2023 MANAGEMENT AND STOCK STATUS SUSTAINABILITY OVERVIEW







14 LIFE BELOW WATER

REDUCTION FISHERIES PART 1

REDUCTION FISHERIES

2023 Management and stock status sustainability overview – **PART 1**

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DISCLAIMER

The current overview was mostly prepared with information available from FishSource.org[™], a program of Sustainable Fisheries Partnership (SFP). The findings summarized in the report are based on information that the authors accessed from FishSource in August 2023. SFP updates FishSource regularly, and the report may not capture the most recent data for all the stocks. Always check FishSource.org for the most updated information SFP has for any given stock and fishery. Given the large number of existing fisheries for a given sector, this report evaluates the strategically most important stocks worldwide at the time (based on criteria such as the volume of catch or interest for SFP partners, for example). Note that the current scoring and ranking categories provided in the report do not consider the environmental impacts of the fisheries (i.e., they are based solely on the quality of management/degree of fishers' compliance and the status of the stock). However, the main environmental issues are considered at a high resolution, based on information already captured in the respective narrative "Environment and Biodiversity" sections of FishSource.org, and in other sources of information.

SUMMARY

- This report represents the **14th edition** of SFP's global sustainability overview of the main Pacific and Atlantic fish stocks used for reduction purposes.
- The list of evaluated fisheries remains largely consistent with previous editions. Similar to 2022, the 2023 sustainability overview will be divided into two assessment phases: (1) mid-2023 and (2) early 2024. This approach enables evaluations to be more responsive to the most recent status of each fishery.
- The current report encompasses the fisheries included in the first phase, which focuses on 11 fisheries, primarily from Europe and South America, and reflects information as of August 2023.
- Most of the evaluated fisheries have maintained their overall performance in terms of management and stock status and continue to be relatively well-managed (Table 3).
- Simultaneously, sustainability performance in certain fisheries, particularly those from South America, remains challenging. Despite the relatively good current stock health, several of these fisheries continue to face persistent management issues, with two fisheries in worse condition than in 2022, due to ineffective or deficient management systems:
 - Anchoveta Chile Valparaíso (V) Los Lagos (X) (B1 to C)
 - Araucanian herring Central-South Chile (B1 to C)

- Despite ongoing improvement efforts, the aforementioned challenges require expanded industry engagement with managers to address these issues. This includes emphasizing the importance of:
 - Developing and implementing effective joint management strategies for transboundary stocks (e.g., <u>Anchoveta - Southern Peru/Northern Chile</u>)
 - Defining appropriate ecosystem-based long-term management objectives for these fisheries to safeguard the respective stocks and associated trophic chains
 - 3. Ensuring the effective implementation and enforcement of existing regulations and management measures.
- Evaluations for the remaining eight fisheries will be incorporated into phase two of the 2023 overview, scheduled to be released by early 2024. This will occur after the publication of key management measures and updated stock status information (Appendix I).



Anchoveta Engraulis ringens © Wikimedia Commons

INTRODUCTION

Sustainable Fisheries Partnership (SFP) applies a sectoral approach to its mission of making actionable information available to the supply chain to leverage market forces to achieve improvements in fisheries. Seafood sectors may be defined in terms of the shared biological characteristics of harvested species, as well as their role in defined markets (for instance, blue whiting and anchovy share few biological characteristics, but they are both important in the same fishmeal and fish oil markets). In 2017, SFP announced a new sector-based initiative, called Target 75 (SFP, 2017), which aims to get 75 percent of the world's seafood produced in a sustainable manner, or demonstrating improvement toward sustainability. The reduction fisheries are one of the strategic seafood sectors covered by this initiative.

Since 2008, analyses of FishSource² data (in the form of "sector reports") have been performed for the most strategic seafood sectors. These overviews assess the management sustainability performance of individual stocks and aggregate data to reflect the sustainability status of the overall sector. This information can provide useful guidance to those parts of the fishing and seafood industries that need to incorporate sustainability criteria into procurement policies. This report focuses on the reduction fisheries sector, with emphasis on fisheries from the Atlantic and eastern Pacific oceans.

The 2023 SFP Reduction Fisheries Sustainability Overview analyzes fisheries from 19 different fisheries (most targeting forage species) and assesses the sustainability of the existing management regimes. As in previous editions, only a subset of the global catch applied for reduction is covered; species that are used exclusively as fish trimmings are excluded from this sustainability analysis.

Southeast Asian fisheries in the Indian and western Pacific oceans — capturing a range of species and used for a variety of purposes — are also very relevant to the global catch supply for marine ingredients. But, as in previous years, the Asian fisheries are not extensively examined in this report.



² FishSource is a publicly available online resource about the status of fisheries, fish stocks, and aquaculture. FishSource compiles and summarizes publicly available scientific and technical information and presents it in an easily interpretable form. For more information visit <u>https://www.fishsource.org/about</u>

ASSESSMENT CRITERIA AND FISHERIES INCLUDED

1.1 SOURCES OF INFORMATION AND ASSESSMENT CRITERIA

Our overview is based on information from <u>FishSource.org</u>, SFP's online information resource about the status of fish stocks and fisheries. FishSource scores consist of a suite of criteria to assess key aspects of management and stock status of fisheries and fish stocks. **Table 1**, below, provides a brief explanation of the five FishSource scoring criteria (full details of the FishSource scoring methodology can be found at: <u>https://www.fishsource.org/how/scores</u>).

 Table 1
 Current rationale for each of the five FishSource management quality and stock health scoring criteria.

	Score/Criterion	Rationale	Rationale (description)					
quality	Management strategy (1): Is management precautionary?	Fat low biomass / Ftarget OR Fcurrent / Ftarget	How does the adopted limit and/or target reference point for fishing mortality rate compare to the stock's fishing mortality rate at low biomass, as an index of whether the management strategy is precautionary? The higher the ratio, the lower the score.					
anagement	Managers' compliance (2): Do fishery managers follow scientific advice?	Set TAC / Advised TAC	How does the adopted total allowable catch (TAC) level compare to the scien advice on measures needed to meet stock management objectives, as an inde of whether fishery managers follow scientific advice? The higher the ratio, the lower the score.					
	Fishers' compliance (3): Do fishers comply?	Catches / Set TAC	How did the catch level in the most current year for which data are available compare to the adopted TAC level, as an index of whether harvest control rules were met? The higher the ratio, the lower the score.					
health	Current health (4): Is the stock biomass healthy?	B _{current} / B _{target}	How does stock biomass in the most current year for which data are available compare to the biomass level that is predicted to support maximum sustainable yields, or similar biological reference point, as an index of whether the stock biomass is healthy? The higher the ratio, the higher the score.					
Stock health	Future health (5): Will the stock be healthy in the future?	Fcurrent / Ftarget	How does the fishing mortality rate in the most current year for which data are available compare to the rate that is predicted to support maximum sustainable yields, or similar biological reference point, as an index of whether the stock will be healthy in the future? The higher the ratio, the lower the score.					

For profiles assessed using the FishSource quantitative criteria, FishSource scores each criterion on a scale of 0 to 10, with 0 being the lowest and 10 being the highest possible score. Preserving comparability with quantitative scores, qualitative scores are obtained by using the cut-off points as used in applications of the Marine Stewardship Council (MSC) fishery assessment method, where "< 6" indicates a high risk and a negative assessment finding, " \geq 6" indicates a medium risk and that improvements are required, and " \geq 8" indicates a low risk and that the fishery meets the criterion conditions. In addition, a data-deficient (DD) score also indicates a potentially higher risk, given insufficient and/or out-of-date information on either the management, stock condition, or fishing pressure of the fishery in analysis.

The scores are based on the most recently available public data as of August 2023, and generally represent a snapshot of the position in 2022 (or early 2023) concerning management quality and stock status indicators, and in 2021³ for catch statistics.

To create simple and accessible assessments of the stocks, FishSource scores are used to place fisheries into one of five ranked sustainability categories (A, B1, B2, DD, and C) (Table 2). The categorization is based on the quality of management ("Management strategy", "Managers' compliance" and "Fishers' compliance" scores) and the status of the target stock ("Current health" and "Future health" scores). Neither the scores nor the categories represent a complete evaluation of sustainability issues (e.g., ecosystem and biodiversity issues) or an endorsement of the overall sustainability of these fisheries. Table 2Criteria for the five SFP management and stockstatus sustainability categories used in this 2023 fisheriesoverview

Categories	Criteria
Category A:	Score 8 or above across all
Very well-managed fisheries	FishSource scores
Category B1: Reasonably managed fisheries with stock in good condition	Score 6 or above across all FishSource scores, and score 8 or above in terms of biomass (i.e., current health of the stock)
Category B2:	Score 6 or above across all
Reasonably managed fisheries	FishSource scores
Category DD:	Score 6 or above across all
Fisheries with high uncertainty in	FishSource scores, except that
terms of their stock status or	at least one FishSource score is
management	data-deficient (DD) ⁴
Category C:	At least one FishSource score
Poorly managed fisheries	below 6

³ Although catch data for 2022 is already available for most fisheries, for two fisheries it is only available up to 2021; thus, we have used the 2021 catch across all fisheries.
⁴ A data-deficient (DD) score is determined when there is high uncertainty or lack of information, which prevents a given score to be determined for that specific criterion. For more information, please consult <u>https://www.fishsource.org/faq</u>. The definition of the category DD was slightly amended in 2020 to better differentiate fisheries with high uncertainty in stock condition or management from those with moderate uncertainty.

1.2 FISHERIES INCLUDED IN THE CURRENT OVERVIEW

As in previous editions, this 2023 overview focuses solely on stocks that are used mainly for fishmeal and fish oil, regardless of the taxonomic group. The proportion of any given species/stock being utilized for fishmeal and fish oil will be a function of market demand and can change with time.

The 2023 overview does not include smaller stocks of the NE Atlantic and SE Pacific (e.g., Sandeels nei - Northern and Central North Sea, Sandeels nei - Viking and Bergen Banks, Falkland sprat - Aysén Region), as available in the previous report. These are minor stocks and only represent a small fraction (< 2% in volume) of the global production that is used for reduction purposes.

Similar to last year, the 2023 sustainability overview will be divided into two evaluation phases: (1) mid-2023 and (2) early 2024. This approach allows evaluations to be more timesensitive to the most recent status of each fishery. The first (current) phase focuses on 11 fisheries, mostly from Europe and South America, and reflects information as of August 2023. Evaluations for the remaining eight fisheries will be included in phase two of the 2023 overview (planned for early 2024), after the respective key management measures and updated stock status information are released (Appendix I).



MAIN FINDINGS – Part 1 of evaluations

 Table 3
 Current FishSource scores (Management Quality and Stock Health), SFP management and stock status sustainability category (A, B1, B2, DD, C), and 2021 catch ('000 t) data for the 11 main fisheries used for reduction purposes and assessed in this first part of the 2023 overview.

	Γ	Management	_	Stock	Status				Changes
Stock / nested jurisdiction ^(1, 2)	Management strategy	Managers' compliance	Fishers' compliance	Current health	Future health	Sustainability category	Latest Catch ⁽⁵⁾	% of total	from last year
European sprat - Baltic Sea	≥6	10.0	9.7	10.0	8.0	B1	284.9	4%	-
Sandeels nei - Central Eastern North sea	≥6	10.0	10.0	10.0	≥6	B1	157.5	2%	-
European sprat - North Sea, Skagerrak and Kattegat	≥6	≥6	9.7	10.0	≥6	B1	80.1	1%	B2 to B1
Gulf menhaden - Gulf of Mexico	≥6	≥8	≥6	8.7	9.7	B1	360.8	5%	-
Sandeels nei - Dogger Bank area	≥6	10.0	9.5	7.4	≥6	B2	17.1	0%	C to B2
Capelin - Icelandic	≥6	10.0	10.0	≥6	≥6	B2	128.7	2%	-
Anchoveta - Peruvian Northern-Central	≥6	≥6	≥8	≥ 6 ⁽³⁾	≥6	B2	4,475.8	67%	-
Anchoveta Chile Valparaíso (V) - Los Lagos (X)	< 6	6.0	10	≥8	≥ 8	С	168.8	3%	B1 to C
Anchoveta - Southern Peru/Northern Chile (Peru) ⁽⁴⁾	< 6	≥6	10.0	10.0	10.0	С	242.4	4%	-
Anchoveta - Southern Peru/Northern Chile (Chile)(4)	< 6	2.6	10.0	10.0	10.0	С	377.8	6%	-
Araucanian herring - Central-South Chile	< 6	0.0	10.0	≥6	≥ 8	С	338.1	5%	B1 to C

NOTES: (1) Shading in stock name: gray means no change from 2022; light green means rise in sustainability category; light orange means a drop in the sustainability category. (2) Stocks are ordered according to the SFP stock status and management performance categories used in this 2023 reduction fisheries overview are presented in Table 2 above. (3) The Peruvian Northern-Central anchoveta stock is exhibiting signs of being in worse condition compared to recent years. Both summer and winter surveys have indicated a high percentage of juveniles. However, the estimated biomass remains within the range of values observed over the past two decades. It is crucial to closely monitor biomass estimates in the upcoming seasons to determine whether the low biomass recorded in April 2023 is attributable to natural stock fluctuations, such as reduced productivity, or indicative of a declining stock condition. (4) Anchoveta - Southern Peru/Northern Chile is a transboundary stock with two different jurisdictions: Chile and Peru. Given that, each jurisdiction has separate management strategies, the scores presented reflect management performance at the management unit (jurisdiction) level. (5) Catches refer to 2021 (just for comparison purposes) and are in thousand tonnes.

 Table 4
 Changes in SFP management and stock status sustainability categories across the stocks evaluated in the first phase of the 2023 overview.

Stock	Change in category	Notes
European sprat - North Sea, Skagerrak and Kattegat	B2 to B1	The perception of the stock health is more optimistic than last year. Per the most recent assessment, there was stronger recruitment in 2022 compared to previous years, and the estimated spawning biomass in 2023 is above MSY B _{escapement} .
<u>Sandeels nei - Dogger Bank area</u>	C to B2	The more recent catches (2022) are now within the advised and defined catch limits. A formal management plan is still lacking, but in recent years the EU has used real-time monitoring for setting TACs within the fishing year. The recent drop in the catch limits and fishing mortality has allowed the stock to recover, and the spawning biomass in 2023 is estimated to be slightly above target levels.
<u>Anchoveta Chile Valparaíso (V) - Los Lagos (X)</u>	B1 to C	This stock is harvested within a mixed fishery that also targets and captures Araucanian herring. Despite the presence of a management plan that incorporates provisions for adjusting catch limits, or Total Allowable Catches (TACs), in response to in-season changes, the current management approach has proven ineffective at reducing catch limits when supported by scientific evidence indicating a decline in the stock's condition. This persistent issue has resulted in certain measures in the management plan not being adequately implemented, potentially undermining the long-term sustainability of one the stocks and fishery.
<u>Araucanian herring - Central-South Chile</u>	B1 to C	This stock is harvested within a mixed fishery that also targets and captures anchoveta. Despite the presence of a management plan that incorporates provisions for adjusting catch limits, or Total Allowable Catches (TACs), in response to in-season changes, the current management approach has proven ineffective at reducing catch limits when scientific evidence suggests so. For instance, in 2023, this resulted in a set TAC significantly exceeding the recommended range of the advised biological catch (ABC) for this stock. This ongoing challenge implies that certain measures in the management plan are not being adequately implemented, potentially undermining the long-term sustainability of one of the stocks and the fishery.

 Table 5
 SFP management and stock status sustainability category C or DD stocks in the first part of the 2023 overview, and the reasons for FishSource scores below 6, data-deficient, or not scored.

Stock	Management strategy	Managers' compliance	Fishers' compliance	Current health	Future health	Comments
<u>Anchoveta –</u> <u>Chile Valparaíso (V) – Los Lagos</u> <u>(X)</u>	< 6	6.0	10.0	≥ 8	≥8	This stock is harvested within a mixed fishery that also targets and captures Araucanian herring. Despite the presence of a management plan that incorporates provisions for adjusting catch limits, or Total Allowable Catches (TACs), in response to in-season changes, the current management approach has proven ineffective at reducing catch limits when scientific evidence suggests so. This persistent issue has resulted in certain measures in the management plan not being adequately implemented, potentially undermining the long-term sustainability of one the stocks and the fishery.
<u>Anchoveta - Southern Peru/</u> <u>Northern Chile (Peru) ⁽¹⁾</u>	< 6	≥ 6	10.0	10.0	10.0	This stock is distributed across Chilean and Peruvian waters, yet it continues to be managed independently by these nations. The absence of coordination between the two countries has led to the unilateral setting of Total Allowable Catches (TACs) by Chile and Peru. Collectively, these unilateral TACs have consistently exceeded the recommended overall TAC for this stock. For 2023, for example, the sum of Chile and Peru unilateral TACs was 1.09 million tonnes, while the recommended catch limit for the stock ranged between 467,000 to 651,000 tonnes. There is some indication that discussions are underway to address this issue, as evidenced by initiatives like the GEF-UNDP-Humboldt Project. However, as of now, no concrete measures have been implemented to establish effective joint management of the fishery.

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Stock	Management strategy	Managers' compliance	Fishers' compliance	Current health	Future health	Comments
<u>Anchoveta - Southern Peru/</u> <u>Northern Chile (Chile) ⁽¹⁾</u>	< 6	2.6	10.0	10.0	10.0	This stock is distributed across Chilean and Peruvian waters, yet it continues to be managed independently by these nations. The absence of coordination between the two countries has led to the unilateral setting of Total Allowable Catches (TACs) by Chile and Peru. Collectively, these unilateral TACs have consistently exceeded the recommended overall TAC for this stock. For 2023, for example, the sum of Chile and Peru's unilateral TACs was 1.09 million tonnes, while the recommended catch limit for the stock ranged between 467,000 to 651,000 tonnes. There is some indication that discussions are underway to address this issue, as evidenced by initiatives like the GEF-UNDP-Humboldt Project. However, as of now, no concrete measures have been implemented to establish effective joint management of the fishery. The current management approach has been ineffective at reducing catch limits when updated scientific data suggests an inseason reduction in the TAC. In 2023, the final unilateral TAC set for the Chilean component of the stock considerably exceeded the lower limit of the advised allowable biological catch (ABC) range. This situation has triggered a score below 6 for the "Managers' compliance" criterion of the <u>Chilean Jurisdiction related FishSource profiles</u> .
<u>Araucanian herring –</u> <u>Central-South Chile</u>	< 6	0.0	10.0	≥ 6	≥8	This stock is harvested within a mixed fishery that also targets and captures anchoveta. Despite the presence of a management plan that incorporates provisions for adjusting catch limits, or Total Allowable Catches (TACs), in response to in-season changes, the current management approach has proven ineffective at reducing catch limits when scientific evidence suggests so. For instance, in 2023, this resulted in a set TAC exceeding by almost 50% the recommended range of the advised biological catch (ABC) for this stock during the fishing season. This ongoing challenge implies that certain measures in the management plan are not being adequately implemented, potentially undermining the long-term sustainability of the stock and the fishery.

Notes: (1) This is a transboundary stock, which occurs in both Chilean and Peruvian waters. Since there is no coordination in management, no jointly set TAC, and individual advised TACs for each country, the Management strategy and Managers' and Fishers' compliance scores are determined exclusively at a country level.

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APPENDIX I List of fisheries included the 2023 overview, region, date FishSource profile last updated, and 2023 evaluation phase

	Stock / nested jurisdiction	Region / FAO major fishing area	Date FishSource profile last updated ¹
	Anchoveta – Chile Valparaíso (V) – Los Lagos (X)	South America (Southeast Pacific)	Oct 2023
	Anchoveta - Peruvian Northern-Central	South America (Southeast Pacific)	Sep-2023
	Anchoveta - Southern Peru/Northern Chile (Chile)	South America (Southeast Pacific)	Oct 2023
tion	Anchoveta - Southern Peru/Northern Chile (Peru)	South America (Southeast Pacific)	Oct 2023
Current evaluation	Araucanian herring - Central-South Chile	South America (Southeast Pacific)	Oct 2023
t eva	Capelin - Icelandic	Europe (Northeast Atlantic)	Sep 2023
rren	European sprat - Baltic Sea	Europe (Northeast Atlantic)	Aug-2023
Cui	European sprat - North Sea, Skagerrak and Kattegat	Europe (Northeast Atlantic)	Aug-2023
	Gulf menhaden - Gulf of Mexico	North America (Western Central Atlantic)	Aug 2023
	Sandeels nei - Central Eastern North Sea	Europe (Northeast Atlantic)	Jun 2023
	Sandeels nei - Dogger Bank area	Europe (Northeast Atlantic)	Jun 2023
Ŧ	Anchoveta - Chile Atacama (III) -Coquimbo (IV)	South America (Southeast Pacific)	Aug 2022
2024	Atlantic menhaden - NW Atlantic	North America (Northwest Atlantic)	Dec 2022
arly 2	Blue whiting - NE Atlantic	Europe (Northeast Atlantic)	Fev 2023
n (ea	Capelin - Barents Sea	Europe (Northeast Atlantic)	24-Jan-23
atio	Chilean jack mackerel - SE Pacific	South America (Southeast Pacific)	23-Aug-22
valu	European pilchard - NW Africa central	West Africa (Eastern Central Atlantic)	05-Apr-23
nd e	European pilchard - NW Africa southern (Mauritania)	West Africa (Eastern Central Atlantic)	05-Apr-23
Second evaluation (early 2024)	European pilchard - NW Africa southern (Morocco)	West Africa (Eastern Central Atlantic)	05-Apr-23
S	Norway pout - North Sea, Skagerrak and Kattegat	Europe (Northeast Atlantic)	03-Fev-23

Notes: (1) Evaluation phase 1 (light-blue shaded) reflects the fisheries already updated in the current overview, with information as of August 2023. Evaluation phase 2 relates to fisheries not yet updated as per 2022 management and stock condition. These fisheries are to be updated between December 2023 and early 2024, with information as of November 2023.

APPENDIX II Information about existing improvement (Active FIPs) and certification programs, for the all the key fisheries assumed to be mainly used for reduction purposes (See notes at the end of the table for more details on the fisheries and attributes included.)

		Active	e FIPs ⁽³⁾				Certificat	Status as of Oct	ober 2023
	Stock	FIP name	FIP start (year)	FIP type	FIP progress rating	MarinTrust ⁽⁴⁾	MSC ⁽⁵⁾	Date 1st MSC certification	# of MSC fisheries (6)
	Anchoveta Chile Valparaíso (V) - Los Lagos (X)		-	-	-	Yes	-	-	-
	Anchoveta - Peruvian Northern-Central	Peruvian anchovy - industrial purse-seine	2017	Ср	А	Yes	-	-	-
Fisheries in first evaluation phase (Sep 2023)	Anchoveta - Peruvian Northern-Central	Peruvian anchovy - small scale purse-seine	2017	Ср	А	_ (7)	-	-	-
	Anchoveta - Southern Peru/Northern Chile	-	-		-	Yes	-	-	-
	Araucanian herring - Central-South Chile		-	-	-	Yes	-	-	-
aluatior	Capelin - Icelandic	-	-		-	Yes	Cert	Apr-17	2
first ev	European sprat - Baltic Sea	-	-		-	Yes	Sus, Wdrn ⁽⁹⁾	May-17	6
eries in	European sprat - North Sea, Skagerrak and Kattegat	-	-	-	-	Yes	Cert, FA	Feb-18	2
Fish	Gulf menhaden - Gulf of Mexico	-	-		-	Yes	Cert	Oct-19	1
	Sandeels nei - Central Eastern North Sea		-		-	-	Cert, Wdrn	Mar-17	2
	Sandeels nei - Dogger Bank area	-	-		-	-	Wdrn	Mar-17	1

		Active	e FIPs ⁽³⁾				Certificat	Status as of Oct ions	tober 2023
	Stock	FIP name	FIP start (year)	FIP type	FIP progress rating	MarinTrust ⁽⁴⁾	MSC ⁽⁵⁾	Date 1st MSC certification	# of MSC fisheries (6)
~	Anchoveta - Chile Atacama (III) -Coquimbo (IV)	-	-	-	-	Yes	-	-	-
y 2024	Atlantic menhaden - NW Atlantic	-	-	-	-	Yes	Cert	Sep-19	1
e (earl	Blue whiting - NE Atlantic	<u>NE Atlantic Blue Whiting</u> <u>FIP</u>	2021	Bs	С	IP	Sus, Wdrn ⁽¹⁰⁾	Jun-16	4
Fisheries in second evaluation phase (early 2024)	Capelin - Barents Sea	-	-		-	Yes	-	-	-
	Chilean jack mackerel - SE Pacific	-	-		-	Yes	Cert	Apr-19	2
	European pilchard - NW Africa central	Morocco sardine - pelagic trawl and seine	2014	Ср	Inactive (11)	Yes ⁽⁸⁾	_ (10)	-	-
secon	European pilchard - NW Africa southern (Morocco)	Morocco sardine - pelagic trawl and seine	2014	Ср	Inactive (11)	Yes ⁽⁸⁾	_ (10)	-	-
eries in	European pilchard - NW Africa southern (Mauritania)	<u>Mauritania small pelagics -</u> purse seine	2017	Ср	А	IP	-	-	-
Fishe	Norway pout - North Sea, Skagerrak and Kattegat	-	-		-	Yes	Cert, Wdrn	Mar-17	2
	Antarctic krill - Atlantic Southern Ocean	-	-	-	-	-	Cert, Wdrn	Jun-10	4
Š	Bonga shad - NW Africa	<u>Mauritania small pelagics -</u> purse seine	2017	Ср	А	IP	-	-	-
isherie	European anchovy - South Africa/SE Atlantic	-	-		-	Yes	-	-	-
Other fisheries	European anchovy - NW Africa	Morocco anchovy - purse seine	2019	Ср	А	Yes ⁽⁸⁾	-	-	-
0	Madeiran Sardinella - NW Africa	<u>Mauritania small pelagics -</u> <u>purse seine</u>	2017	Ср	А	IP	-	-	-
	Round sardinella - NW Africa	<u>Mauritania small pelagics -</u> <u>purse seine</u>	2017	Ср	А	IP	-	-	-

		Active	e FIPs ⁽³⁾				Certificat	Status as of Oct ions	ober 2023
	Stock	FIP name	FIP start (year)	FIP type	FIP progress rating	MarinTrust ⁽⁴⁾	MSC ⁽⁵⁾	Date 1st MSC certification	# of MSC fisheries (6)
	South Africa redeye herring - South Africa/SE Atlantic	-	-		-	Yes	-	-	-
	Sandeels nei - Central and Southern North Sea	-	-		-	-	Wdrn	Mar-17	1
	Boarfish - NE Atlantic	-	-	-	-	Yes	-	-	-
	Falkland sprat - Los Lagos Region	-	-		-	Yes	-	-	-
	Falkland sprat - Aysén Region	-	-		-	-	-	-	-
	Frigate and bullet tunas Ecuador	Ecuador small pelagics	2018	Bs	В	IP	-	-	-
	Middling thread herring - Sinaloa and Nayarit	-	-		-	Yes	Cert	Oct-16	1
eries	Pacific anchoveta - Ecuador	Ecuador small pelagics	2018	Bs	В	IP	-	-	-
Other fisheries	Pacific anchoveta - Pacific Panama	Panama small pelagics	2011	Ср	Completed	IP	-	-	-
Othe	Pacific chub mackerel - Ecuador	Ecuador small pelagics	2018	Bs	В	IP	-	-	-
	Pacific thread herring - Sonora	-	-		-	Yes	Cert, Wdrn	Jul-11	3
	Thread herrings nei - Panama	Panama small pelagics	2011	Ср	Completed	IP	-	-	-
	Pacific anchoveta - Ecuador	Ecuador small pelagics	2018	Bs	В	IP	-	-	-
	Slender thread herring - Sinaloa and Nayarit	-	-		-	Yes	Cert	Oct-16	1
	South American pilchard - Gulf of California	-				Yes	Cert	Jul-11	1
	South American pilchard - Pacific Baja California	-	-		-	Yes	-	-	-
	Australian pilchard - Great Australian Bight	-	-	-	-	Yes	Cert	Nov-18	1

		Active	e FIPs ⁽³⁾				Certificat	Status as of Oct ions	tober 2023
	Stock	FIP name	FIP start (year)	FIP type	FIP progress rating	MarinTrust ⁽⁴⁾	MSC ⁽⁵⁾	Date 1st MSC certification	# of MSC fisheries (6)
	Bali sardinella - Southern Java to Western of Timor Sea	-	-	-	-	-	-	-	-
	Indian oil sardine - Andhra Pradesh	-	-		-	-	-	-	-
	Indian oil sardine - Goa	Indian Oil Sardine	2018	Bs	В	-	-	-	-
	Indian oil sardine - Karnataka	-	-		-	-	-	-	-
eries	Indian oil sardine - Kerala	-	-		-	-	-	-	-
Other fisheries	Indian oil sardine - Maharashtra	Indian Oil Sardine	2018	Bs	В	-	-	-	-
Othe	Indian oil sardine - Tamil Nadu	-	-		-	-	-	-	-
	South American pilchard - Japanese Pacific	-			-	-	-	-	-
	Japanese sardine - Japan Hokkaido	Japan Hokkaido Japanese sardine - purse seine	2022	Bs	C ⁽¹²⁾	-	-	-	-
	Miscellaneous marine species – Gulf of Thailand ⁽¹³⁾	Gulf of Thailand Mixed- Trawl Fishery	2020	Bs	Unrated	IP	-	-	-
	Miscellaneous marine species – Vietnam (13)	<u>Vietnam mixed species -</u> <u>trawl</u>	2021	Bs	В	-	-	-	-

Notes: (1) This list includes all key stocks and fisheries known to be mainly used for reduction purposes (whole fish) that are associated to one or more active fishery improvement projects (FIPs), or the certification programs considered, and not just the stocks considered in the current overview. (2) The first section of the table (blue shaded) includes the 11 stocks included in part one of the overview, the second section (light gray) includes the eight stocks to be evaluated in part two (early 2023), and the third section (light yellow), includes other fisheries not covered in the current overview, but known to be used mainly for reduction purposes. (3) For more information on the currently active FIPs, please visit the Improvement Projects section in FishSource (SFP 2023a), or the respective FIP public reports in Fishery Progress (FishChoice 2023) or MarinTrust Improver Program (MarinTrust 2023b). FIP type: Bs = Basic and Cp = Comprehensive (4) Yes = Approved Whole Fish (main species); IP = covered under the MarinTrust Improver Programme (MarinTrust 2023b). (5) MSC Status: Cert = Certified; FA = Full Assessment; Sus = Suspended; Wdrn = Withdrawn (MSC 2023). (6) Refers to the number of fisheries that are in the MSC program and that overlap with the stock (source: SFP 2023b); MSC 2023). (7) In Peru, the artisanal fishery for anchoveta must be used for human direct consumption only, thus it is outside of the scope of MarinTrust and the current overview. (8) Certified by MarinTrust 2023a). (9) In late 2020, all the Baltic fisheries were either suspended or withdrawn due to the uncertainty of the stock health with regard to the MSC's "key Low Trophic Level" criteria. (10) In late 2020, all the NE Atlantic blue whiting fisheries in the MSC program were suspended due to coastal states failing to set quotas in line with the advised levels. A FIP was launched in October 2021 (MarinTrust, 2023b). (11) The <u>Japan Hokkaido Japanese sardine - purse seine</u> FIP is now considered Inactive due to failing to meet reportin



FURTHER INFORMATION

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Sustainable Fisheries

14 LIFE BELOW WATER

