activities in the fishing sector. FIP partners advocated for the active involvement of the Executive Branch of the Peruvian Government in combating illegal activities. Task Completed March 2020 3.4. Conduct workshops to improve the inter-institutional coordination between PRODUCE, DIREPROs and DICAPI. Due to the Covid-19 situation, the workshop scheduled for 2020 could not be held. The goal of this workshop was to provide updates on the implementation of the Law of Interdictions. For information on SITRAPESCA for FIP partners and regional directions of PRODUCE and captaincies. However, PRODUCE responded (in response to a request from FIP partners) to provide information on the status of implementation. Task Completed

				March 2020
				3.5. Disseminate the results of the workshops.
				No workshops were held in 2020 (see task above). However, a report summary was compiled.
				Task Completed
				March 2021
				3.6 Work with PRODUCE to define a methodology for estimating the unreported catch.
				FIP partners encouraged government stakeholders to publicly disclose the methodology used to estimate unreported catches in the DHC fishery. As a result, PRODUCE's General Directorate for Monitoring, Surveillance, and Control issued Directive N°061-2020-PRODUCE/DGSFS-PA, establishing guidelines for PRODUCE to provide IMARPE with data on illegal and undeclared fishing in the Peruvian anchovy fishery. This data is included in IMARPE's Total Allowable Catch (TAC) recommendations. The directive explains how illegal and/or undeclared fishing is quantified and specifies the responsible parties for producing such reports.
				Task Completed
				March 2021
				3.7. Work with PRODUCE to define a methodology for allocating DHC/IHC quota for the Northern-Central stock.
				FIP partners urged government stakeholders to establish a transparent and clear mechanism for defining quotas in the IHC and DHC sub-fisheries to ensure compliance with IMARPE's recommended catch levels for the Northern-Central stock. As a result of this advocacy, PRODUCE issued a resolution.
				Task Completed

4.3. The On-Board Private Observer Program has been ongoing since 2017-18.	Action 4. Determining the impacts of the fleet on ETP species and other ecosystem components and mitigate them, if necessary	2.3.3, 2.3.2, 2.3.1, 2.5.3, 2.5.2, 2.5.1, 2.4.3, 2.4.2, 2.4.1, 2.1.3, 2.1.2, 2.1.1, 2.2.3, 2.2.2, 2.2.1	4.3. Implement a private On-Board Observer Program in Chimbote and Sechura and continue with its development. There are 4 observers fully trained and working within the FIP fleet. Task ongoing
4.5. Specific FIP fleet interaction information regarding P2 species and habitat is available.			4.5. Analyze and publish the outcomes of the observer program. Reporting has been occurring annually (and even a summary compiling data from several seasons). The key aspect will be to analyze the impact of the fishery on ETP species, their status, and habitat interactions. Task ongoing
4.6. Captains are trained on the adoption of the maneuver in order to minimize habitat interaction			4.6. Promote mitigation measures for the impacts, in case it is deemed necessary in light of the analysis of the collected information. CeDePesca conducted a workshop for skippers and crew members. At these workshops, CeDePesca showed the skippers and crew members the results from the Private Onboard Observers Program in Sechura, and explained a maneuver devised by skippers to close and turn the purse seine before it contacts the sea bottom in order to reduce the impacts on benthic species and the habitat. Task ongoing

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