



Methodology for the Seafood Stewardship Index

March 2021



**World
Benchmarking
Alliance**

Planetary health and human well-being depend on ocean health and well-functioning aquatic ecosystems. Indeed, the key role of the oceans in achieving sustainable development is now widely recognised, as reflected in global targets and agendas such as UN Sustainable Development Goal (SDG) 14 (life below water) and the Sustainable Ocean Plan released by the High Level Panel for a Sustainable Ocean Economy. The ocean and its coastal interface provide a number of ecosystem services such as climate regulation; cultural activities; economic activities such as fisheries, marine transportation, trade and fuel; nutrient cycling and primary production; genetic resources and potential new medicines; and various resources to support human life such as food and energy. However, the health of the oceans and thus their ability to support life on earth is under threat from ocean and land-based pollution, overfishing, climate change and ocean acidification, to name a few.

The seafood industry is one of the key sectors of the ocean economy as it supports the employment of more than 600 million people and is an important source of food for over 3 billion people. At the same time, the industry is responsible for a number of environmental and social impacts that jeopardise not only its own economic sustainability but also the future of millions of people who rely on it for their livelihoods and as a primary source of food and nutrients.

All stakeholders have a role to play in supporting the transition to a more sustainable and responsible seafood industry, and thereby supporting the achievement of the Sustainable Development Goals (SDGs). By assessing the 30 most influential seafood companies

in the world, the Seafood Stewardship Index (SSI) aims to identify how the private sector is contributing to this transition, where companies are on the right path and where they can do better. The [first iteration of the benchmark](#) revealed that even though great strides have been made since the emergence of the sustainable seafood movement in the late 1990s – such as increased market demand for certified seafood and fishery improvement projects – there is still a long way to go, especially when it comes to traceability and social responsibility. Although many companies have commitments and policies in place, it is still unclear to what extent companies are fulfilling these commitments and implementing these policies. Now is the time for action and true stewardship.

This revised methodology is thus focused on rewarding impact and performance, with a number of indicators requiring evidence of impacts associated with the various activities that companies are implementing, whether improvement projects, policy advocacy or participation in a pre-competitive platform. Moreover, the methodology now also rewards stewardship, which we define as [‘taking responsibility’](#). This means that the Seafood Stewardship Index not only rewards companies that perform well but also those that have set robust goals in line with the SDGs and can demonstrate credible progress towards those goals within a reasonable timeframe. Lastly, given the role of seafood in the wider food and agriculture transformation, the Seafood Stewardship Index has become a spotlight benchmark in the World Benchmarking Alliance’s (WBA) broader food and agriculture transformation. This has required some alignment in terms of expectations and indicators, which is explained later in the document.

Foreword

We thank all of those who provided feedback and input on the earlier draft of this methodology. As we prepare to release the second iteration of the Seafood Stewardship Index later in 2021, we look forward to working with you and the wider sustainable seafood community to transform the seafood industry in a way that supports inclusion, equality and long-term ocean health.



Helen Packer

Lead
Seafood Stewardship Index



Rik Beukers

Research Lead
Seafood Stewardship Index



Foreword	2
Setting the scene: Seafood and WBA's food and agriculture transformation	5
About the World Benchmarking Alliance	5
The food and agriculture transformation	6
The role of seafood in the food and agriculture transformation	7
Keystone companies	7
The Seafood Stewardship Index	9
Theory of change	9
Scope of the benchmark	12
SDG scope	12
Industry scope	13
Company scope	13
Methodology and benchmark development	16
WBA's benchmarking cycle	16
Dialogue and research: Alignment with other benchmarks, standards and reporting initiatives	16
Methodology development and review	16
Data collection	17
Verification and analysis	18
Process and timeline	19
Analytical framework for the Seafood Stewardship Index	20
Measurement areas and indicators	20
Approach to scoring and weighting	20
Indicators for the Seafood Stewardship Index	23
Measurement area A: Governance and strategy	24
Measurement area B: Ecosystems	27
Measurement area C: Traceability	35
Measurement area D: Social responsibility	39
Acknowledgements	48
Annexes	49
Annex 1: Review and consultations	49
Annex 2: WBA guiding principles	54
Annex 3: SDG targets in scope of the benchmark	56
Annex 4: Key concepts and definitions	60
Annex 5: Key resources and references	65
Annex 6: Other references	69

About the World Benchmarking Alliance

WBA is a diverse and growing group of organisations from across the globe, motivated by the common ambition to create a world that works for all – as embodied by the SDGs. We share the vision that achieving these goals requires a systems perspective, as each of the 17 SDGs are interlinked. We also agree that the private sector has a key role to play if we are to achieve systemic transformation.

WBA uses a systems approach to develop its benchmarks, placing a strong emphasis on transforming the systems that have the greatest potential to drive economic, environmental and social progress. Systems thinking helps us make better sense of the issues, as well as identify the most influential companies in each system. By 2023, WBA will have benchmarked 2,000 companies – the [SDG2000](#) – across seven systems transformations that we believe are vital for putting our society, planet and economy on a more sustainable and resilient path over the next decade and beyond (see Figure 1). Benchmarks will be produced for all seven systems, with accompanying methodologies to evaluate and support systems change.

Social transformation sits at the core of our model because it represents topics such as human and labour rights that are fundamental to achieving the SDGs, irrespective of the sector or transformation. For this reason, all SDG2000 companies will be assessed on relevant social topics, including the companies in the Seafood Stewardship Index.

FIGURE 1: WBA's seven systems transformations

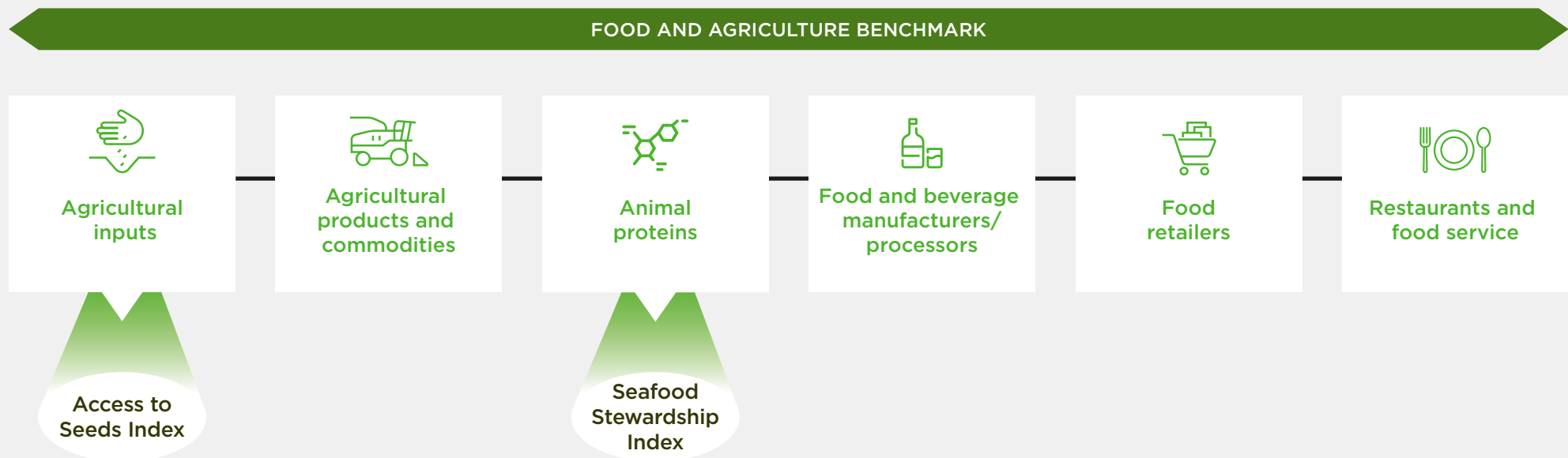


The food and agriculture transformation

Transforming the food system requires action across all related sectors and industries. Given that the system is so interwoven, business leadership is vital to ensure that all companies play their part, acknowledging their purpose and strengths within the value chain. Good business leadership can help provide better access to healthy diets while protecting the environment and leaving no one behind by creating fair and equitable operations and value chains. Within the food and agriculture transformation, WBA has taken a multi-level approach that includes a broad Food and Agriculture Benchmark and two spotlight benchmarks: [the Seafood Stewardship Index](#) and the [Access to Seeds](#)

[Index](#). While the Food and Agriculture Benchmark focuses on breadth in terms of company scope and indicators, WBA recognises the need for an in-depth evaluation of particular industries and their specific issues through spotlight benchmarks. The Seafood Stewardship Index and the Access to Seeds Index serve this purpose. Both spotlight benchmarks are developed under the umbrella of the food and agriculture transformation but operate in their respective industry and stakeholder ecosystems (see Figure 2). Alignment of methodologies is sought where appropriate. In the third quarter of 2021, WBA will publish the first Food and Agriculture Benchmark, the second Seafood Stewardship Index and the third Access to Seeds Index.

FIGURE 2: SCOPE OF WBA'S FOOD AND AGRICULTURE BENCHMARK AND SPOTLIGHT BENCHMARKS



The role of seafood in the food and agriculture transformation

Seafood plays a crucial role in nourishing populations and supporting livelihoods all over the world, especially in developing countries. Aquatic foods not only provide 3.3 billion people with 20% of their animal protein, but they also contain a variety of essential vitamins, micronutrients and healthy omega fats. Recent estimates by the Food and Agriculture Organization of the United Nations (FAO) indicate that 198 million people are employed along the seafood value chain from harvesting to distribution, of which 56.6 million are directly employed. The livelihoods of 880 million people depend on the sector, most of which is located in the Global South.¹ Moreover, more than half of international trade originates in developing countries, and their share in fishery trade is increasing steadily. With a total first fish sale value estimated at USD 401 billion and a global export value of USD 164 billion in 2018, the seafood industry is an important part of both the food and ocean economy.² Aquatic foods have a much lower carbon footprint and fewer biodiversity impacts compared to crops and livestock, thus holding great potential to contribute to a more sustainable food system.³ Lastly, according to a [report published by the Index Initiative](#),⁴ the precursor of WBA, the seafood sector was identified as one of 15 sectors that can make an important contribution to several SDGs and to sustainable development as a whole. Major fish stocks can be rebuilt, aquaculture offers opportunities for technological advancements and better supply chain management would improve working conditions and livelihoods. Advancements in sustainable seafood production can deliver unique and significant

contributions to the achievement of SDG 2 (zero hunger), SDG 14 (life below water) and their interlinkages with SDG 1 (no poverty), SDG 5 (gender equality), SDG 8 (decent work and economic growth), SDG 12 (responsible consumption and production) and SDG 15 (life on land).

Yet despite the global importance of seafood in providing nourishment and employment and its potential contribution to a sustainable food system, fisheries and aquaculture face a number of social and environmental challenges. These include overfishing, climate change, ocean pollution, antibiotic resistance, impacts on biodiversity, unethical labour practices and human rights violations. The challenges cannot be tackled by one actor or one stakeholder group alone. Therefore, overcoming them will require collaborative efforts between governments, civil society, the financial sector and the seafood industry itself, from producers to retailers.

Keystone companies

The global trade in seafood is dominated by transnational companies managing complex international supply chains. These companies control a significant portion of marine catch and aquaculture production, particularly for the largest and most valuable species. Increasingly, these companies also control large parts of the seafood value chain, from farming and harvesting to the production of consumer products. Market concentration in the seafood industry is low compared to other food sectors. This is changing, however, due to growing demand. The international seafood value chain is increasingly dominated by globally operating companies that often produce, process and/or trade

large quantities of seafood and a wide range of fish species. Peer recognition between leading seafood companies is growing, as most of them have become global players active in multiple countries, species and product segments. In addition to their own fishing and aquaculture operations, these companies operate as traders, connecting fisheries and aquaculture operations from around the globe to international markets. A 2016 publication by the Stockholm Resilience Centre revealed that 13 transnational corporations control 11–16% of the global marine catch (9–13 million tons) and 19–40% of the largest and most valuable capture fisheries, including species. Thus, through their sheer size and expansive global supply chains, large seafood companies (including fishing companies, aquaculture companies, feed companies and seafood processors) have a disproportionate and influential role in transforming the sector.⁵

As leading seafood companies can potentially deliver a significant, unique and actionable contribution to the SDGs, the Seafood Stewardship Index assesses and compares the social and environmental performance of the 30 largest seafood companies and the extent to which their activities are in line with the SDGs. The companies were selected based on revenue, international value chain networks and subsidiaries, their position in the value chain, involvement in global governance processes and impacts on developing countries.

Current practices and commitments demonstrate that the companies in scope have agency to initiate major improvements, alone or in partnership with other stakeholders. Indeed, the first iteration of the Seafood Stewardship Index revealed a number of activities that sea-

food companies are involved in and contributing to with the aim of improving their social and environmental performance. These include pre-competitive and multi-stakeholder partnerships to tackle forced labour in seafood supply chains such as Seafood Business for Ocean Stewardship (SeaBOS), Global Sustainable Seafood Initiative (GSSI), or Seafood Task Force (STF), third-party certifications such as the Marine Stewardship Council (MSC) or the Aquaculture Stewardship Council (ASC), establishing industry-wide traceability standards such as the Global Dialogue on Seafood Traceability (GDST), and aquaculture feed innovations. The performance of companies on different issues varied widely, and the results revealed significant challenges that still need to be overcome for companies to achieve comprehensive oversight of both their own operations and supply chains, especially with regard to illegal, unregulated and unreported fishing, protecting ecosystems and respecting human rights and working conditions. The results also showed that the industry overall needs to move beyond setting commitments and developing standards to active implementation.



The Seafood Stewardship Index and its methodology aim to take companies on a stewardship journey. This starts with awareness and recognition of their impacts on the environment and society, followed by assessing those impacts and then implementing effective and meaningful activities that not only mitigate negative impacts but transform the seafood industry into one that respects and protects the resources on which it depends, including human resources.

What is stewardship?

Stewardship can be understood as ‘the responsible use, including conservation, of natural resources in a way that takes full and balanced account of the interests of society, future generations and other species, as well as of private needs, and accepts significant answerability to society’.⁶ Stakeholder consultations revealed that the definition of stewardship should go beyond the responsible use of natural resources to include other dimensions such as community engagement, human rights and labour practices, and fair operating practices. Ways that seafood companies can demonstrate stewardship include efficiently using natural resources, sourcing materials from sustainable origins and operating ethically, for example ensuring decent working conditions for all employees and respecting local communities.

Theory of change

One way to encourage companies to become better stewards and transition to a more sustainable and responsible seafood industry is to

The Seafood Stewardship Index

benchmark their sustainability performance. The benchmark can be used as a tool to understand what seafood companies are currently doing and how they can improve in relation to their various impact areas. A legitimate and credible index can be a catalyst to drive this envisioned transition.

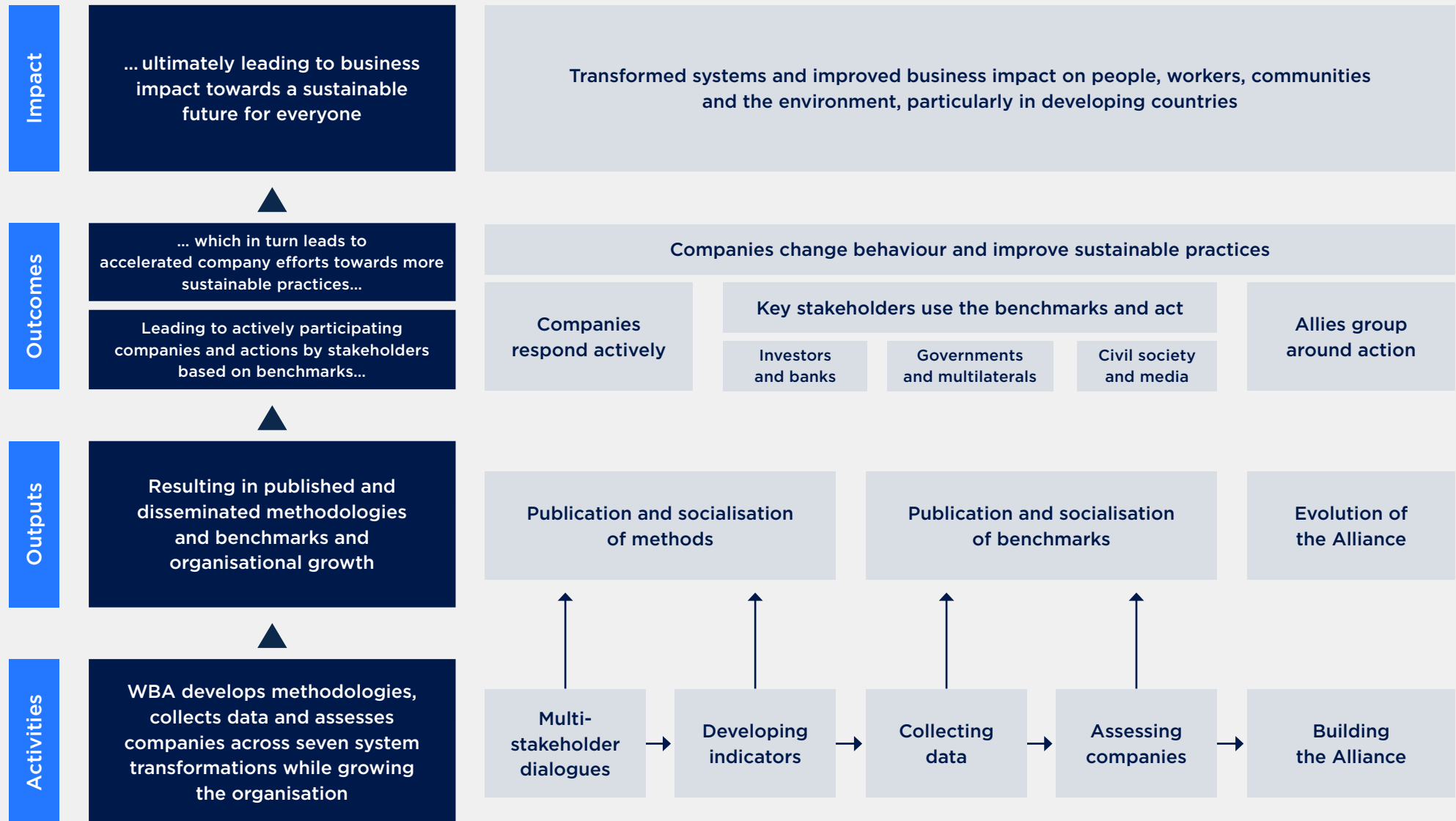
Although transparency, and thus accountability, is increasing in the industry, information gaps remain on the catch, production and traded volumes of leading seafood companies. The Seafood Stewardship Index clarifies how companies can use their influential position to enable the production of more sustainable seafood, thereby promoting stewardship of (marine) ecosystems. The benchmark also shows where seafood companies' influence is limited and where there is a need for other actors, such as governments and other value chain actors, to take action. Finally, the benchmark aims to enrich the public debate on what can reasonably be expected of seafood companies in contributing to the SDGs.

As such, the Seafood Stewardship Index's theory of change is based on the following principles:

- **Aligned with the SDGs and existing standards and frameworks.** The Seafood Stewardship Index methodology compiles and translates existing standards, goals and frameworks into measurable indicators. This alignment enables the benchmark to clarify and set clear expectations for seafood companies in all areas of seafood stewardship, including environmental and social dimensions.
- **Accountability through transparent, public and impartial data.** The Seafood Stewardship Index provides a transparent and impartial framework on the basis of which seafood companies and their stakeholders can monitor how companies are contributing to the SDGs. Results are made public to raise awareness, reward positive changes and build a better understanding of the role that major seafood companies play in promoting stewardship of natural resources and supply chains. By being public and transparent, the results of the assessment are available to all stakeholders (financial institutions, companies in and outside the industry, governments and civil society), allowing them to monitor the performance of the 30 largest seafood companies and guide their engagement with these companies.
- **Highlighting best practices.** By highlighting best practices, the Seafood Stewardship Index stimulates learning across the seafood industry, provides guidance to companies and their stakeholders and accelerates the private sector's contributions to the SDGs. The benchmark clarifies what seafood companies are already doing and where they can do more to improve responsibility and sustainability in seafood supply chains.
- **Accountability through ranking.** By creating a ranking, the benchmark aims to recognise strong performers and hold laggards to account, encouraging a race to the top.
- **Keystone companies.** The principle of [keystone companies](#) is at the core of the Seafood Stewardship Index and WBA's theory of change (see Figure 3). The idea is that large companies with expansive supply chains can lead and drive change throughout an industry. This is also the principle behind the formation of SeaBOS, a collaboration between scientists and leading seafood companies.

The Seafood Stewardship Index

FIGURE 3: WBA'S THEORY OF CHANGE



How can stakeholders use the Seafood Stewardship Index?

Financial institutions can use the index results as a tool to guide responsible investment, stewardship and engagement with the companies in scope.

Civil society organisations can use the results to inform their strategy, engagement with and focus on companies as well as other stakeholders (e.g. policymakers, investors).

Policymakers can use the results to inform policy priorities that support and shape companies' improvements, identifying where voluntary action has not sufficiently led to systems change.

Scope of the benchmark

SDG scope

For the first methodology, all 17 SDGs and 169 targets were assessed to identify the goals and targets on which the seafood industry has the largest impact and can therefore make the most significant contribution. The SDG targets that meet all assessment criteria fall under SDG 1 (no poverty), SDG 2 (zero hunger), SDG 5 (gender equality), SDG 8 (decent work and economic growth), SDG 12 (responsible consumption and production), SDG 14 (life below water) and SDG 15 (life on land). The SDG targets in scope of this benchmark can be found in Annex 2. For the second methodology, we added SDG 17 (partnerships for the goals) as the overarching goal to which all WBA benchmarks contribute.

How have companies used the Seafood Stewardship Index so far?

Companies can use the index results to learn about their own performance and plan and prioritise improvement accordingly. Companies can also learn how their peers are addressing certain issues - although this is already happening through formal and informal pre-competitive collaborations and learning platforms, e.g. the Seafood Task Force.

Between July and September 2020, WBA conducted interviews with 14 of the companies in scope to understand how they have used the benchmark. Overall, the feedback received was positive. Several company representatives said they used the results to draw the attention of the board and functional units to certain internal issues and consequently secured funding to implement improvements. A few companies developed new social and environmental policies and started engaging with their subsidiaries to better understand performance across supply chains and to align policies of subsidiaries with the parent company. A number of representatives said the benchmark helped them better understand how they align with the SDGs and how they are performing compared to their peers. Finally, a few explained that the benchmark was useful for understanding stakeholder expectations, especially around disclosure and transparency. In terms of concrete internal changes, the benchmark, by revealing gaps in disclosure and reporting, triggered some companies to revise key performance indicators (KPIs) and associated internal reporting processes. More generally, several companies improved their public reporting and disclosure.

Industry scope

The Seafood Stewardship Index will continue to focus on the 30 largest companies that produce seafood or aquaculture feed. During consultations, stakeholders pointed out that retailers have an important position in the seafood value chain and can play a crucial role in making the seafood industry more sustainable. As a result, several major retailers will be included in the Food and Agriculture Benchmark, in which one indicator is focused on sustainable fishing and aquaculture.

Company scope

The Seafood Stewardship Index will continue to focus on the 30 largest companies globally. These companies were selected using five criteria based on the characteristics of keystone actors that WBA used to identify the SDG2000 (see Table 1). Keystone actors are the largest companies in a given industry that have a disproportionate effect on the structure and function of the system in which they operate. The 30 companies selected for the benchmark represent a significant share of the global seafood market and are well positioned to accelerate the transition to a more sustainable seafood production system.

TABLE 1: KEYSTONE ACTOR CHARACTERISTICS USED FOR THE SDG2000, INCLUSION CRITERIA AND COMPANY ASSESSMENTS

Keystone actor characteristics and WBA selection criteria	Inclusion criteria	Company assessment
The company dominates global production revenues and volumes within the sector.	The company is selected on the basis of revenue from seafood and/or aquaculture feed.	The Undercurrent News' World's 100 Largest Seafood Companies report, published in November 2020, ⁸ was used as a source for identifying seafood-related revenues. As this report does not include aquaculture feed companies or seafood companies' aquaculture feed-related revenues, additional research and advice from the Expert Review Committee and other experts were used to identify aquaculture feed companies and seafood companies with significant aquaculture feed revenues. Revenues were reassessed for seafood companies with large aquaculture feed portfolios to establish whether this would result in inclusion. Information about revenues was cross-checked with information from Refinitiv Eikon.
The company controls globally relevant segments of production.	The company has an important position within the supply chain, either by being active in multiple segments or dominating one segment.	Each company in the preliminary list of companies was assessed on the segments in the seafood supply chain in which it is active and the species and product groups in its portfolio.
The company connects ecosystems globally through subsidiaries.	The company has international seafood-related subsidiaries and offices, and it sources and distributes products globally.	Each company was assessed on whether it sources from and distributes to international markets, and whether it has subsidiaries and offices in different countries.

<p>The company influences global governance processes and institutions.</p>	<p>The company is involved in seafood-specific initiatives or associations that contribute to global governance processes.</p>	<p>A preliminary assessment indicates that the seafood companies in scope are involved in global governance processes and institutions, including seafood-specific initiatives. Examples include SeaBOS, the Global Sustainable Seafood Initiative (GSSI), Global Tuna Alliance, International Seafood Sustainability Foundation (ISSF), Seafood Task Force, Global Dialogue on Seafood Traceability (GDST), the Advisory Network of the High-Level Panel for a Sustainable Ocean Economy, regional fisheries management organisations and non-seafood-specific initiatives, such as the UN Global Compact (UNGC).</p>
<p>The company has a global footprint, particularly in developing countries.</p>	<p>The company has a footprint in developing countries through sourcing of products or aquaculture feed ingredients, operating or processing activities, or sales.</p>	<p>A significant portion of the world's seafood is produced in or sourced from developing countries. Company reviews were conducted to identify whether companies have operations in developing countries, whether they source species or aquaculture feed ingredients caught or produced in developing countries, and whether products are marketed in developing countries.</p>

To allow for comparison and to assess progress, the same 30 companies will be included in the second benchmark. Moreover, as seen in other benchmarks, repeated involvement in a benchmark drives progress.

However, mergers and acquisitions in the industry in the intervening years have impacted three companies that were included in the first benchmark:

- In 2017, Shanghai Fisheries General Corporation became a fully owned subsidiary of the Bright Food Group. According to the **World's 100 Largest Seafood Companies 2020** report,⁹ Bright Food Group ranked 23rd, with an estimated revenue of USD 1,158 million. It will replace Shanghai Fisheries General Corporation in the company scope of the benchmark.
- In 2019, Bolton Group acquired Tri Marine International. According to the **World's 100 Largest Seafood Companies 2020** report, Bolton Group ranked 17th, with an estimated revenue of USD 1,512

million. Based on revenue and an assessment of the other inclusion criteria, Bolton Group will now be included in the benchmark, with Tri Marine International being assessed as a fully owned subsidiary.

- In 2020, FCF Co Ltd acquired Bumble Bee Foods. Their combined seafood-related revenue came to USD 2,600 million. FCF Co Ltd will remain in the benchmark, with Bumble Bee Foods being assessed as a fully owned subsidiary.
- As a result of these mergers and acquisitions, the number of companies dropped to 29. Therefore, Japanese processor and wholesaler OUG Holdings was added to the scope of the benchmark. The company mainly focuses on the Japanese market but also has an international network of sales offices. In 2019, its revenue was USD 2,940 million.

Based on the inclusion criteria and considering recent mergers and acquisitions, the 30 companies listed in Table 2 will be assessed in the 2021 index.

The Seafood Stewardship Index

TABLE 2: COMPANIES IN THE 2021 SEAFOOD STEWARDSHIP INDEX

	Name	Country of origin	2019 revenue in USD million	In Food and Agriculture Benchmark
1	Maruha Nichiro	Japan	7,478	x
2	Nippon Suisan Kaisha (Nissui)	Japan	6,094	x
3	Dongwon Enterprise	South Korea	4,902	x
4	Mowi	Norway	4,632	x
5	Thai Union Group	Thailand	4,070	x
6	Mitsubishi Corporation	Japan	3,600	x
7	Austevoll Seafood	Norway	3,050	x
8	OUG Holdings	Japan	2,940	x
9	Nutreco (Skretting)	Netherlands	2,600 ⁱ	x
10	FCF Co Ltd (including Bumble Bee Foods)	Taiwan	2,600 ⁱⁱ	x
11	Trident Seafoods	United States	2,550	x
12	Kyokuyo	Japan	2,413	x
13	Red Chamber Group	United States	2,150	x
14	Cargill Aqua Nutrition	United States	2,140 ⁱⁱⁱ	x
15	Marubeni Corporation	Japan	1,825	x
16	Cooke Aquaculture and Cooke Seafood USA	Canada	1,771	x

	Name	Country of origin	2019 revenue in USD million	In Food and Agriculture Benchmark
17	Schouw & Co (BioMar)	Denmark	1,681 ^{iv}	x
18	Parlevliet and Van der Plas	Netherlands	1,540	x
19	Bolton Group (including Tri Marine International)	Italy	1,512	
20	Pacific Seafood Group	United States	1,450	x
21	SalMar	Norway	1,391	
22	Charoen Pokphand Foods	Thailand	1,310 ^v	x
23	Nueva Pescanova	Spain	1,185	x
24	Bright Food Group (Shanghai Fisheries General Corporation)	China	1,158	x
25	Nomad Foods	United Kingdom	1,042	
26	High Liner Foods	Canada	942	
27	Labeyrie Fine Foods	France	879	
28	Royal Greenland	Greenland	805	
29	Wales Group (Sea Value & Sea Wealth)	Thailand	789	
30	Yokohama Reito (Yokorei)	Japan	761	

ⁱ 2019 revenue.

ⁱⁱ Combined 2019 revenues of FCF Co Ltd and Bumble Bee Foods.

ⁱⁱⁱ 2016 revenue.

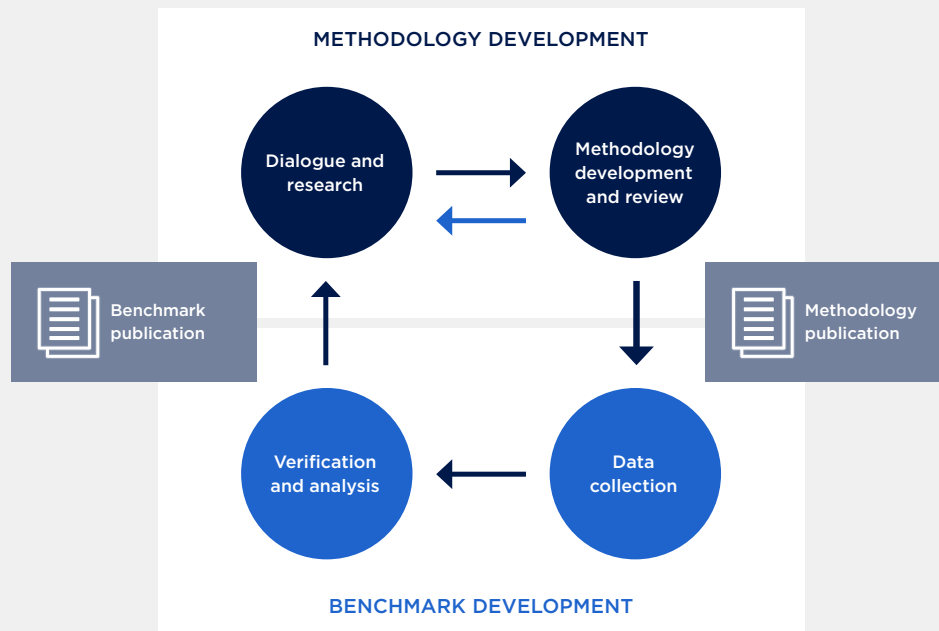
^{iv} 2019 revenue.

^v 2019 revenue, excluding feed revenue.

WBA's benchmarking cycle

WBA benchmarks are published in accordance with the benchmarking cycle, which is made up of six steps (see Figure 4).

FIGURE 4: WBA BENCHMARK CYCLE



Dialogue and research: Alignment with other benchmarks, standards and reporting initiatives

The measurement framework for the first Seafood Stewardship Index methodology was based on the results of extensive multi-stakeholder dialogues and research. The methodology for the second index has built upon that framework as well as the updated mapping of important initiatives in the seafood industry. It aims to align with the best available science, relevant principles and normative standards, reporting frameworks and sector-, product- and issue-specific initiatives (see Annex 5).

In addition, since the first benchmark was published, WBA has adopted a systems-based approach to developing benchmarks to transform seven areas, including in the food and agriculture and social spheres. As such, the Seafood Stewardship Index is part of the food and agriculture transformation, and 22 out of 30 companies in the benchmark are also in scope of the Food and Agriculture Benchmark. Moreover, all 30 companies in scope of the Seafood Stewardship Index will be assessed against WBA's core social indicators. More information about the core social indicators can be found under measurement area D.

Methodology development and review

The review of the methodology for the 2021 Seafood Stewardship Index has been done according to a multi-stakeholder process. First, it was overseen by an independent multi-stakeholder Expert Review Committee (ERC) (see Table 3), made up of a diverse group of experts

around the seafood sector. The ERC has met multiple times throughout the process, to provide strategic guidance, recommendations and advice on the scope, structure, content and methodology of the benchmark. Second, the methodology has been subject to a six week public consultation, allowing all stakeholders to provide input. All feedback received has been integrated into the final methodology.

TABLE 3: MEMBERS OF THE EXPERT REVIEW COMMITTEE FOR THE SEAFOOD STEWARDSHIP INDEX

1	Robert Blasiak	Researcher, Stockholm Resilience Centre
2	Bertrand Charron	Science and Sustainability Communications Manager, Aquaculture Stewardship Council
3	Clarus Chu	Seafood Manager, WWF
4	Jennifer Dianto Kemmerly	Vice President, Global Ocean Initiatives, Monterey Bay Aquarium
5	John Garner	Retired seafood representative
6	Abigail Herron	Global Head of Responsible Investment, Aviva Investors
7	Duncan Leadbitter	Director, Fish Matter
8	Oluyemisi Oloruntuyi	Head of Global Accessibility, Marine Stewardship Council
9	Henk Peters	Programme Officer, Oxfam
10	Huw Thomas	Director, 3 Pillars Seafood
11	Tania Woodcock	Project Manager, Ocean Disclosure Project, Sustainable Fisheries Partnership

Data collection

Data collection for the benchmark is due to start at the beginning of April 2021. Each company in scope is invited to respond to a survey that is pre-populated by WBA researchers on the basis of publicly available corporate information published on company websites and in annual reports, sustainability reports and other public materials. This is designed to speed up the process for companies and facilitate their engagement with the benchmark. Companies will have an opportunity to contribute data for all questions and expand upon each answer with supplemental information beyond what is already publicly available. The Seafood Stewardship Index assesses companies at the group level and therefore will send only one survey to each company and not to individual subsidiaries. The parent company is thus responsible for including information about subsidiaries in the survey. Companies that choose not to complete the survey will be evaluated based solely on publicly available information and will not be able to appeal the results.

To promote corporate transparency, WBA benchmarks seek to reward public disclosure by only using information that companies make public or are willing to make public. For instance, companies might have additional internal documentation or information that they have not yet published externally. Therefore, the Seafood Stewardship Index will accept company information that is not in the public domain but that WBA can make public, if necessary. This means that the option to provide information under non-disclosure is no longer available. All data must be supplied in English. The 2021 benchmark will include data and reporting published in 2019–2020.

Verification and analysis

After all data is collected, it will be verified and analysed, a process overseen by the Seafood Research Lead. For verification purposes, researchers conduct an extensive quantitative and qualitative check of each indicator for each company, including cross-checks. Scoring is carried out according to scoring guidelines that are approved by the WBA Executive Board and published alongside benchmark results. The results will provide the basis for company scorecards, which will outline how companies performed in the benchmark, including strengths and weaknesses, and highlight best practices. Company scorecards will be shared with companies prior to publication of the Seafood Stewardship Index.

After publication of the benchmark, findings and results, including scorecards, will be actively distributed. This will involve media outreach, engagement with individual companies and industry organisations, and outreach to specific stakeholders such as investors, banks, non-governmental organisations (NGOs) and policymakers. Feedback will be captured for the methodology review process for the next iteration of the benchmark.



FIGURE 5: SEAFOOD STEWARDSHIP INDEX 2019-2021 TIMELINE

**October 2019
(Our Ocean conference,
Oslo):**

**Publication of the first
Seafood Stewardship Index**

Ranking of 30 keystone companies in the seafood industry, with key findings and company scorecards.

December 2020

Publication of the draft methodology for the Seafood Stewardship Index for public consultation

The draft methodology was published for public consultation between 16 December 2020 and 31 January 2021. The document outlines the draft indicators and scoring and weighting approaches.

April-May 2021:

Data collection for companies

Based on a prepopulated questionnaire, companies will be given the opportunity to provide additional public data for the benchmark.

September 2021

Publication of the benchmark

The second iteration of the Seafood Stewardship Index will be launched in the third quarter of 2021, at the inaugural United Nations Food Systems Summit.

March 2021

Publication of the methodology

Throughout the public consultation, stakeholders provided feedback through online webinars and in written form, leading to the publication of this methodology (see [Annex 1](#) for a summary of the feedback received and responses).



Measurement areas and indicators

The Seafood Stewardship Index measures company performance across four different areas, which are inspired by the SDGs. Based on learnings from the first iteration of the benchmark, ERC recommendations and stakeholder feedback received during the public consultation, the methodology was revised. Figure 6 presents an overview of the measurement areas and indicators of the Seafood Stewardship Index methodology. The next section provides a detailed explanation of each indicator.

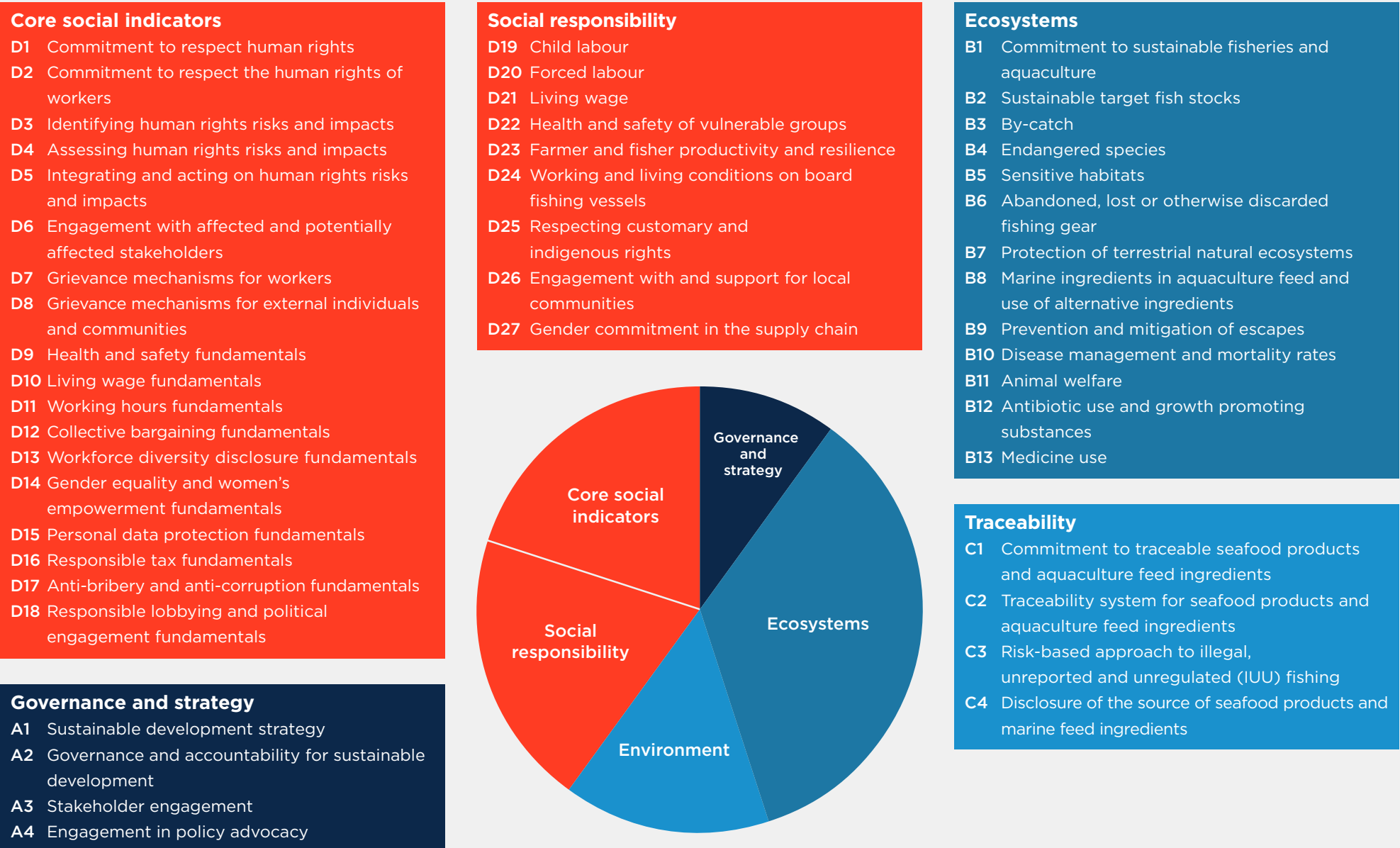
Approach to scoring and weighting

A set of guidelines for each indicator will be used to score company performance. Each indicator has a fixed scale, whereby the company receives a score depending on the scoring criteria. WBA scores will have a 0–2 range: a score of 0 reflects no performance and a score of 2 reflects best performance. Each indicator is scored against a set of predefined criteria related to ‘elements’ outlined for each indicator. The elements for each indicator reflect what is expected of the company and what it will be assessed and scored on. Draft scoring guidelines are already in development and will be published with the benchmark results.

The benchmark will use a weighed approach to calculate companies’ scores. This approach builds on the first Seafood Stewardship Index methodology and that of other WBA benchmarks. Weighting will be distributed across the different measurement areas to ensure that the measurement framework is balanced and reflects stakeholder priorities.

Analytical framework for the Seafood Stewardship Index

FIGURE 6: OVERVIEW OF INDICATORS IN THE FOUR MEASUREMENT AREAS



Analytical framework for the Seafood Stewardship Index

Table 4 and figure 7 present the weightings of the different measurement areas. The ecosystems measurement area carries the greatest weight (35%), in part to account for the number of indicators in this measurement area. Social responsibility and the core social indicators have a combined weight of 40%. Traceability accounts for a relatively small 15% but carries the greatest weight per indicator. Governance and strategy and the core social indicators have a weighting of 10% and 20% respectively, which is in alignment with the Food and Agriculture Benchmark.

All indicators within a measurement area will receive the same weight. However, as some indicators in the ecosystems measurement area are specific to either fishing, aquaculture or aquaculture feed production, not all companies can be meaningfully assessed on all 13 ecosystem indicators. Full details on which indicators are applicable to each company will be published with the final scores and scoring guidelines.

FIGURE 7: WEIGHTS PER MEASUREMENT AREA

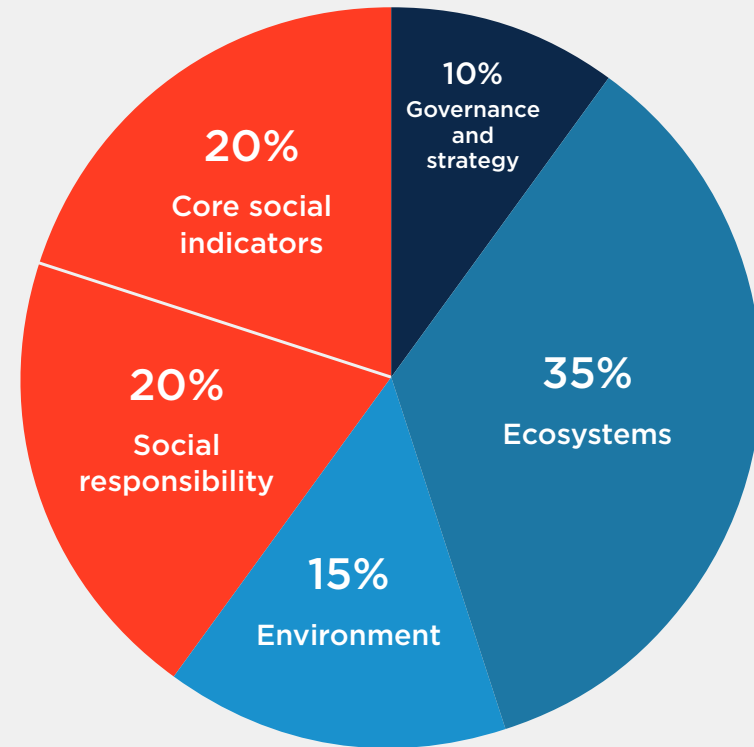


TABLE 4: WEIGHT PER MEASUREMENT AREA AND INDICATOR

Measurement area	Weight (%)	Indicators	Weight per indicator (%)
A. Governance and strategy	10	4	2.50
B. Ecosystems	35	13	2.69
C. Traceability	15	4	3.75
D. Social responsibility	20	9	2.22
Core social indicators	20	18	1.11

Indicators for the Seafood Stewardship Index

The following sections describe each indicator within the four different measurement areas. The indicators follow a standard format:

- **Topic:** a short descriptor of the issue.
- **Indicator:** sets out the topic-specific outcomes expected of the company.
- **Rationale:** sets out the reason why the topic is included in the benchmark and why it is crucial for a sustainable seafood industry and the SDGs.
- **Elements:** sets out what companies will be assessed against for the indicator.
- **Sources:** lists the key existing initiatives that the indicator aligns with or builds upon.

For each indicator outlined below, WBA is developing scoring guidelines to be used in the assessment process in 2021. The scoring guidelines will be finalised following the data collection process and so are not included in this document. They will be published with the benchmark results later this year. The guidelines will reflect the elements set out for each indicator and will also recognise sub-sector-specific differences across the value chain, where relevant. Some topics will be inherently more reliant on quantitative targets and performance data, whereas others will rely on a qualitative assessment of policy, processes and implementation.



Measurement area A: Governance and strategy



This measurement area analyses how stewardship is integrated into seafood companies' governance structure, strategies and management systems, and how companies engage and collaborate with stakeholders to improve stewardship and contribute to sustainability and the SDGs.

Key indicator revisions

The number of indicators in this measurement area will be reduced from seven to four. Key revisions are:

- **Alignment with the Food and Agriculture Benchmark.** The indicators for governance will be aligned with the Food and Agriculture Benchmark. A set of three governance indicators has been

developed that will be applied to the Food and Agriculture Benchmark to compare company performance across benchmarks and systems to be transformed. The indicators are similar to those used in the previous benchmark for sustainability strategies, governance and accountability, and stakeholder engagement.

- **Policy advocacy.** In addition to WBA's generic indicators, the indicator relating to policy advocacy is still included.

A1. Sustainable development strategy

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company has sustainable development objectives and targets embedded in its strategy and business model.
- **Rationale:** A corporate strategy that integrates sustainable development objectives and targets helps the company to deliver on key SDGs and facilitates its ability to adapt and change through forward planning, increasing its resilience, managing risks and protecting workers, the company and society at large (SDG target 12.6).
- **Elements:**
 - The company has a long-term strategy to contribute positively to sustainable development and achieving the SDGs.
 - As part of its strategy, the company identifies and prioritises the issues on which it has clear impact, within the environment, food and nutrition security and social domains, both directly and through its supply chain.
 - The company sets realistic but ambitious objectives and targets that cover its impacts on the environment, food and nutrition security and social issues.

Measurement area A: Governance and strategy

- The company periodically reviews the strategy, objectives and targets to ensure they remain fit for the changing contexts and reports performance against the targets.
- **Sources:** GRI Universal Standards (2020), SDG Impact Standards for Enterprises (2020), SDGD Recommendations (2020).

A2. Governance and accountability for sustainable development

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company has a governance system that includes board/highest level responsibility and accountability for its sustainable development targets. Board members have sustainable development objectives and incentives to reward the effective delivery of relevant company strategies and initiatives.
- **Rationale:** A board governance structure that links sustainable development goals and targets to roles and remuneration is important to ensure the accountability of the company in relation to its contribution to sustainable development targets (SDG target 12.6).
- **Elements:**
 - The company assigns decision-making and oversight responsibility for sustainable development topics to the highest governance body.
 - The company links performance criteria in remuneration policies for the members at the highest level of its governance body to its objectives for sustainable development topics.
- **Sources:** GRI Universal Standards (2020), SDG Impact Standards for Enterprises (2020), SDGD Recommendations (2020), WEF

Toward Common Metrics and Consistent Reporting of Sustainable Value Creation (2020).

A3. Stakeholder engagement

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company engages with stakeholders on sustainable development issues and incorporates the outcomes of these activities in its strategy and operations.
- **Rationale:** Stakeholders may raise concerns that could influence medium- or long-term financial or operating performance or create acute short-term financial impacts through the loss of a license to operate, reputational damage, changes in customer demand and/or disruptions to business viability. Regularly engaging with stakeholders, such as local communities, governments, academia and non governmental organisations, contributes to the company's understanding of diverse and frequently opposing perspectives, potentially drives innovation and helps to shape robust and inclusive approaches. Companies are expected to engage proactively in multi-stakeholder dialogues and initiatives relating to stewardship challenges in the industry. Complaints, disputes or significant adverse impacts highlighted by stakeholders should be addressed and resolved. Engagement processes are expected to produce a clear output or action and an acknowledgement of how stakeholder inputs are used (SDG target 12.6).
- **Elements:**
 - The company describes the process for identifying relevant stakeholder groups, at global and local levels, including

Measurement area A: Governance and strategy

the communities it impacts, civil society, governments, workers and employees, and how it engages with these groups.

- The company discloses the process of stakeholder engagement and regularly reports on how it integrates the outcomes of stakeholder engagement and the identification of sustainability risks and opportunities into its long-term corporate strategy.
- **Sources:** GRI Universal Standards (2020), SASB (2018), SDG Impact Standards for Enterprises (2020), SDGD Recommendations (2020), WEF Toward Common Metrics and Consistent Reporting of Sustainable Value Creation (2020).

A4. Engagement in policy advocacy

- **Indicator:** The company demonstrates policy advocacy activities, with the aim of implementing public policies or strengthening legislation that supports social responsibility and environmental sustainability in the seafood industry.
- **Rationale:** A company can be an influential advocate for social-, environmental- and traceability-related regulations by engaging (individually or collectively with other companies) with governments and policymakers. The goal of policy advocacy activities is either to strengthen existing legislation or create new legislation that contributes to socially responsible and environmentally sustainable fishing and aquaculture operations and supply chains (SDG targets 12.6 and 14.2).
- **Elements:**
 - The company engages in policy advocacy activities, either

individually or collectively with other companies, with the aim of strengthening or developing public policies and legislation that support social responsibility and environmental sustainability in the seafood industry.

- The company provides specific examples of policy advocacy activities and discloses how these activities have or are contributing to changes in public policies or legislation.
- **Sources:** FAO (1995), ISSF (2019), SeaBOS (2020), UNGC (2019).



A crucial element of good stewardship practices for companies in the seafood industry is managing the impacts of fishing and aquaculture operations on ecosystems. This measurement area focuses on what companies are doing to avoid, reduce and/or mitigate negative ecosystem impacts in a number of key areas of fishing, aquaculture and aquaculture feed production.

Key indicator revisions

The number of indicators in this measurement area will be reduced from 20 to 13. Key revisions are:

- **Reformulation of indicators.** The majority of indicators that were included in the first methodology have been retained. Some indi-

cators have been reformulated to be more precise about what is expected from companies. Some indicators have been removed to avoid overlap between indicators or in instances where the first iteration of the benchmark revealed that a meaningful comparative assessment was difficult. Overall, the new ecosystem indicators aim to cover the following aspects of stewardship: commitment and reporting, assessment and disclosure of impacts, mitigation activities and progress reporting.

- **Integration with the Food and Agriculture Benchmark.** Several areas that measure the performance of seafood companies overlap with areas to which companies in the overarching food system can also contribute. Indicators relating to animal welfare, antibiotic use and the protection of terrestrial natural ecosystems (achieving conversion-free operations and supply chains for high-risk commodities such as soya and palm oil) will be applied in both the Food and Agriculture Benchmark and the Seafood Stewardship Index. Furthermore, the first iteration of the benchmark assessed company performance on generic environmental impacts such as greenhouse gas emissions, freshwater use, and food loss and waste. With the development of the Food and Agriculture Benchmark, which addresses the environmental performance of companies across the food value chain, the Seafood Stewardship Index will focus on topics of specific relevance for the seafood industry and to which seafood companies can make a significant contribution. Therefore, these topics will no longer be part of this benchmark, but company performance will be assessed against these topics in the environmental dimension of the Food and Agriculture Benchmark.

Measurement area B: Ecosystems

B1. Commitment to sustainable fisheries and aquaculture (adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company has targets for sustainable fishing and aquaculture operations and/or sustainable sourcing of seafood and aquaculture feed ingredients, and publicly reports against these targets.
- **Rationale:** To safeguard fish populations and marine biodiversity, companies need to source seafood products and marine feed ingredients responsibly and operate according to sustainable fishing and/or aquaculture practices. According to FAO estimates from 2017, about a third of global fish stocks were overfished, while nearly 60% were maximally sustainably fished.¹⁰ With global fish stocks under increasing pressure, companies need to be transparent about the sustainable management and efficient use of marine resources. Companies can contribute to this by adopting sourcing policies that include specific, measurable and time-bound targets, monitor progress and publicly report their progress against these targets (SDG targets 14.2 and 14.4).
- **Elements:**
 - The company with fishing and/or aquaculture operations discloses information about sustainability requirements, criteria and targets that have been set for sustainable fishing and aquaculture operations. This could include sharing a sourcing policy or supplier code of conduct that sets clear targets based on credible standards and ratings.
 - The company involved in trading and/or processing seafood products demonstrates what sustainability requirements,

criteria and targets have been set for sustainable sourcing. This could include disclosing its sourcing policy and/or supplier code of conduct that sets clear targets based on credible standards and ratings.

- The company publicly discloses information about how it monitors and makes positive progress against the criteria and targets that have been set for sustainable seafood operations.
- **Sources:** CASS (2019), FAIRR (2019), Food Foundation – Plating up Progress (2020), SBTN Draft Interim Guidance (2020), Sustainable Seafood Coalition (2018).

B2. Sustainable target fish stocks

- **Indicator:** The company is reducing its impacts on stocks of target species through activities that ensure and support science-based management.
- **Rationale:** Seafood companies involved in fishing or sourcing from wild fish stocks show stewardship by sourcing from stocks that are well managed and/or conducting fishing activities that do not lead to overfishing and ensure the long-term sustainability of fish resources. In the case of overfished stocks, companies can help restore and rebuild fish stocks in the shortest time feasible through improved and effective harvesting regulations and improved catch methods (SDG targets 14.2 and 14.4).
- **Elements:**
 - The company has assessed the management status and level of sustainability of target stocks across 100% of its portfolio, including its own operations and supply chain. The company

Measurement area B: Ecosystems

- publicly discloses the results of that assessment.
- If the company sources from or targets overfished stocks, stocks subject to overfishing or poorly managed stocks, the company demonstrates activities to improve the management of the fishery. Examples of activities that companies can undertake to reduce impact on target fish stocks are improvement projects, gear modification, closing of fishing areas, policy advocacy to support the development and adoption of harvest strategies, participating in collective industry platforms (e.g. ISSF, Global Tuna Alliance) and supporting data collection programmes.
- The company demonstrates the effectiveness of its activities by disclosing results and outcomes in progress reports. Examples of progress reporting are fishery improvement project (FIP) progress reports or historical data on the status of targeted stocks.
- **Sources:** CASS (2019), FAO (1995), GSSI (2019), MarinTrust (2017), MSC (2018), Seafood Watch (2020), SFP FishSource (2020).

B3. By-catch

- **Indicator:** The company is reducing its impacts on by-catch species.
- **Rationale:** In addition to catching target species, fishing gear and techniques can also catch non-target species. At least 7.3 million tonnes of by-catch are caught incidentally each year. By-catch levels do not always have significant impacts, but in some fisheries the percentage of by-catch can significantly impact the sustainability of a species and can far outweigh the size of the target catch¹¹ (SDG

targets 14.1 and 14.2).

- **Elements:**
 - The company has assessed by-catch levels and risks across its entire portfolio, including its operations and supply chain. The company publicly discloses the results of that assessment.
 - Where significant by-catch-related impacts have been identified, the company demonstrates activities to reduce by-catch. Examples of activities that companies can undertake are improvement projects, using more selective fishing gear and methods, collecting data or supporting data collection (e.g. through 100% observer coverage), and providing crew training on by-catch mitigation and release practices.
 - The company demonstrates the effectiveness of its activities by disclosing results and outcomes in progress reports. Examples of progress reporting are FIP progress reports or historical by-catch data.
- **Sources:** CASS (2019), FAO (1995), GSSI (2019), MarinTrust (2017), MSC (2018), Seafood Watch (2020), SFP (2015), SFP FishSource (2020).

B4. Endangered species

- **Indicator:** The company is reducing its impacts on endangered species.
- **Rationale:** Fishing and aquaculture companies can impact endangered^{vi} species through their direct operations. Companies should also refrain from harvesting and trading endangered species to prevent their extinction (SDG targets 15.1 and 15.5).

Measurement area B: Ecosystems

- **Elements:**
 - The company has assessed its impacts on endangered species in its operations and supply chain, referring to endangered species in line with international agreements such as the IUCN Red List or CITES. The company publicly discloses the results of that assessment.
 - The company demonstrates activities to reduce impacts on endangered species. These could include improvement projects, modifying fishing techniques, reducing wildlife interactions in aquaculture or not catching or sourcing endangered species.
 - The company demonstrates the effectiveness of its activities by disclosing results and outcomes in progress reports. Examples of progress reporting are FIP progress reports or historical data on impacts on endangered species.
- **Sources:** CASS (2019), CITES (2021), FAO (1995), GSSI (2019), IUCN Red List of Endangered Species (2021), MarinTrust (2017), MSC (2018), Seafood Watch (2020), SFP FishSource (2020).

B5. Sensitive habitats

- **Indicator:** The company is reducing its impacts on sensitive habitats.
- **Rationale:** Habitats are a vital element of ecosystems yet are easily disrupted by fishing and aquaculture activities and often hard to restore. Where seafood operations are found to significantly impact sensitive habitats, companies are expected to protect these habitats from the potentially negative impacts of their operations (SDG targets 14.2, 15.1 and 15.5).

- **Elements:**
 - The company has assessed its impacts on sensitive habitats across its entire portfolio, including its operations and supply chain. The company publicly discloses the results of that assessment.
 - The company demonstrates what it does to mitigate those impacts, for example by applying alternative fishing techniques, introducing operational changes, refraining from fishing or aquaculture activities in or near protected areas, or ensuring that aquaculture feed ingredients are sourced from areas with no negative impacts on surrounding habitats.
 - The company demonstrates the effectiveness of its activities by disclosing results and outcomes in progress reports. Examples of progress reporting are FIP progress reports or ecosystem assessments.
- **Sources:** CASS (2019), FAO (1995), GSSI (2019), MarinTrust (2017), MSC (2018), Seafood Watch (2020), SFP FishSource (2020).

B6. Abandoned, lost or otherwise discarded fishing gear

- **Indicator:** The company prevents and reduces abandoned, lost or otherwise discarded fishing gear.
- **Rationale:** Abandoned, lost or otherwise discarded^{vi} fishing gear (ALDFG) represents a substantial portion of ocean plastics. The estimated annual amount of ALDFG in oceans is estimated to be at least 640,000 tonnes.¹² ALDFG can also refer to discarded or lost equipment from aquaculture operations. Plastics are major polluters of natural ecosystems, with associated toxins and micro-

^{vi} Species considered 'vulnerable', 'endangered' or 'critically endangered' on the IUCN Red List or included in CITES Appendices I, II and III.

Measurement area B: Ecosystems

particles disrupting soils, waterways, oceans and human food chains¹³ (SDG target 14.1).

- **Elements:**
 - The company has a commitment to reduce ADLFG in its operations and supply chain. The company also demonstrates in which part of its operations ADLFG is a risk.
 - The company implements measures for preventing and reducing ADLFG in its operations and supply chain and is involved in advocacy activities that contribute to reducing ocean plastics.
 - The company discloses information about the results of the implemented measures for preventing and reducing ADLFG in its operations and supply chain.
- **Sources:** FAO (2009), Global Ghost Gear Initiative (2020), SeaBOS (2020).

B7. Protection of terrestrial natural ecosystems (adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company demonstrates that it is achieving conversion-free operations and supply chains for its high-risk commodities.
- **Rationale:** Food systems are the leading drivers of biodiversity loss and ecosystem conversion. Agricultural expansion has caused more than 70% of tropical deforestation globally, as forests are cleared to make way for land to grow crops such as soya and palm oil.¹⁴ This commodity-driven tropical deforestation is responsible for approximately 5% of global greenhouse gas emissions.¹⁵ In

the aquaculture industry, soya and palm oil are key ingredients in aquaculture feed production. Seafood companies can work towards achieving conversion-free operations through the sustainable use of soya and palm oil in aquaculture feed production (SDG targets 15.1 and 15.5).

- **Elements:**
 - The company has deforestation/conversion-free^{vii} targets for the soya and palm oil it purchases for aquaculture feed production and regularly discloses performance against its targets. For example, it reports the proportion of soya and palm oil that can be shown to be deforestation- or conversion-free.
 - The company meets the targets by demonstrating that the relevant commodities are 100% conversion-free^{viii} or by not purchasing any relevant commodities (direct or embedded) from suppliers with deforestation or land-use conversion in their operations or regions where this occurs.
 - If not yet 100% conversion-free, the company discloses performance against its targets.
- **Sources:** AFi Core Principles (2020), ASC (various), CDP Forests (2020), Collier FAIRR Protein Producer Index Methodology (2020), CRS (2016), FAO (2011), Forest 500/Global Canopy (2019), Global Aquaculture Alliance (GAA) (various), GLOBALG.A.P. (various), Global Salmon Initiative (GSI) (2020), GSSI (2019), KnowTheChain (2020), RSPO (2018), RTRS (2017), Seafood Watch (2020), UNGC (2020), WRI (2016), ZSL SPOTT (2019).

^{vii} Conversion-free as defined by the Accountability Framework initiative. See Annex 3.

^{viii} The [Accountability Framework initiative](#) identifies approaches companies can use to demonstrate conversion-free supply chains.

B8. Marine ingredients in aquaculture feed and use of alternative ingredients

- **Indicator:** The company demonstrates more efficient use and/or reductions in the use of marine ingredients in aquaculture feed for carnivorous species and develops alternative ingredients.
- **Rationale:** According to FAO data, around 10% of global seafood production is used to produce marine ingredients such as fish oil and fish meal.¹⁶ Both are nutritious ingredients and important components in the production of aquaculture feed for carnivorous species. However, there are concerns about the contribution of fish oil and fish meal production to overfishing and the potential competition for fish resources between feed production and human consumption. Aquaculture feed-producing companies can actively contribute to improving the sustainability of feed production through more efficient use (e.g. by improving feed conversion rates) and/or reductions in the use of marine ingredients and/or by developing alternative ingredients with similar nutritional values and a lower environmental impact (SDG targets 12.2, 14.4 and 15.5).
- **Elements:**
 - The company discloses quantitative information about the use of marine ingredients in its aquaculture feed production across 100% of its operations.
 - The company demonstrates what it is doing to achieve more efficient use and/or reductions in the use of marine ingredients.
 - The company discloses sustainable alternative solutions

to reduce marine ingredients and demonstrates how these solutions are implemented.

- **Sources:** ASC ([various](#)), FAO ([2011](#)), GAA ([various](#)), GLOBALG.A.P. ([various](#)), GSI ([2020](#)), GSSI ([2019](#)), Seafood Watch ([2020](#)), UNGC ([2020](#)).

B9. Prevention and mitigation of escapes

- **Indicator:** The company prevents escapes and, in the event of an escape, mitigates the impact.
- **Rationale:** Escapes can negatively impact wild fish populations and environments. A company that has mechanisms in place to prevent escapes and mitigate the impact of an outbreak if one occurs can minimise these negative environmental impacts (SDG targets 2.5 and 15.8).
- **Elements:**
 - The company discloses annual metrics about outbreaks of farmed fish or shrimp.
 - The company demonstrates the mechanisms in place to prevent escapes and, in the event of an escape, demonstrates what it does to mitigate the negative impacts.
- **Sources:** ASC ([various](#)), Collier FAIRR Protein Producer Index Methodology ([2020](#)), FAO ([2011](#)), GAA ([various](#)), GLOBALG.A.P. ([various](#)), GSI ([2020](#)), GSSI ([2019](#)), Seafood Watch ([2020](#)), UNGC ([2020](#)).

Measurement area B: Ecosystems

B10. Disease management and mortality rates

- **Indicator:** The company discloses mortality rates across its operations and demonstrates its efforts to prevent and manage diseases.
- **Rationale:** Mortality or survival rates can be used as performance-based indicators of how diseases are being managed. By disclosing disease management plans and mortality or survival rates across its operations, the company demonstrates transparency about how diseases are being managed (SDG target 12.4).
- **Elements:**
 - The company discloses disease management plans for its aquaculture operations.
 - The company has a target for mortality and/or survival rates across 100% of its operations.
 - The company discloses mortality and/or survival rates across 100% of its operations and reports on progress against its target.
- **Sources:** ASC ([various](#)), Collier FAIRR Protein Producer Index Methodology (2020), FAO (2011), GAA ([various](#)), GLOBALG.A.P. ([various](#)), GSI (2020), GSSI (2019), Seafood Watch (2020), UNGC (2020).

B11. Animal welfare

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company is committed to improving aquatic and farm animal welfare.
- **Rationale:** More than 70 billion land animals are farmed for food annually, with two thirds in conditions that mean they cannot move freely or live naturally.¹⁷ A 100 billion fish are farmed for food

annually with prevalent welfare problems in their slaughter, transport, handling and rearing, for which the severity and duration of distress is often high.¹⁸ By 2050, livestock and aquaculture production is projected to double compared to 2000^{19,20} (SDGs 3, 12, 14 and 15).

- **Elements:**
 - The company has an animal welfare policy that applies to all its aquaculture species.
 - The company has targets to address key welfare issues and regularly discloses performance against the targets (in its supply chain where applicable).
 - The company has targets for the percentage of animal-derived products to be audited/certified by third parties to meet higher welfare standards and discloses performance against all its targets (in its supply chain where applicable).
- **Sources:** Aquatic Life Institute ([n.d.](#)), ASC ([various](#)), BFAFAW (2019), CIWF ([n.d.](#)), Collier FAIRR Protein Producer Index Methodology (2020), FAO (2011), Food Foundation – Plating Up Progress (2020), GAA ([various](#)), GLOBALG.A.P. ([various](#)), GRI ([n.d.](#)), GSI (2020), GSSI (2019), OIE ([n.d.](#)), SASB (2018), Seafood Watch (2020), UNGC (2020).

B12. Antibiotic use and growth-promoting substances

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company is reducing the use of medically important antimicrobials and specifically prohibits the prophylactic use of antibiotics and growth-promoting substances.

Measurement area B: Ecosystems

- **Rationale:** Antibiotic use is prevalent in the global food and agriculture sector. Moreover, accelerated growth of aquaculture along with widespread and unrestricted use of prophylactic antibiotics, especially in developing countries, has resulted in a series of developments detrimental to the environment and human health. Antimicrobial resistance is a significant public health threat, and governments across the world are calling for a decrease in the use of antibiotics in livestock and aquaculture production. Aquaculture companies can demonstrate leadership in addressing antimicrobial resistance by demonstrating effective use of antibiotics and zero use of antibiotics that are critically important for human health (SDG target 12.4).
- **Elements:**
 - The company has a policy on prophylactic use of antibiotics and growth-promoting substances that applies to all its aquaculture species and products.
 - The company has targets for zero use of growth-promoting substances and prophylactic use of antibiotics and regularly discloses performance against the targets (in its supply chain where applicable).
 - The company has a target to reduce the total use of antibiotics classified as 'medically important antimicrobials' and regularly discloses performance against the target (in its supply chain where applicable).
- **Sources:** Aquatic Life Institute (n.d.), ASC (various), Business Benchmark on Farm Animal Welfare Methodology Report (BB-FAW) (2019), Compassion in World Farming (CIWF) (n.d.), Collier FAIRR Protein Producer Index Methodology (2020), FAIRR

Best Practice Policy on Antibiotics Stewardship (n.d.), FAO (2011), Food Foundation – Plating Up Progress (2020), GAA (various), GLOBALG.A.P. (various), GRI (n.d.), GSI (2020), GSSI (2019), OIE (n.d.), SASB (2018), Seafood Watch (2020), UNGC (2020).

B13. Medicine use

- **Indicator:** The company discloses quantitative information about the use of medicines to manage diseases and demonstrates how it is reducing medicine use within its operations.
- **Rationale:** Diseases are an element of aquaculture operations that require strict and effective management to prevent their spread and adverse impacts on the farm and beyond. A company can report quantitative information about the use of medicines and demonstrate what it is doing to reduce medicine use in its operations (SDG target 12.4).
- **Elements:**
 - The company discloses quantitative information about medicine use across 100% of its operations.
 - The company demonstrates the efforts it is making to reduce medicine use within its operations, for example by reporting on alternative and/or non-medicinal treatments.
 - The company demonstrates results, outcomes or the effectiveness of its efforts and is transparent about the challenges in reducing medicine use.
- **Sources:** ASC (various), Collier FAIRR Protein Producer Index Methodology (2020), FAO (2011), GAA (various), GLOBALG.A.P. (various), GSI (2020), GSSI (2019), Seafood Watch (2020), UNGC (2020).



Illegal, unregulated and unreported (IUU) fishing is an important issue in SDG 14 (life below water). Traceability mechanisms that monitor the origins of seafood products and marine ingredients are considered a key element in addressing IUU fishing. This measurement area addresses how seafood companies manage this issue in their operations and supply chains. It also assesses whether companies are transparent about their sources of seafood products and fishing activities.

Key indicator revisions

The number of indicators in this measurement area will be reduced from 12 to four. Key revisions are:

- **Focus on performance.** The first iteration of the benchmark included indicators for traceability (monitoring ingredients' legal origins), which is a risk-based approach to IUU fishing. An evaluation of company performance and stakeholder feedback revealed that stakeholders expect companies to demonstrate performance on those topics. The revised indicators therefore primarily look at performance.
- **Focus on transparency of sourcing activities.** The indicator in the first iteration of the benchmark on disclosure of marine and terrestrial ingredients has been reformulated to address only seafood products and raw marine ingredients.

C1. Commitment to traceable seafood products and aquaculture feed ingredients

- **Indicator:** The company commits to traceable seafood products and aquaculture feed ingredients (marine and terrestrial) in its own operations and supply chain.
- **Rationale:** Companies are legally required to trace the source of their seafood products and marine feed ingredients. Current import regulations such as the United States' Seafood Import Monitoring Program and the European Union's IUU regulation have inherent weaknesses. These include not always covering all seafood products or supply chains, or not integrating a robust verification process.^{23,24} Therefore, companies are expected to go beyond legal compliance and have traceability systems that comprehensively monitor and verify seafood products, marine and terrestrial feed ingredients across their entire portfolio. The Global

Measurement area C: Traceability

Dialogue on Seafood Traceability (GDST), a business-to-business platform, has developed a global standard for tracking seafood products from point of origin to point of sale. Over 60 companies and organisations participated in developing the standard, and more than 40 companies have endorsed or adopted the standard. To achieve fully traceable seafood products and marine feed ingredients, companies commit to electronic and interoperable traceability, in line with the GDST standards. Companies involved in aquaculture feed production set a similar commit for traceability of terrestrial feed ingredients.

- **Elements:**
 - If involved in the production of wild-caught and/or farmed seafood products, the company commits to traceable seafood, in alignment with GDST.
 - If involved in the production of aquaculture feed, the company commits to traceable marine feed ingredients in alignment with GDST and commits to traceable terrestrial feed ingredients in alignment with best practice.
 - The company sets time-bound targets for traceable seafood products and marine and terrestrial feed ingredients.
 - The company reports on progress against its targets for traceable seafood products and marine and terrestrial feed ingredients.
- **Sources:** CRS (2016), Environmental Justice Foundation (EJF), Oceana, Pew, WWF (2016), GDST (2020), Oceana, Pew, The Nature Conservancy, EJF, WWF (2020), RTRS (2017), WRI (2020).

C2. Traceability system for seafood products and aquaculture feed ingredients

- **Indicator:** The company demonstrates a traceability system for seafood products and aquaculture feed ingredients (marine and terrestrial) in its own operations and supply chain.
- **Rationale:** Buyers of seafood products, importing market countries and other stakeholders want to see evidence that seafood products and aquaculture feed ingredients are fully traceable, all the way to the source, whether a farm or a fishery. For aquaculture feed companies this also refers to terrestrial ingredients used for feed production. This requires accurate data about actors in the supply chain, production methods, sustainability practices and compliance with regulations, to eliminate unsustainable and illegal practices. To qualify as robust, a traceability system must include mechanisms to verify the information used and inputted into the system along the whole supply chain. Traceability systems, when designed according to a set of robust criteria such as the GDST, are key for capturing product data that meets both market and regulatory requirements. Robust traceability also underpins claims that a seafood or aquaculture feed company makes about the origins of raw material in its seafood products and aquaculture feed (SDG targets 12.2 and 14.4).
- **Elements:**
 - The company explains the traceability system it has in place to trace and verify the origins of its seafood products, marine and terrestrial feed ingredients. The company provides evidence of which key data elements are collected,

Measurement area C: Traceability

as well as how this data is verified and shared along the supply chain.

- The company demonstrates that the traceability system is in place for 100% of its portfolio. If the system does not cover 100% of its portfolio, the company discloses a plan to address the gap with the aim of achieving 100% traceable seafood products, marine and terrestrial feed ingredients.
- **Sources:** CRS (2016), EJF (2020), FAO (2018), Future of Fish (2016), GDST (2020), Sustainable Alliance for Legality & Traceability (2020), WWF (2015), RTRS (2017), WRI (2020).

C3. Risk-based approach to illegal, unreported and unregulated (IUU) fishing

- **Indicator:** The company uses a risk-based approach to assess and mitigate IUU fishing issues across its operations and supply chain.
- **Rationale:** IUU fishing is a key issue in the global seafood industry. IUU catches are estimated to account for 11–26 million tonnes of fish annually, with a value of between USD 10 billion and USD 23 billion.²⁵ To eliminate IUU products from the global seafood market, seafood companies, in addition to legal requirements, can put in place risk assessment procedures to assess and mitigate IUU risks in their operations and supply chains (SDG target 14.4).
- **Elements:**
 - The company has a commitment to eliminate IUU products from its entire seafood portfolio, whether that is in its own operations and/or supply chain.
 - If involved in fishing operations, the company demonstrates

how it assesses IUU risks in its fisheries. A company involved in trading and/or processing seafood products can demonstrate how it assesses IUU risks for the seafood products it sources.

- A company involved in aquaculture and production of aquaculture feed demonstrates how it assesses the IUU risks related to the marine ingredients in its aquaculture feed.
- The company discloses due diligence processes, information and data sources it uses to check for IUU risks and how it assesses IUU risks across its operations and supply chain.
- The company discloses the results of IUU risk assessments and/or cases where IUU risks have been identified.
- The company discloses how IUU risks across its operations and supply chain are mitigated.
- Examples of documentation regarding IUU risk assessments and due diligence processes for companies can be found [here](#) and [here](#).
- **Sources:** British Retail Consortium (BRC), EJF (2015), Oceana, UN Environment Programme (UNEP) (2018), EJF, Oceana, Pew, WWF (2016), (2017).

C4. Disclosure of the source of seafood products and marine feed ingredients

- **Indicator:** The company discloses the source of its seafood products and marine feed ingredients.
- **Rationale:** A company that publicly discloses the source of its seafood products and marine feed ingredients demonstrates

Measurement area C: Traceability

transparency about its portfolio. By being fully transparent about the source of its products, a company shows responsibility and accountability for its operations (SDG targets 12.2 and 14.4).

- **Elements:**
 - The company discloses the source of the seafood products and marine feed ingredients it produces, sources and purchases across 100% of its portfolio.
 - Relevant information to be disclosed for wild seafood products are at a minimum: common and scientific species name, country of origin, FAO catch area, certification status, ratings status or whether in a FIP, harvest method and management authority.
 - Relevant information to be disclosed for farmed seafood products are at a minimum: common and scientific species name, country of origin, certification status, ratings status or whether in an AIP and production method.
 - An example of the information companies can disclose can be found [here](#).
- **Sources:** Conservation Alliance for Seafood Solutions (CASS) (2019), Future of Fish (2016), GDST (2020), ISSF (2019), Oceana, UNEP (2018), Ocean Disclosure Project (ODP) (2020), SeaBOS (2020), UNGC (2019), WWF (2015).



Seafood Stewardship Index has four additional social responsibility indicators that capture specific expectations regarding a small number of salient social topics for the seafood industry. Recognising the complexity of applying different layers of social indicators, care has been taken to avoid overlapping indicators, while ensuring that all key social topics are addressed.

WBA's social transformation framework

WBA's [social transformation framework](#) sets out the societal expectations for business conduct that companies should meet in order to leave no one behind. By respecting human rights, providing and promoting decent work and acting ethically, companies can support the SDGs, address inequalities and contribute to a sustainable future for all. The framework describes how WBA will assess and compare company performance on the social transformation and incentivise companies to create a future that works for everyone.

The framework includes a set of 18 core social indicators (CSIs) that 'signpost' progress towards achievement of these expectations (see Table 5). Companies that do not meet the CSIs will be regarded as failing to demonstrate sufficient commitment to meeting the high-level societal expectations and to responsible business conduct in general. The CSIs represent a line below which we question a company's ability to contribute to the SDGs and whether the company can be seen as a responsible actor. All companies should meet all the requirements of the CSIs. In other words, no company should fall below the line.

Key indicator revisions

- **Alignment with the social transformation framework.** The social indicators of the Seafood Stewardship Index are aligned with the social transformation framework. All 30 companies in scope of the Seafood Stewardship Index will be assessed against a set of 18 core social indicators (CSIs).
- **Alignment with the Food and Agriculture Benchmark.** The 30 companies in scope of the Seafood Stewardship Index will furthermore be assessed against five social indicators from the Food and Agriculture Benchmark. These indicators build on the social transformation framework and assesses critical issues, salient risks and social inclusion in the food and agriculture sector, which to a large extent are also relevant for the seafood industry. In addition to the core social indicators and the Food and Agriculture Benchmark, the

TABLE 5: CORE SOCIAL INDICATORS

Respect human rights	D1. Commitment to respect human right	Indicator: The company publicly commits to respecting all internationally recognised human rights across its activities.
	D2. Commitment to respect the human rights of workers	Indicator: The company publicly commits to respecting the principles concerning fundamental rights at work in the eight ILO core conventions as set out in the ILO Declaration on Fundamental Principles and Rights at Work. It also has a publicly available statement of policy committing it to respect the human rights of workers in its business relationships.
	D3. Identifying human rights risks and impacts	Indicator: The company proactively identifies its human rights risks and impacts.
	D4. Assessing human rights risks and impacts	Indicator: Having identified its human rights risks and impacts, the company assesses them and then prioritises its salient human rights risks and impacts.
	D5. Integrating and acting on human rights risks and impacts	Indicator: The company integrates the findings of its assessments of human rights risks and impacts into relevant internal functions and processes by taking appropriate actions to prevent, mitigate or remediate its salient human rights issues.
	D6. Engaging with affected and potentially affected stakeholders	Indicator: As part of identifying and assessing its human rights risks and impacts, the company identifies and engages with stakeholders whose human rights have been or may be affected by its activities.
	D7. Grievance mechanisms for workers	Indicator: The company has one or more channel(s)/mechanism(s) (its own, third party or shared) through which workers can raise complaints or concerns, including in relation to human rights issues.
	D8. Grievance mechanisms for external individuals and communities	Indicator: The company has one or more channel(s)/mechanism(s) (its own, third party or shared) through which individuals and communities who may be adversely impacted by the Company can raise complaints or concerns, including in relation to human rights issues.
Provide and promote decent work	D9. Health and safety fundamentals	Indicator: The company publicly commits to respecting the health and safety of workers and discloses relevant data. It also places health and safety expectations on and monitors the performance of its business relationships.
	D10. Living wage fundamentals	Indicator: The company is committed to paying its workers a living wage and supports the payment of a living wage by its business relationships.

	D11. Working hours fundamentals	Indicator: The company does not require workers to work more than the regular and overtime hours and places equivalent expectations on its business relationships.
Provide and promote decent work	D12. Collective bargaining fundamental	Indicator: The company discloses information about collective bargaining agreements covering its workforce and its approach to supporting the practices of its business relationships in relation to freedom of association and collective bargaining
	D13. Workforce diversity disclosure fundamentals	Indicator: The company discloses the percentage of employees for each employee category by at least four indicators of diversity.
	D14. Gender equality and women's empowerment fundamentals	Indicator: The company publicly commits to gender equality and women's empowerment and discloses quantitative information on gender equality and women's empowerment.
Act ethically	D15. Personal data protection fundamentals	Indicator: The company publicly commits to protecting personal data and has a global approach to data privacy.
	D16. Responsible tax fundamentals	Indicator: The company has a public global tax approach and discloses its corporate income tax payments on a country-by-country basis.
	D17. Anti-bribery and anti-corruption fundamentals	Indicator: The company publicly prohibits bribery and corruption and takes steps to identify and address bribery and corruption risks and incidents
	D18. Responsible lobbying and political engagement fundamentals	Indicator: The company has an approach to lobbying and political engagement and has related controls in place.

D19. Child labour

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company eliminates and prevents child labour in its own operations and supply chain.
- **Rationale:** Worldwide, 70% of child labour is found in the agriculture sector – one of the most dangerous in terms of work-related

fatalities and disease.²⁶ The principle behind the effective abolition of child labour is to stop all work by children that jeopardises their education and development.²⁷ Child labour also occurs in the seafood industry, mostly in informal and small-scale fishing, aquaculture or processing activities. Fishing activities, in particular, are considered hazardous work, where children can be exposed to extreme conditions and risks (SDG targets 8.7 and 8.8).

Measurement area D: Social responsibility

- **Elements:**
 - The company indicates that it does not use child labour and verifies the age of job applicants and workers in its own operations and supply chain.
 - The company provides evidence of a monitoring and verification process for its own operations and supply chain. Where a case of child labour is found in its operations, the company describes a transition programme for the child from employment to education. If it finds a case in the supply chain, the company describes how it works with suppliers to eliminate child labour and improve working conditions for younger workers.
 - The company provides an analysis of trends demonstrating progress towards eliminating child labour.
- **Sources:** AFi (2021), ASC (2020), CHRБ (2020), Conservation International (2019), Fair Trade USA (2018), FAO (2018), GAA (2020), GRI 403 (2018), GSSI and CGF (2020), ILO (1973), ILO (2007), KnowTheChain (2020), MarinTrust (2017), Seafood Task Force (2018), UNGC (n.d.), UN Guiding Principles (2017), World Development Indicators (n.d.).

D20. Forced labour

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company eliminates and prevents forced labour in its own operations and supply chain.
- **Rationale:** The majority of employment created by the seafood industry requires low or unskilled labour. The use of forced labour

(often migrant workers) in supply chains is known to occur regularly and is often linked to IUU, particularly in South-east Asia.^{28, 29} While recent reports and media coverage have mainly focused on Thailand, forced labour is a problem throughout the world.³⁰ Specific international guidelines exist (notably, ILO Convention 188 – Work in Fishing Convention, 2007) but are not ratified and poorly implemented and enforced. Therefore, elimination of forced labour is one of the key challenges that the private sector can help address by putting in place risk assessments and grievance mechanisms (SDG targets 8.7 and 8.8).

- **Elements:**
 - The company indicates that it does not use forced labour in its own operations and supply chain.
 - The company protects workers' freedom of movement and right to collective bargaining and requires its suppliers to adhere to the same standard. Where a case of forced labour is found, the company describes how it identifies this practice in its operations, or how it works with its suppliers to eliminate forced labour in its supply chain.
 - The company provides an analysis of trends demonstrating progress towards eliminating forced labour.
- **Sources:** ASC (2020), CHRБ (2020), Conservation International (2019), Fair Trade USA (2018), FAO (2016), GAA (2020), GRI 103 (2016), GSSI and CGF (2020), ILO (1930), ILO (2007), KnowTheChain (2020), MarinTrust (2017), Seafood Task Force (2018), UNGC (n.d.), UN Guiding Principles (2017), World Development Indicators (n.d.).

D21. Living wage

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company pays all its workers a living wage and requires its suppliers to do the same.
- **Rationale:** The majority of employment created by the seafood industry requires low or unskilled labour. Workers in both primary and secondary production are therefore among the most vulnerable, often lacking sustainable livelihoods and disproportionately exposed to income insecurity and poor working conditions because of a lack of social protections. Many fishers, fish farmers and workers in processing operations are identified as working poor³¹ (SDG target 8.5).
- **Elements:**
 - The company commits to paying a living wage across its operations and includes living wage requirements in its contractual arrangements with suppliers.
 - The company describes how it determines a living wage for the regions where it operates.
 - The company provides evidence that it pays a living wage for all workers across its operations and supply chain.
- **Sources:** CHRB (2020), Conservation International (2019), FAO (2020), FAO SAFA Tool (2014), FAO (2016), Future-Fit Foundation (2020), IDH Sustainable Trade Initiative (2020), OECD-ETI (n.d.), Oxfam and Roundtable on Sustainable Palm Oil (RSPO) (2020), WBA's social transformation draft methodology (2020), Seafood Stewardship Index (2019), ZSL SPOTT (2019).

D22. Health and safety of vulnerable groups

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company identifies and addresses health and safety risks to vulnerable groups in its supply chain.
- **Rationale:** Fishing is one of the most dangerous occupations in the world. Accident and fatality rates in fishing remain high in most countries. Aquaculture and seafood processing have also been highlighted as hazardous industries. The vast majority of people working in fisheries and aquaculture, including in pre-harvest and post-harvest activities, live in rural, often remote areas in developing countries. In 2019, the highest numbers of fishers and aquaculture workers were in Asia (85% of the global total), followed by Africa (9%).³² Based on the data available, it is estimated that the proportion of women in the total workforce is 19% in aquaculture and 12% in fisheries. The proportion of women in inland water fishing exceeds 20% and is up to 90% in secondary activities, such as processing.³³ In addition, the sector is characterised by high involvement of migrant and underaged workers, often in hazardous conditions. About 59% of all children aged 5–17 who are engaged in hazardous work are in the agriculture sector, including fisheries and aquaculture³⁴ (SDG target 8.8).
- **Elements:**
 - The company demonstrates an understanding of health and safety risks to vulnerable groups in the supply chain, such as through risk mapping.
 - The company has a management system to monitor its suppliers and ensure they identify and address health and

Measurement area D: Social responsibility

- safety risks to vulnerable groups.
- The company demonstrates how it works with suppliers to protect and improve the health and safety of vulnerable groups through activities such as capacity building and training, financial and technical assistance and providing adequate housing, where applicable.
- The company discloses trends demonstrating progress towards addressing the health and safety of vulnerable groups.
- These elements apply, as a minimum, to all tier 1 suppliers in the company's supply chain.
- **Sources:** ASC (2020), CHRB (2020), Conservation International (2019), Collier FAIRR Protein Producer Index Methodology (2020), Ethical Trading Initiative (n.d.), FAO SAFA Tool (2014), FAO (2016), Forest Stewardship Council (2015), Future-Fit Foundation (2020), GAA (2020), GRI 403 (2018), ILO (2001), ILO (2007), MarinTrust (2017), Roundtable on Sustainable Biomaterials (2017), SASB (2018), Seafood Task Force (2018), WBA's social transformation draft methodology (2020), ZSL SPOTT (2019).

D23. Farmer and fisher productivity and resilience

(adopted from the Food and Agriculture Benchmark)

- **Indicator:** The company supports the resilience, productivity and access to markets of farmers and fishers, especially small-scale producers.
- **Rationale:** Of all those engaged in fishing and fish farming, most are in developing countries, and the majority are small-scale, artisanal fishers and aquaculture workers. It is estimated that about

90% of all people directly dependent on capture fisheries work in the small-scale fisheries sector. Of this percentage, half are women. As such, small-scale fisheries serve as an economic and social engine, supporting food and nutrition security, employment and other multipliers to local economies while underpinning the livelihoods of coastal communities. The ability of farmers and fishers to earn a living income is critical to ensure their viability and economic success.³⁵ Multinational companies can support small-scale producers through improved opportunities to access markets as well as increased knowledge, technology and resources (SDG targets 2.3, 2.A, 8.2 and 14.A).

- **Elements:**
 - The company commits to supporting farmers and fishers, especially small-scale producers, and discloses evidence of activities such as programmes, training and finance that support them. Activities can include providing fair trading terms; facilitating access to markets; supporting tailored financial services such as pre-financing schemes and risk-sharing mechanisms; and facilitating access to technology, technical assistance and capacity building.
 - The company discloses the impact of its support activities, such as those provided to smallholders across its high-risk food categories. Impact can include increased yields or productivity, percentage of farmers or fishers reached, or percentage of products sourced from small-scale producers.
 - The company provides evidence that it takes a holistic, system-level, multi-stakeholder approach in its support for farmers and fishers and, in particular, small-scale producers.

Measurement area D: Social responsibility

- **Sources:** ASC (2020), WBA's Access to Seeds Index (2019), AFI (2021), CHRB (2020), Conservation International (2019), Fair Trade USA (2018), FAO (2018), FAO SAFA Tool (2014), Forest 500/Global Canopy (2019), ILO Convention No. 160 (1985), RSPO (2020), World Business Council for Sustainable Development (2019), ZSL SPOTT (2019).

D24. Working and living conditions on board fishing vessels

- **Indicator:** The company demonstrates that it has measures in place to ensure decent working and living conditions on board fishing vessels within in its own operations and/or supply chain.
- **Rationale:** Working on fishing vessels is labour intensive and considered one of the world's most dangerous occupations, responsible for more than 24,000 casualties per year.³⁶ Fishing companies and buyers can help improve working and living conditions on board fishing vessels by supporting the development and implementation of social responsibility standards that are in line with relevant ILO conventions in their own operations and/or on vessels in their supply chains (SDG targets 8.5, 8.7 and 8.8).
- **Elements:**
 - The company has a policy or code of conduct in line with relevant ILO conventions,³⁷ which requires decent working and living conditions on board fishing vessels in its own operations and/or supply chain. The policy should include, at a minimum, requirements for safe, healthy and hygienic conditions on board fishing vessels; access to sanitary facilities with

adequate privacy; potable water and food of sufficient quality and quantity; clearly defined working and resting hours; and freedom from violence and harassment. The policy can be developed by the company itself or based on industry initiatives, such as the Seafood Task Force Code of Conduct or the Responsible Fishing Vessel Standard.

- The company has systems in place to monitor compliance with the policy, and when cases of non-compliance are found, the company demonstrates the steps it takes to address them.
- **Sources:** amfori BSCI (2017), Conservation International (2019), Environmental Defense Fund, Rare/Meloy Fund, Encourage Capital (2018), Ethical Trading Initiative (2016), FAO (2016), Fishery-Progress.org (2020), Global Seafood Assurances (2020), GSSI and SSCI consultation document (2020), ILO (2007), ISSF (2020), KnowTheChain (2020), Seafood Task Force (2018), UNGC (2019).

D25. Respecting customary and indigenous rights

- **Indicator:** The company commits to respecting the rights of customary resource users and the rights of indigenous communities.
- **Rationale:** Local users of fisheries and aquatic resources, including indigenous people, have equal rights to economic resources defined by law or custom. Industrial seafood operations need to recognise and respect customary rights when sharing or targeting the same resources. Where there is joint use of fisheries and aquatic resources by industry and local communities, it is important for companies to respect local access and allocations or agreements with free, prior and informed consent (SDG targets 1.4, 2.1 and 14.B).

- **Elements:**
 - The company has a commitment to respect the rights of customary resource users, including indigenous communities.
 - The company demonstrates a process to assess the impact of its operations on customary resource users, including indigenous communities, and actively engages with them to mitigate potential negative impacts.
- **Sources:** ASC (2020), Conservation International (2019), Environmental Defense Fund, Rare/Meloy Fund, Encourage Capital (2018), FAO (1995), FAO (2015), FisheryProgress.org (2020), GAA (2020), MarinTrust (2017), United Nations (2007), UNGC (2019).

D26. Engagement with and support for local communities

- **Indicator:** The company has a process for engaging with local communities impacted by its own operations and supply chain and demonstrates activities that address the issues raised as a result of that engagement.
- **Rationale:** Seafood companies can have significant impacts – both positive and negative – on local communities through their own operations and supply chains. Companies interact with local communities through their environmental impacts such as air, land or water pollution, economic impacts through the provision of decent employment and training opportunities, and cultural impacts by respecting local customs and participating in local cultural activities. Negative impacts on local communities should be addressed according to a robust engagement process with

the affected communities, including grievance and remediation mechanisms, and followed by concrete actions to address those impacts (SDG targets 2.3 and 2.A).

- **Elements:**
 - The company commits to supporting local communities and demonstrates activities that promote community development.
 - The company identifies and engages with stakeholders and/or engages with vulnerable groups from communities when planning and implementing community support projects and programs.
 - The company tracks the progress of its activities and seeks to measure the impact of these activities on communities.
- **Sources:** ASC (2020), Conservation International (2019), Environmental Defense Fund, Rare/Meloy Fund, Encourage Capital (2018), FAO (1995), GAA (2020), GRI 413 (2016), MarinTrust (2017), UNGC (2019).

D27. Gender commitment in the supply chain

- **Indicator:** The company drives gender equality and women's empowerment in its supply chain.
- **Rationale:** It is estimated that women make up 50% of the global fishing and aquaculture workforce (primary production and post-harvest operations).³⁸ However, women commonly suffer from discrimination, abusive treatment, violence, sexual harassment, and poor and unsafe working conditions. Gender equality and women's empowerment should therefore be a key consideration for companies in the seafood industry. Core social indicator 14

Measurement area D: Social responsibility

(gender equality and women's empowerment fundamentals) requires companies to address this issue in their own operations. Therefore, this indicator focuses on supply chain performance by expecting companies to require their suppliers to work towards gender equality and women's empowerment and consider the needs of their women workers (SDG targets 5.1, 5.5 and 8.5).

- **Elements:**
 - The company requires and helps its suppliers to commit to gender equality and women's empowerment throughout their operations and to consider gender needs.
 - The company has targets on gender equality in its supply chain and tracks progress against these targets.
- **Sources:** Conservation International (2019), FAO (2013), FAO & Globefish (2015), GRI 204 (2016), GRI 414 (2016), Women's Empowerment Principles (n.d.), WBA (2020).

Acknowledgements



This methodology was not created in isolation, and WBA would like to thank those who helped shape the model and initial list of indicators. First, we are grateful to the members of our Expert Review Committee, and the organisations that support them, for their guidance and insights. Second, we would like to thank the organisations that provided guidance and documentation to strengthen the development of the indicators before and during the public consultation.

WBA is funded by governments, foundations and philanthropic organisations that share our vision for the future. We would like to thank them for their support, without which none of our work would be possible. A full list of WBA's funders is set out on the final page of this report.

Our continually growing alliance of more than 200 organisations represents civil society, business networks, financial institutions and multilateral organisations, with SDG 17 (partnerships for the goals) at its core. We would like to thank our Allies for their support and expertise, and we look forward to their continued contributions as we work towards publication of the second Seafood Stewardship Index.

Annex 1: Review and consultations

From 16 December 2020 to 31 January 2021, WBA held a public consultation on the draft methodology for the 2021 Food and Agriculture Benchmark. All interested stakeholders were invited to share their comments via email or an online feedback form. As a cornerstone of WBA's approach to actively facilitating and organising stakeholder conversations, we also held three public consultation webinars throughout January.

In total 22 stakeholders across multiple backgrounds and geographies participated in the webinars. Moreover, we received written feedback from 21 stakeholders, whereby 8 represented companies in scope of

the Seafood Stewardship Index, and 13 responses from other stakeholders including civil society organisations, consultants and industry associations.

Beyond the public consultation, WBA has engaged with stakeholders and experts, to collect input on the benchmark's scope, structure and draft indicators. A set of final draft indicators was presented to the ERC to discuss final recommendations and guidance before publication.

All feedback was compiled and used to finalise the methodology. The following table provides an overview per section of the main input and how it was incorporated.

TABLE 6: OVERVIEW OF MAIN FEEDBACK RECEIVED

Feedback	How the feedback was addressed
<p>Company selection</p> <p>Some of the companies selected for WBA's seafood index have very different activities which are not comparable, such as aquaculture and high seas fisheries. WBA should consider establishing sub-categories per industry sector.</p>	<p>WBA's Seafood Stewardship Index includes 30 seafood companies that were selected based on WBA's principles for keystone companies. As such, all companies have in common that they have a substantial impact on the sustainability of the seafood industry as a whole.</p>
<p>Focus on performance and impact</p> <p>The benchmark should focus on corporate performance and impact rather than commitments and policies.</p>	<p>The Seafood Stewardship Index will reward corporate performance and impact, for example through evidence for progress on targets, over commitments and policies.</p>
<p>Publication of the scoring guidelines</p> <p>SSI (and all stakeholders) would greatly benefit in publishing at the same time as the report, the full scoring guidelines and full score cards (including precisely how score were obtained/calculations) for all stakeholders to 'see'. This information should be made public (as much of it is an assessment of firms' transparency & openness).</p>	<p>As in the first iteration of the benchmark, scores, score cards and scoring guidelines will be published at the same time. This is to allow for a more accurate reflection of companies' practices.</p>

TABLE 7: OVERVIEW OF KEY INDICATOR FEEDBACK RECEIVED

Indicator	Comments received	Response
Engagement in policy advocacy	Add an element, “Company uses its influence to encourage its suppliers and relevant stakeholders to verifiably engage in advocacy efforts to strengthen environmental sustainability and social responsibility.”	Stakeholder feedback will be used the elements section as an example of engagement activities for companies.
Traceability system for seafood products and aquaculture feed ingredients	SSI should consider giving higher score for those firms displaying more solid verification tools and/or 3rd party-certified chains of custody certification.	Companies with Chain of Custody certification will be rewarded.
	This indicator should also assess the traceability of terrestrial ingredients in feed.	Traceability of terrestrial ingredients has been included in this indicator.
	Stakeholders provided suggestions of key data elements that should be disclosed publicly for farmed and wild-caught products.	The indicator has not been revised however, stakeholder feedback has been taken into account to improve the elements and draft scoring guide-lines.
Disclosure of the source of seafood products and marine feed ingredients	This indicator should take into account quality & level of ambition of the target based on the timeframe, whether the targets aligned with established standards (e.g., MSC, Seafood Watch), the scope/% of portfolio of the commitment/target.	This indicator has been removed.
Commitment to sustainable fisheries and aquaculture	<p>This indicator should take into account quality & level of ambition of the target based on the timeframe, whether the targets aligned with established standards (e.g., MSC, Seafood Watch), the scope/% of portfolio of the commitment/target.</p> <p>Recognized AIPs and FIPs should be accepted as a way to demonstrate sustainable sourcing.</p>	Stakeholder feedback has been taken into account to improve the elements and scoring guidelines so that the quality/level of ambition of the targets that companies set is reflected in the score.
Assessment of ecosystem impacts	This indicator is too vague for a meaning-full assessment.	This indicator has been deleted, however, an assessment of specific ecosystem impacts (target fish stocks, bycatch, endangered species and sensitive habitats) are included in the scoring guidelines of indicators B2-B5.

Indicator	Comments received	Response
Ocean plastics	This indicator is too broad if it includes both plastic packaging and ghost gear.	This indicator was revised to be more specifically focused on abandoned, lost or otherwise discarded fishing gear, and not about plastics use in general. The Food and Agriculture Benchmark methodology includes an indicator where companies are being assessed on plastic use and packaging.
Animal welfare	The inclusion of aquatic animal welfare more explicit.	Aquatic animal welfare has been included more explicitly in the indicator, elements and scoring guidelines.
Child labour	This indicator should apply the ILO convention C138 on minimum age for admission to employment of minimum 15 years old, in combination with the limitation of hazardous work that requires a minimum age of 18 for admission to work.	ILO conventions (including the C138) are incorporated into the indicator rationale. This indicator assesses the prevention of child labour; safe working conditions for young workers under 18 are assessed in indicator D22 "Health and safety of vulnerable groups"
Forced labour	Stakeholders flagged a number of issues as missing and/or not sufficiently covered by this indicator e.g., recruitment issues for migrant fishers, discrimination, debt bondage, abusive working condition, remedy for victims of forced labour, human trafficking, contractual nature of employment (worker agreements).	Specific issues salient to the seafood industry have been included in the elements section of this indicator to make it explicit that those issues are being considered in this indicator.
	The first couple of core social indicators seem to be some steps in human rights due diligence. Whereas for other labour and social issues, this principle of DD or assess/address does not seem to apply.	Indicator D20 on forced labour includes elements of due diligence.
Living wage	This indicator should require the company to specify which methodology it applies to determine the living wages in all its geographies it operates (example of tool/approach/organization used. Companies should not calculate this on their own, this should be done by a 3rd party to increase consistency and credibility of the number calculated.	This indicator will assess whether the company commits to pay a living wage for own operations and the supply chain. Further it will require companies to share how they determine a living wage for the regions where they operate. The onus will be on the companies to have an approach that is applicable to high seas fisheries and the use migrant workers. These approaches will then be considered to what extent that these commitments are aligned with the key definitions of a living wage.
	Concern about incentivizing suppliers to do so although they are the ones who control the price i.e., if they are not paying their suppliers more while forcing them to pay living wage could create some negative incentives.	Concern about incentivizing suppliers to do so although they are the ones who control the price i.e., if they are not paying their suppliers more while forcing them to pay living wage could create some negative incentives.

Indicator	Comments received	Response
Health and Safety	This indicator should consider how companies address this issue with regards to vul-nerable groups.	Following stakeholder feedback, this indicator has been revised and will focus on health and safety for vulnerable groups specifically.
	Unlike in other indicators, this health and safety indicator does not appear to ask companies to describe efforts to promote health and safety of workers in opera-tions/supply chain.	Following stakeholder feedback, this indicator has been revised and will focus on health and safety for vulnerable groups specifically. This now also includes efforts to promote health and safety for vulnerable groups. Furthermore, the indicator D24 focuses on decent working and living condi-tions on-board fishing vessels, which also includes health and safety aspects.
	The indicator only asks companies to dis-close commitment and health and safety statistics (such as injury and fatality rates). However, there are many important as-pects of health and safety measures that are not captured by these standards statis-tics but are important (such as covid-19-related health and sanitation measures).	Health and safety performance by companies will be included in the revised indicator D22 on health and safety for vulnerable groups, as well as the indicator D24 that focuses on decent working and living conditions on-board fishing vessels.
Respecting customary (indigenous) rights	<p>This indicator does not apply for high seas fishing activities.</p> <p>This indicator should include customary rights, which is appropriate for this bench-mark. It raises awareness and will lead to companies researching and paying more attention to this topic.</p>	The indicator has been revised to take into account both indigenous rights and customary rights. Ad-dressing the feed-back that for some companies both concepts might not apply, the scoring guide-lines are revised to reward companies that com-mit to either indigenous or customary rights.
Supporting development of local communities	Companies should be expected to conduct consultations with communities before, during and after it has operated in their area. Companies should be transparent about the number of complaints received from communities and how these are ad-dressed/handled/closed.	This indicator has been revised to look at 1) com-munities in general that are affected by a compa-ny's activities 2) the process that companies have in place to engage with affected communities, including the outcomes of this process, activities implemented and progress tracking.
	The definition of local communities should be broadened to not only focus on local communities in the vicinity of operations but on the wider community. When it comes to fisheries and aqua-culture opera-tions, communities further away, down-stream a river or along the ocean can be adversely affected due to pollution, over-fishing or escapes of fish etc.	The definition of local communities has been re-vised and is now based on GRI's definition of local communities, that has a broader focus.

Indicator	Comments received	Response
Gender commitment in the supply chain.	Stakeholders had questions as to why this indicator only focused on the supply chain and not own operations.	The indicator rationale has been revised to clarify that companies are assessed on gender equality within their own operations as part of the core social indicators. This indicator has a more specific focus on what companies do to support gender equality and women's empowerment in its supply chain.

Annex 2: WBA guiding principles



WBA developed a set of principles to guide its work and reflect its values and mission (see Table 8). These principles were formed in collaboration with global stakeholders throughout the consultation phase and were refined using input and feedback from roundtable consultations, online surveys and expert meetings.

The principles are divided into three categories: operational principles that explain how WBA functions; benchmark development principles that address how the benchmarks are designed; and content principles that cover what the benchmarks assess. Currently, the guiding principles reflect the outcomes and findings from WBA's global consultation phase. However, the world is rapidly changing, and additional insights and perspectives are likely to emerge over time. Consequently, these principles may evolve – in consultation with stakeholders – to reflect new findings and realities.



TABLE 8: WBA GUIDING PRINCIPLES

Operational principles	
Inclusive	WBA actively engages with and involves all stakeholders in building the Alliance and the benchmarks.
Impartial	WBA and its benchmarks are equally responsive to all stakeholders.
Independent	WBA and its benchmarks are independent from the industries and companies they assess.
Focused on impact	WBA and its benchmarks promote dialogue and measure impact on the SDGs to create positive change.
Collaborative	WBA collaborates with stakeholders and Allies to enhance alignment of corporate performance with internationally agreed sustainability objectives.
Free and publicly available	WBA is a public good, and its benchmarks and methodologies are free and publicly available to all.
Benchmark development principles	
Relevant	WBA benchmarks focus on sustainable development issues most relevant to industries' core businesses and on the industries and companies that can make the most significant, actionable and unique contributions to these issues.
Clear in method and intent	WBA benchmarks are transparent about their methodology, development processes and results.
Complementary	WBA benchmarks build upon the work done by others, adding further value with a focus on SDG impact.
Responsive and iterative	WBA benchmarks are updated regularly to reflect evolving stakeholder expectations, policies, developments and company performance.
Content principles	
Balanced	WBA benchmarks assess both positive and negative impacts that companies might have on the SDGs.
Reflective of societal expectations	WBA benchmarks reflect the extent to which companies' performance on relevant SDGs aligns with stakeholders' expectations.
Forward-looking	WBA and its benchmarks engage and assess companies on their current performance on the SDGs and on exposure to sustainability risks and future opportunities.

Annex 3: SDG targets in scope of the benchmark

SDG	Rationale	Relevant targets
	<p>Developing countries earn considerably more from seafood exports than from any other major food commodity, such as rubber, cocoa, coffee or sugar. Also, about 60% of all inter-national seafood trade originates in developing countries. Locating seafood-processing activities and sourcing seafood products from local communities and small-scale producers can contribute to employment and improve people’s livelihoods in low-income countries.</p>	<p>1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.</p>
	<p>Fish is an extremely nutritious and vital source of protein and essential nutrients, especially for people living in poverty. Approximately 3 billion people, mostly in developing countries, are dependent on seafood for their animal protein intake. Sustainable seafood production contributes to food and nutrition security on a global level. Ensuring local availability, accessibility and utilisation of highly nutritious seafood can further contribute to food security in local communities.</p>	<p>2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.</p> <p>2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.</p> <p>2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.</p> <p>2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilisation of genetic resources and associated traditional knowledge, as internationally agreed.</p> <p>2A. Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.</p>

SDG	Rationale	Relevant targets
 <p>5 GENDER EQUALITY</p>	<p>Women play an important role in the handling, processing and marketing of fish products. The percentage of women engaged in secondary activities, such as processing work and often for low-paid and very labour-intensive work, can be up to 90%. Promoting gender equality in the sector contributes to women’s full and effective participation, as well as provides equal opportunities for those who are active across the seafood supply chain.</p>	<p>5.1 End all forms of discrimination against all women and girls everywhere.</p> <p>5.2 Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation.</p> <p>5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.</p>
 <p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>Around 60 million people are engaged in the primary sector of capture fisheries and aquaculture. About 660-880 million people depend on the seafood industry for their livelihoods. The industry relies heavily on the labour of low-skilled or unskilled workers. For areas of production with narrow profit margins, measures to advance decent work are needed to protect workers’ human rights, secure their physical safety and help improve their status. Labour-intensive activities, such as value-added processing, can also contribute to employment creation and economic growth.</p>	<p>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value-added and labour-intensive sectors.</p> <p>8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the ten-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.</p> <p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.</p> <p>8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.</p> <p>8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in pre-carious employment.</p>

SDG	Rationale	Relevant targets
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>Global food losses and food waste in seafood supply chains are estimated at 35%. In fishing, the efficient use of natural resources requires that target stocks be well managed and that the by-catch and discards that occur frequently are monitored and mitigated, particularly for protected and threatened species. In aquaculture, and generally across the supply chain, responsible production leads to a reduction in food losses and waste discharges.</p>	<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.3 By 2030, halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains, including post-harvest losses.</p> <p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment.</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.</p>
 <p>14 LIFE BELOW WATER</p>	<p>Overfishing is considered the second largest threat to the oceans after climate change. In 2014, almost 30% of wild fish stocks were considered overfished, 60% were fully exploited and only 10% could be expected to allow further growth. In particular, illegal, unreported and unregulated fishing is an important threat to marine ecosystems, undermining national and regional sustainability and marine biodiversity measures. Managing fisheries responsibly and ensuring that products come from traceable sources can contribute to the sustainable use of oceans and marine resources.</p>	<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.</p> <p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.</p> <p>14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.</p> <p>14.A Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing states and least developed countries.</p> <p>14.B Provide access for small-scale artisanal fishers to marine resources and markets.</p>

SDG	Rationale	Relevant targets
	<p>Aquaculture has overtaken wild-caught fish in terms of worldwide consumption. If managed poorly, aquaculture can have negative impacts on ecosystems. Sustainable management of aquaculture and efficient use of inputs (e.g. feed, water, therapeutants) can contribute to the sustainable use of terrestrial ecosystems and prevent land degradation and biodiversity loss.</p>	<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p> <p>15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.</p>
	<p>Companies can contribute to this overarching SDG by participating in multi-stakeholder partnerships that work towards a more sustainable seafood industry.</p>	<p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.</p> <p>17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.</p>

Annex 4: Key concepts and definitions

Abandoned, lost or otherwise discarded fishing gear (ALDFG)

The FAO refers to abandoned, lost or otherwise discarded fishing gear and ghost fishing as follows:

- ‘Abandoned fishing gear: fishing gear that is deliberately left at sea with no intention by fishers to retrieve it, for whatever reason.
- Discarded fishing gear: fishing gear or parts thereof that is deliberately thrown overboard without any intention for further control or recovery.
- Lost fishing gear: the accidental loss of fishing gear at sea.
- Ghost fishing: the capture of marine organisms by lost, abandoned or otherwise discarded fishing gear or parts thereof. Effectively, the capture of fish and other species that takes place after all control of fishing gear is lost by a fisher. For example, a lost, abandoned or discarded gillnet might continue to fish with consequent mortality to the enmeshed fish. Ghost fishing is often cyclical, and the pattern, duration and extent will depend on a large number of factors including the gear type, water depth, currents and local environment.’⁴⁹

Animal welfare

Animal welfare is the ‘physical and mental wellbeing of animals and the freedom to express behaviors that are important to them.’⁵⁰ Most often, the Five Freedoms (Freedom from Hunger and Thirst, Freedom from Discomfort, Freedom from Pain, Injury or Disease, Freedom to Express Normal Behaviour and Freedom from Fear and Distress) are used to demonstrate the attributes of good animal welfare.

Antibiotics

The FAO defines antibiotics as ‘drugs of natural or synthetic origin that have the capacity to kill or to inhibit the growth of micro-organisms. Antibiotics that are sufficiently non-toxic to the host are used as chemotherapeutic agents in the treatment of infectious diseases of humans, animals and plants.’⁵¹

By-catch

By-catch is the ‘incidental capture and mortality of non-target marine animals during fishing.’⁵²

Child labour and child work

‘A “child” is anyone under the age of 18 as defined by the Convention on the Rights of the Child. A child can “work” at an earlier age than 18 as specified in ILO Convention 138 Minimum Age for Admission to Employment (1973) – i.e. if the age is above the age for finishing compulsory schooling, is in any case not less than 15 years of age (and at 14 years of age in specific circumstances in developing countries) and as long as it is not “hazardous work.” “Child labour” is work by people under 18 (“children”) that is not permitted (as set out above). “Child work” is work by people under 18 (“children”) that is permitted. Child work is carried out by “young workers.”’⁵³

Conversion-free operations

The Accountability Framework initiative defines conversion-free operations as ‘commodity production, sourcing or financial investments that do not cause or contribute to the conversion of natural ecosystems.’ No conversion refers to no gross conversion of natural

ecosystems, which the Accountability Framework initiative specifies as ‘the appropriate policy and goal on this topic for companies and supply chains.’⁵⁴

Customary rights

Customary rights are resource use rights defined by the law, local tradition or indigenous rights and status. Customary rights arise from a ‘behaviour or act that is repeated over time under the belief that it is obligatory and due to repetition and acceptance, acquire the force of law within a geography or society.’⁵⁵

Diseases

A disease in aquaculture is a ‘clinical or non-clinical infection with an etiological agent’⁵⁶ (e.g. bacteria, viruses, parasites). In addition to their impact on farmed fish, diseases can be transferred, thereby creating a risk to the health of wild fish in surrounding ecosystems.

Endangered species

Endangered species are threatened with extinction at the population level as determined by authorities and found on lists prepared under international agreements. These include the IUCN Red List with ‘vulnerable’, ‘endangered’ or ‘critically endangered’ status⁵⁷ and the CITES Appendices I, II and III.⁵⁸ Appendix I includes the definition of endangered, threatened and protected species by the Marine Stewardship Council.⁵⁹

Escapes

Escapes of farmed fish, shrimp and shellfish into the wild ‘could lead through interbreeding to the alteration of the gene pools of local crustacean or fish populations. Escapes of non-native species could also lead to competition with native species for food and/or habitat, and possibly have other detrimental ecological consequences. Diseases can also be transmitted from escapees to wild fish.’⁶⁰

Forced labour

‘Forced labour refers to situations in which persons are coerced to work through the use of violence or intimidation, or by more subtle means such as accumulated debt, retention of identity papers or threats of denunciation to immigration authorities. Forced labour, contemporary forms of slavery, debt bondage and human trafficking are closely related terms though not identical in a legal sense. Most situations of slavery or human trafficking are, however, covered by the ILO’s definition of forced labour (see ILO Forced Labour Convention, 1930 (No. 29) and Abolition of Forced Labour Convention, 1957 (No. 105)).’⁶¹

Free, prior and informed consent

Free, prior and informed consent (FPIC) is a specific right pertaining to indigenous peoples that allows them to ‘give or withhold consent to a project that may affect them or their territories. Once they have given their consent, they can withdraw it at any stage. Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated.’⁶²

Human rights

Human rights are ‘basic international standards aimed at securing dignity and equality for all. Every human being is entitled to enjoy them without discrimination. They include the rights contained in the International Bill of Human Rights. They also include the principles concerning fundamental rights at work set out in the ILO’s Declaration on Fundamental Principles and Rights at Work.’⁶³

Illegal, unreported and unregulated fishing

‘Illegal, unreported and unregulated (IUU) fishing is a broad term that captures a wide variety of fishing activity. IUU fishing is found in all types and dimensions of fisheries; it occurs both on the high seas and in areas within national jurisdiction. It concerns all aspects and stages of the capture and utilisation of fish, and it may sometimes be associated with organised crime. IUU fishing activities are classified as follows:

Illegal fishing:

- conducted by national or foreign vessels in waters under the jurisdiction of a state, without the permission of that state, or in contravention of its laws and regulations
- conducted by vessels flying the flag of states that are parties to a relevant regional fisheries management organisation but operate in contravention of the conservation and management measures adopted by that organisation and by which the states are bound, or relevant provisions of the applicable international law, or
- in violation of national laws or international obligations, including those undertaken by cooperating states to a relevant regional fisheries management organisation.

Unreported fishing:

- which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations, or
- are undertaken in the area of competence of a relevant regional fisheries management organisation which have not been reported or have been misreported, in contravention of the reporting procedures of that organisation.

Unregulated fishing:

- in the area of application of a relevant regional fisheries management organisation that are conducted by vessels without nationality, or by those flying the flag of a state not party to that organisation, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organisation, or
- in areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with state responsibilities for the conservation of living marine resources under international law.⁶⁴

Indigenous rights

The United Nations Declaration on the Rights of Indigenous Peoples, adopted in 2007, provides legal rights for peoples with indigenous origins or identity and establishes a universal framework of minimum standards for the survival, dignity and well-being of the indigenous peoples of the world.⁶⁵

Livelihoods

‘Livelihoods allow people to secure the basic necessities of life, such as food, water, shelter and clothing.’⁶⁶

Living wage

‘There are numerous definitions of a living wage, but the core concept is to provide a decent standard of living for a worker and his or her family. A living wage is sufficient to cover food, water, clothing, transport, education, health care and other essential needs for workers and their family, based on a regular work week not including overtime hours.’⁶⁷

Local communities

A local community is defined as ‘persons or groups of persons living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by an organisation’s operations. The local community can range from persons living adjacent to an organisation’s operations to those living at a distance who are still likely to be impacted by these operations.’⁶⁸

Marine ingredients

Marine ingredients are mainly used for human consumption and animal feed and are derived from ‘forage fish and marine organisms such as fish, krill, shellfish and algae.’⁶⁹ Within the scope of the Seafood Stewardship Index, marine ingredients also include wild-captured fish as well as organisms from freshwater fisheries and aquaculture.

Medicine use

‘Any substance or combination of substances presented for treating or preventing disease in animals or which may be administered to animals to restore health, and correct or modify physiological functions in animals.’⁷⁰

Small-scale producers

Small-scale producers include fisheries and aquaculture operations along with self-employed smallholders operating locally and accessing local fish resources to harvest or prepare fish for direct consumption within local households and commercial sale.^{71,72}

Stewardship

Stewardship can be understood as ‘the responsible use, including conservation, of natural resources in a way that takes full and balanced account of the interests of society, future generations and other species, as well as of private needs, and accepts significant answerability to society.’⁷³ Stakeholder consultations revealed that the definition of stewardship should go beyond the responsible use of natural resources to include other dimensions such as community engagement, human rights and labour practices, and fair operating practices. Some ways that seafood companies can demonstrate stewardship are by efficiently using natural resources, sourcing materials from sustainable origins and operating ethically, for example ensuring decent working conditions for all employees and respecting local communities.

Supply chain

Supply chains are seen as the ‘route that the seafood takes from the time that it is in contact with a fisher/farmer to the final product form that it takes when it is sold to the end consumer.’⁷⁴ When the Seafood Stewardship Index indicators refer to supply chains where a company is active, this includes all its seafood supply chain business relationships. This means that companies are expected to look beyond tier 1 suppliers. For marine and terrestrial ingredients that are used for aquaculture feed production, supply chains can be seen as the route that ingredients take from harvesting to the final product. This supply chain also includes companies that sell aquaculture products that have been farmed with feed produced from these marine and terrestrial ingredients.

Target catch

Target catch refers to ‘catch of a species, a particular size or sex, or an assemblage of species that is primarily sought in a fishery, such as shrimp in a shrimp fishery or mature female fish in a roe fishery. The definition of targeted catch within a fishery is not static, as in a multi-species fishery, the mix of species targeted and caught may change over time.’⁷⁵

Terrestrial ingredients

Terrestrial ingredients in aquaculture feeds are animal and vegetable products from land-based sources. Examples of terrestrial ingredients are poultry and livestock by-products (e.g. meat, bone meal), cereal grains and oils (e.g. soya, rice bran, palm oil).

Traceability

The Seafood Stewardship Index addresses full traceability of seafood products, as well as marine and terrestrial ingredients for aquaculture feed production across the supply chain. This includes both internal and external traceability. Internal traceability includes tracking and preserving of information about batches or units of seafood through a company’s facilities, such as aggregating, disaggregating, transforming, transporting or otherwise altering of batches of seafood. External traceability refers to ‘the ability to track key data elements and other information about a seafood product as it moves between trading partners and through the supply chain. At a minimum, external traceability is one-up, one-down traceability.’⁷⁶

Vulnerable groups

Vulnerable groups in the food and agriculture sector are particularly at risk of occupational injury and illness and include migrant and temporary labourers, women and young farmers.

Well-managed fisheries

A well-managed fishery meets the FAO definition of fisheries management and demonstrates an ‘integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and formulation and implementation, with enforcement as necessary of regulations or rules which govern fisheries activities in order to ensure the continued productivity of the resources and accomplishment of other fisheries objectives.’⁷⁷ For assurance, companies sourcing seafood often look for sources that are certified.

Annex 5: Key resources and references

	Date	Author(s)
Principles and normative standards		
State guidance		
FAO Code of Conduct for Responsible Fisheries	1995	Food and Agriculture Organization
FAO Guidelines for Ecolabelling in the Wild Capture Seafood Sector	2009	Food and Agriculture Organization
FAO Technical Guidelines on Aquaculture Certification	2011	Food and Agriculture Organization
FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication	2015	Food and Agriculture Organization
C188 - Work in Fishing Convention	2008	International Labour Organization
ILO Decent Work Indicators, 2nd version (2013)	2013	International Labour Organization
United Nations Declaration on the Rights of Indigenous Peoples	2007	United Nations
Good Practice Guidelines on National Seafood Traceability Systems	2018	Food and Agriculture Organization
FAO Voluntary Guidelines for Catch Document Schemes	2017	Food and Agriculture Organization
Private sector guidance		
UN Guiding Principles on Business and Human Rights	2011	United Nations
SDG Impact Standards for Enterprises	2020	United National Development Pro-gram
SDGD Recommendations	2020	Adams, Druckman and Picot
Toward Common Metrics and Consistent Reporting of Sustainable Value Creation	2020	World Economic Forum
SASB Standards	2018	SASB
Seafood/ocean-specific private sector guidance		
WWF Traceability Principles for Wild-Caught Fish Products	2015	World Wildlife Fund
Future of Fish - Five Core Functions of Traceability Principles	2016	Future of Fish

	Date	Author(s)
Principles for Investment in Sustainable Wild Capture Fisheries	2018	Consortium of impact investors and NGOs
Science Based Targets for Nature Initial Guidance for Business	2020	Science Based Targets for Nature
Global Salmon Initiative Handbook for Sustainable Salmon Farming	2020	Global Salmon Initiative
Conservation Alliance for Seafood Solutions Common Vision	2019	Conservation Alliance for Seafood Solutions
UN Global Compact Sustainable Ocean Principles	2019	UN Global Compact
UN Global Compact Sustainable Ocean Principles: Aquaculture Practical Guidance	2020	UN Global Compact
UN Global Compact Sustainable Ocean Principles: Fisheries Practical Guidance	2021	UN Global Compact
Global Dialogue for Seafood Traceability Standard	2020	Global Dialogue for Seafood Trace-ability
Social Responsibility Assessment Tool	2019	Conservation International
ISSF Conservation Measures and Commitments	2019	International Sustainable Seafood Foundation
Risk Assessment and Control of IUU Fishing for the Marine Insurance Industry	2018	PSI and Oceana
Risk Assessment and Verification of Catch Certificates under the EU IUU Regulation	2016	EJF, Oceana, Pew, WWF
PAS 1550: Exercising Due Diligence in Establishing the Legal Origin of Seafood Products and Marine Ingredients	2017	British Standards Institution
FisheryProgress.org Social Policy (draft)	2020	FisheryProgress.org
Seafood Task Force Code of Conduct (members) + Vessel Auditable Standard	2018	Seafood Task Force
Seafish Risk Assessment for Sourcing Seafood	2020	Seafish
Aquatic Animal Health Code	2019	World Organization for Animal Health
Welfare indicator for farmed Atlantic Salmon	2018	FishWell
Roadmap for Improving Seafood Ethics (RISE)	2019	FishWise
Traceability - Next Steps for Business	2017	FishWise
Future of Fish - Traceability Tool Kit	Various	Future of Fish

	Date	Author(s)
Corporate reporting frameworks		
amfori BSCI Code of Conduct	2017	Business Social Compliance Initiative
Ethical Trading Initiative Base Code	2016	Ethical Trading Initiative
Reporting Framework for the UN Guiding Principles on Business and Human Rights	2015	United Nations
Global Reporting Initiative	2018	Global Reporting Initiative
Seafood-specific corporate reporting frameworks		
Ocean Disclosure Project	N/A	Sustainable Fisheries Partnership
Fishery Improvement Program Oversight: FisheryProgress.org	N/A	FisheryProgress.org
Global Tuna Alliance KPIs	2020	Global Tuna Alliance
ISSF Conservation Measures and Commitments	2019	International Sustainable Seafood Foundation
ISSF Pro-Active Vessel Registry	N/A	International Sustainable Seafood Foundation
GSI Sustainability Report – Sustainability Indicators	N/A	Global Salmon Initiative
GRI Universal Standards	2020	Global Reporting Initiative
Certification standards and ratings		
Alaska Responsible Fisheries Management standard v2.1	2020	Alaska Seafood Marketing Institute
Iceland Responsible Fisheries Management standards v2.0	2016	Iceland Responsible Fisheries scheme
G.U.L.F Responsible Fisheries Management standard v1.2	2018	Audubon Nature Institute
MEL Fisheries Management Standard v2.0	2018	MEL Japan
Marine Stewardship Council Fisheries Standard v2.01	2018	Marine Stewardship Council
MSC Chain of Custody Standard v5.0	2019	Marine Stewardship Council

	Date	Author(s)
Aquaculture Stewardship Council Standards	Various	Aquaculture Stewardship Council
Global Aquaculture Alliance Standards	Various	Global Aquaculture Alliance
IFFO RS/MarinTrust Standard	2017	MarinTrust
Fair Trade USA Capture Fisheries Standard New Draft	2020	Fair Trade
Responsible Fishing Vessel Standard	2020	Global Seafood Assurances
GLOBALG.A.P. Aquaculture standard	2017	GLOBALG.A.P.
Seafood Watch Standards	Various	Monterey Bay Aquarium
Good Fish Foundation Methodology	2020	Good Fish Foundation
FishSource		Sustainable Fisheries Partnership
Sustainability Accounting Standards Board Standards	Various	Sustainability Accounting Standards Board
Roundtable on Sustainable Palm Oil Standard	2018	Roundtable on Sustainable Palm Oil
Sedex Members Ethical Trade Audit Measurement Criteria version 6.1	2019	Sedex
SA8000 standard	2019	Social Accountability International
Other benchmarks		
WBA's Social Transformation Benchmark	2021	World Benchmarking Alliance
WBA's Food and Agriculture Benchmark	2021	World Benchmarking Alliance
KnowTheChain	2020	KnowTheChain
WBA's Corporate Human Rights Benchmark	2020	World Benchmarking Alliance
Coller FAIRR Index Methodology	2020	FAIRR
GSSI Global Benchmark Tool	2015	Global Sustainable Seafood Initiative
SSCI At-Sea Operations Draft Social Criteria	2020	Consumer Goods Forum, Global Sustainable Seafood Initiative and Sustainable Supply Chain Initiative

Annex 6: Other references

- 1 Teh, L.C.L., U.R. Sumaila, (2011) "Contribution of marine fisheries to worldwide employment" Fish and Fisheries, Volume 14, issue 1. Available at: <https://doi.org/10.1111/j.1467-2979.2011.00450.x>.
- 2 Food and Agriculture Organization of the United Nations (2020) "The State of World Fisheries and Aquaculture 2020 Sustainability in Action." Available at: <http://www.fao.org/3/ca9229en/ca9229en.pdf>.
- 3 EAT-Lancet Commission (2019) "Food Planet Health." Available at: https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf.
- 4 Index Initiative (2015) "Unraveling the role of the private sector." Available at: <https://www.worldbenchmarkingalliance.org/research/unraveling-the-role-of-the-private-sector/>.
- 5 Österblom, H., J.B. Jouffray, C. Folke, et al. "Transnational Corporations as 'Keystone Actors' in Marine Ecosystems" PLoS ONE 10(5): e0127533. Available at: <https://doi.org/10.1371/journal.pone.0127533>.
- 6 Worrell, R., and M. Appleby, "Stewardship of natural resource: Definition, ethical and practical aspects," Journal of Agriculture and Environmental Ethics, vol. 12, pp. 263-277, 2000.
- 7 Österblom, H., J.B. Jouffray, C. Folke, et al. "Transnational Corporations as 'Keystone Actors' in Marine Ecosystems" PLoS ONE 10(5): e0127533. Available at: <https://doi.org/10.1371/journal.pone.0127533>.
- 8 Undercurrent News (2020) "World's 100 Largest Seafood Companies 2020."
- 9 Ibid.
- 10 Food and Agriculture Organization of the United Nations (2020) "The State of World Fisheries and Aquaculture 2020 Sustainability in Action." Available at: <http://www.fao.org/3/ca9229en/ca9229en.pdf>.
- 11 Consortium for Wildlife Bycatch Reduction (2014) "What is Bycatch?" Available at: <https://www.bycatch.org/about-bycatch>. [Accessed December 2020]
- 12 Food and Agriculture Organization of the United Nations (2018) "Reaching an important milestone in reducing dangerous ghost gear". Available at: <http://www.fao.org/news/story/en/item/1099767/icode/>. [Accessed 15 December 2020]
- 13 Barilla Centre for Food and Nutrition (2019) "Fixing the Business of Food - The Food Industry and the SDG Challenge." Available at: <https://www.barillacfn.com/m/publications/fixing-business-of-food-eng.pdf>.
- 14 Food and Agriculture Organization of the United Nations (2020) "The State of the World's Forests." Available at: <http://www.fao.org/state-of-forests/en/>.
- 15 Pendrill, F.U., M. Persson, J. Godar et al. (2019) "Agricultural and forestry trade drives large share of tropical deforestation emissions." Global Environmental Change 56:1-10. Available at: <https://doi.org/10.1016/j.gloenvcha.2019.03.002>.
- 16 Food and Agriculture Organization of the United Nations (2020) "The State of World Fisheries and Aquaculture 2020 Sustainability in Action." Available at: <http://www.fao.org/3/ca9229en/ca9229en.pdf>.
- 17 World Animal Protection "Animals in farming: supporting 70 billion animals". Available at: <https://www.worldanimalprotection.org/our-work/animals-farming-supporting-70-billion-animals>. [Accessed June 2020]
- 18 Mood, A., P. Brooke (2012) "Estimating the Number of Farmed Fish Killed in Global Aquaculture Each Year." Available at: <http://fishcount.org.uk/published/std/fishcountstudy2.pdf>. [Accessed January 2021]
- 19 World Animal Protection "Animals in farming: supporting 70 billion animals". Available at: <https://www.worldanimalprotection.org/our-work/animals-farming-supporting-70-billion-animals>. [Accessed June 2020]

- 20 World Resources Institute (WRI) [online]. Available at: <https://www.wri.org/news/2014/06/release-farmed-fish-production-must-more-double-2050-new-analysis-finds>. [Accessed January 2021]
- 21 As defined by the World Health Organization. Critically Important antibiotics for human use 5th revision. Geneva, 2017. Available at: <http://www.who.int/foodsafety/publications/antimicrobials-fifth/en/>. [Accessed January 2021]
- 22 Felipe C. Cabello (2006). "Heavy use of prophylactic antibiotics in aquaculture: a growing problem for human and animal health and for the environment". Available at: <https://sfamjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1462-2920.2006.01054.x>. [Accessed January 2021]
- 23 EJF, Oceana, Pew Charitable Trusts and WWF (2016) "Risk Assessment and Verification of Catch Certificates under the EU IUU Regulation." Available at: <http://www.iuuwatch.eu/wp-content/uploads/2016/07/Risk-Assessment-FINAL.DEC16.pdf>.
- 24 comparative study of key data elements in import control schemes aimed at tackling illegal, unreported and unregulated fishing in the top three seafood markets: the European Union, the United States and Japan." Available at: <https://europe.oceana.org/sites/default/files/cds-study-web.pdf>.
- 25 Food and Agriculture Organization of the United Nations (2016) "Illegal, unreported and unregulated fishing." Available at: <http://www.fao.org/3/a-i6069e.pdf>.
- 26 International Labour Organization (ILO) (2017) "Ending child labour by 2025: A review of policies and programmes." Available at: https://www.ilo.org/ipec/Informationresources/WCMS_IPEC_PUB_29875/lang--en/index.htm. [Accessed September 2020]
- 27 International Labour Organization (ILO) "Information System of International Labour Standards: C138 – Minimum Age Convention, 1973 (no. 138)." Available at: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C138#:text=The%20minimum%20age%20for%20admission%20to%20any%20type%20of%20employment,2. [Accessed September 2020]
- 28 International Labour Organization (2021) "Forced labour and human trafficking in fisheries." Available at: <https://www.ilo.org/global/topics/forced-labour/policy-areas/fisheries/lang--en/index.htm>. [Accessed February 2021]
- 29 FishWise (2018) "The links between IUU fishing, human rights, and traceability." Available at: <https://fishwise.org/wp-content/uploads/2018/03/The-Links-between-IUU-fishing-human-rights-and-traceability.pdf>.
- 30 Seafish (2015) "An assessment of ethical issues impacting on the UK seafood supply chain: Literature review." Available at: <https://www.seafish.org/document/?id=fab9c034-3be2-4aa4-8fe8-cea120dd5bb7>. [Accessed February 2021]
- 31 Food and Agriculture Organization of the United Nations (2016) "Scoping study on decent work and employment in fisheries and aquaculture: Issues and actions for discussion and programming." Available at: <http://www.fao.org/3/a-i5980e.pdf>.
- 32 Food and Agriculture Organization of the United Nations (2020) "The State of World Fisheries and Aquaculture 2020 Sustainability in Action." Available at: <http://www.fao.org/3/ca9229en/ca9229en.pdf>.
- 33 Ibid.
- 34 Food and Agriculture Organization of the United Nations (FAO) (2013) "Guidance on addressing child labour in fisheries and aquaculture." Available at <http://www.fao.org/3/i3318e/i3318e.pdf>. [Accessed February 2020]
- 35 Oxfam (2018) "A living income for small-scale farmers – tackling unequal risks and market power." Available at: <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620596/dp-living-income-small-scale-farmers-151118-en.pdf>. [Accessed January 2021]
- 36 Food and Agriculture Organization of the United Nations (2016) "Scoping study on decent work and employment in fisheries and aquaculture: issues and actions for discussion and programming." Available at: <http://www.fao.org/3/a-i5980e.pdf>.

- 37 International Labour Organization (2007) “C188 – Work in Fishing Convention.” Available at: https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C188. [Accessed February 2021]
- 38 Food and Agriculture Organization of the United Nations (2020) “The State of World Fisheries and Aquaculture 2020 Sustainability in Action.” Available at: <http://www.fao.org/3/ca9229en/ca9229en.pdf>.
- 39 Food and Agriculture Organization of the United Nations (2018) “The State of the World Fisheries and Aquaculture 2018.” Available at: <http://www.fao.org/3/I9540EN/i9540en.pdf>.
- 40 Ibid.
- 41 Food and Agriculture Organization of the United Nations (2014) “The State of the World Fisheries and Aquaculture 2014.” Available at: <http://www.fao.org/3/a-i3720e.pdf>.
- 42 <https://www.worldwildlife.org/industries/sustainable-seafood>.
- 43 FAO Globefish (2015) “The Role of Women in the Seafood Industry.” Available at: <http://www.fao.org/3/a-bc014e.pdf>.
- 44 Food and Agriculture Organization of the United Nations (2016) “The State of the World Fisheries and Aquaculture 2016.” Available at: <http://www.fao.org/3/a-i5692e.pdf>.
- 45 Food and Agriculture Organization of the United Nations (2018) “The State of the World Fisheries and Aquaculture 2018.” Available at: <http://www.fao.org/3/I9540EN/i9540en.pdf>.
- 46 Food and Agriculture Organization of the United Nations (2017) “7 reasons why we need to act now to #SaveOurOcean” Available at: <http://www.fao.org/zhc/detail-events/en/c/846698/>. [Accessed December 2020]
- 47 Food and Agriculture Organization of the United Nations (2011) “Global food losses and food waste – Extent, causes and prevention.” Available at: <http://www.fao.org/3/a-i2697e.pdf>.
- 48 Food and Agriculture Organization of the United Nations (2014) “The State of the World Fisheries and Aquaculture 2014.” Available at: <http://www.fao.org/3/a-i3720e.pdf>.
- 49 Food and Agriculture Organization of the United Nations (2009) “Abandoned, lost or otherwise discarded fishing gear” FAO Fisheries and Aquaculture Technical Paper No. 523. Available at: <http://www.fao.org/3/i0620e/i0620e00.htm>.
- 50 Farm Animal Welfare Methodology Report.” Available at: https://www.bbfaw.com/media/1790/bbfaw_methodology_report_2019.pdf.
- 51 Food and Agriculture Organization of the United Nations (2005) “Responsible use of antibiotics in aquaculture.” Available at: <http://www.fao.org/3/a-a0282e.pdf>.
- 52 Consortium for Wildlife Bycatch Reduction (2014) “What is Bycatch?” Available at: <http://www.bycatch.org/about-bycatch>. [Accessed December 2020]
- 53 Corporate Human Rights Benchmark (CHRB) (2020) “Corporate Human Rights Benchmark Methodology 2020 - For the Agricultural Products, Apparel and Extractives Industries.” Available at: <https://www.corporatebenchmark.org/sites/default/files/CHRB%202020%20Methodology%20AGAPEX%2028Jan2020.pdf>.
- 54 Accountability Framework (2020) “Definitions.” Available at: <https://accountability-framework.org/the-framework/contents/definitions/>. [Accessed December 2020]
- 55 Ibid.
- 56 Food and Agriculture Organization of the United Nations (2007) “Aquaculture Development - 2. Health management for responsible movement of live aquatic animals.” Available at: <http://www.fao.org/3/a1108e/a1108e00.pdf>.

- 57 International Union for Conservation of Nature (2012) “IUCN Red List Categories and Criteria Version 3.1.” Available at: <https://www.iucn.org/content/iucn-red-list-categories-and-criteria-version-31-second-edition>. [Accessed December 2020]
- 58 Convention in International Trade in Endangered Species of Wild Fauna and Flora (2017) “Appendices.” Available at: <https://cites.org/sites/default/files/eng/app/2020/E-Appendices-2020-08-28.pdf>. [Accessed December 2020]
- 59 Marine Stewardship Council (2020) “MSC-MSCI Vocabulary” [online.] Available at: https://www.msc.org/docs/default-source/default-document-library/for-business/program-documents/chain-of-custody-supporting-documents/msc-msci-vocabulary-v1-3.pdf?sfvrsn=c4ea6474_11. [Accessed February 2021]
- 60 Global Aquaculture Alliance - BAP Certification (2017), “Best Aquaculture Practices - Finfish and Crustacean Farms - Issue 2.4.” Available at: <https://www.bapcertification.org/Downloadables/pdf/standards/PI%20-%20Standard%20-%20Finfish%20and%20Crustacean%20Farms%20-%20Issue%202.4%20-%202023-May-2017.pdf>.
- 61 CHRB (2020) “Corporate Human Rights Benchmark Methodology 2020 - For the Agricultural Products, Apparel and Extractives Industries.” Available at: <https://www.corporatebenchmark.org/sites/default/files/CHRB%202020%20Methodology%20AGAPEX%2028Jan2020.pdf>.
- 62 Food and Agriculture Organization of the United Nations (2016) “Free Prior and Informed Consent - An indigenous peoples’ right and a good practice for local communities.” Available at: <http://www.fao.org/3/i6190E/i6190e.pdf>.
- 63 CHRB (2020) “Corporate Human Rights Benchmark Methodology 2020 - For the Agricultural Products, Apparel and Extractives Industries.” Available at: <https://www.corporatebenchmark.org/sites/default/files/CHRB%202020%20Methodology%20AGAPEX%2028Jan2020.pdf>.
- 64 Food and Agriculture Organization of the United Nations (2020) “Illegal, Unreported and Unregulated (IUU) fishing - what is IUU fishing?” Available at: <http://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/>. [Accessed December 2020]
- 65 United Nations (2007) “61/295. United Nations Declaration on the Rights of Indigenous Peoples.” Available at: <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N06/512/07/PDF/N0651207.pdf?OpenElement>.
- 66 CHRB (2020), “Corporate Human Rights Benchmark Methodology 2020 - For the Agricultural Products, Apparel and Extractives Industries.” Available at: <https://www.corporatebenchmark.org/sites/default/files/CHRB%202020%20Methodology%20AGAPEX%2028Jan2020.pdf>.
- 67 Ibid.
- 68 GRI Universal Standards (2016) “GRI 413: Local communities 2016.” Available at: <https://www.globalreporting.org/standards/media/1028/gri-413-local-communities-2016.pdf>.
- 69 MarinTrust (IFFO) (2020) “What are marine ingredients” Available at: <https://www.iffocom.com/what-are-marine-ingredients>. [Accessed December 2020]
- 70 Food and Agriculture Organization of the United Nations (2019) “AQUACULTURE DEVELOPMENT 8. Recommendations for prudent and responsible use of veterinary medicines in aquaculture.” Available at: <http://www.fao.org/3/ca7029en/CA7029EN.pdf>.
- 71 Food and Agriculture Organization of the United Nations (2015) “Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication.” Available at: <http://www.fao.org/3/i4487e/i4487e.pdf>.
- 72 Food and Agriculture Organization of the United Nations (2012) “Smallholders and Family Farmers.” Available at: http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Factsheet_SMALLHOLDERS.pdf.

- 73 Worrell, R., and M. C. Appleby (2000) "Stewardship of natural resource: Definition, ethical and practical aspects." *Journal of Agriculture and Environmental Ethics*, vol. 12, pp. 263-277.
- 74 British Standards Institution (2017) "Exercising due diligence in establishing the legal origin of seafood products and marine ingredients – Importing and processing – Code of practice."
- 75 Food and Agriculture Organization of the United Nations (2005) "Discards in the World's Marine Fisheries. An update" Available at: <http://www.fao.org/3/y5936e/y5936e08.htm#:~:text=Target%20catch,fish%20in%20a%20roe%20fishery>. [Accessed February 2021]
- 76 Future of Fish, FishWise, IFT and GFTC (n.d.) "Seafood Traceability Glossary." Available at: https://futureoffish.org/sites/default/files/docs/resources/Seafood%20Traceability%20Glossary_download.pdf.
- 77 Food and Agriculture Organization of the United Nations (1997) "FAO Technical Guidelines for Responsible Fisheries – Fisheries management." Available at: <http://www.fao.org/3/w4230e/w4230e.pdf>.

The World Benchmarking Alliance is funded by



CHILDREN'S
INVESTMENT FUND
FOUNDATION



MINISTRY OF FOREIGN AFFAIRS OF DENMARK
DANIDA INTERNATIONAL
DEVELOPMENT COOPERATION



Federal Ministry
for Economic Cooperation
and Development



Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



IKEA Foundation



Ministry of Foreign Affairs of the
Netherlands



Ministry of Agriculture,
Nature and Food Quality



PORTICUS



UKaid
from the British people

WALTON FAMILY
FOUNDATION



COPYRIGHT

This work is the product of the World Benchmarking Alliance. Our work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit www.creativecommons.org/licenses/by-nc-nd/4.0/.

World Benchmarking Alliance

Rhijnspoorplein 10-38, 1018 TX Amsterdam The Netherlands
info.food@worldbenchmarkingalliance.org
www.worldbenchmarkingalliance.org