Seafood Stewardship Index

Methodology

April 2019

World Benchmarking Alliance

Foreword

For centuries, our planet's oceans, lakes and rivers have shaped and inspired our societies and cultures. Continuing to safeguard our communities with the provision of food sources, trade recourses and income, as well as inform our adventurous and scientific intrigue.

Approximately 3 billion people are dependent on seafood for their animal protein intake. However, alterations to our human and environmental systems in recent years, resulting from climate change, growing populations and mounting seafood consumption per capita, are placing monumental pressures on aquatic ecosystems.

Against this backdrop, the Seafood Stewardship Index is part of the WBA's effort to measure and incentivise business impact towards a sustainable food system that works for everyone.

Following a truly global consultation process, the WBA ran an 8-week public consultation on the SSI's draft methodology from October to December 2018. In-depth feedback was received from experts working across the civil society, science and business community. This engagement and collaboration gave this methodology its credibility and legitimacy, critical to the success of the benchmark.

Now that the methodology is finalised it can guide the forthcoming data collection and analysis. Based on the methodology and data, the WBA will assess how the world's 30 leading seafood companies are driving the urgently needed transformation of the global seafood industry.

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INTRODUCTION

Benchmarking the seafood industry

The global seafood industry provides food and employment to millions of people. Around 60 million people are employed in the primary sector – capture fisheries and aquaculture – of the global seafood industry[1], and an estimated 660-880 million people depend on the seafood industry for their livelihoods[2]. Seafood is also an important protein source, especially for those living in developing countries.

The seafood industry is facing a number of serious challenges. Climate change poses significant threats to capture fisheries and aquaculture production in marine and terrestrial ecosystems[3]. Also, growth in the global demand of seafood products has contributed to overfishing and an unsustainable use of fish stocks. The aquaculture industry in particular has sustainability issues around the use of antibiotics and chemicals, disease control, pollution and conversion of ecosystems with loss of habitats and biodiversity. Furthermore, the seafood industry faces a dynamic production environment with variable levels of regulatory oversight for human rights and labour conditions. These challenges affect the future potential of the seafood industry to continue to provide employment and nutritious food.

Seafood is the single largest globally traded food commodity[1]. A small number of companies hold a significant proportion of control over global production and trading. Among the 100 largest seafood companies in the world, the ten largest companies have

Benchmarking the seafood industry

revenues of nearly 40 percent of the industry's total revenue[4]. Furthermore, 13 of the largest companies control 11-16 percent of the global marine catches (reaching up to 9-13 million tonnes) and 19-40 percent of the largest and most valuable stocks, according to research by the Stockholm Resilience Centre[5]. Given their influential position, the largest companies can address serious problems that are linked to seafood production, for example, food insecurity in developing countries, human rights violations, and Illegal, Unreported and Unregulated (IUU) fishing worldwide. These companies are often at the forefront of new developments and investments within their sector and set a model for other firms to follow. Most of these companies also work with thousands of business partners throughout their value chains. By setting sustainability standards, creating incentives and providing support to other companies, these large companies have potential for substantial leveraged impact in driving the transition to more sustainable, responsible and inclusive seafood value chains.

One way to prompt companies to work towards a more sustainable seafood industry is to benchmark their sustainability performance and develop an index where company performance is assessed and compared. A legitimate and credible index can be a catalyst to drive this envisioned transition. In other industries, benchmarking has already proven to incite companies to progress. The Access to Medicine Index has been benchmarking the largest pharmaceutical companies over the past 10 years with the aim of improving access to medicines for people living in developing countries. The Index "has made commendable contributions towards advancing the engagement of the pharmaceutical industry with the issue of access to medicine. The Foundation itself has become a well-regarded authority on access to medicines and has succeeded to a remarkable degree in building consensus between stakeholders in a highly politicised field around the access to medicine expectations for the industry[6]." Other successful benchmarks include the Access to Seeds Index, the Access to Nutrition Index and the Corporate Human Rights Benchmark.

Seafood Stewardship Index

The Seafood Stewardship Index (SSI) aims to build more sustainable and inclusive seafood supply chains by assessing and benchmarking the performance of the world's largest seafood companies regarding their contribution to the United Nations (UN) Sustainable Development Goals (SDGs)[7] closest to their core business. The SSI is being developed by the World Benchmarking Alliance (WBA).

The purpose of the SSI is to clarify what seafood companies can do and what they are already doing to improve responsibility and sustainability in seafood supply chains. The SSI will provide a transparent and impartial framework by which seafood companies and their stakeholders can monitor stewardship performance. The SSI recognises those companies that show strong performance, while holding poor performers to account. By highlighting best practices, the SSI will stimulate learning across the seafood industry and accelerate the private sector's contributions to the SDGs. Results will be published 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.

The SSI will provide financial institutions, companies, governments and civil society with information they can use to allocate capital, increase transparency, track and compare corporate sustainability

WORLD BENCHMARKING ALLIANCE

The WBA is a newly launched institution that will serve as a public good offering free, publicly available benchmarks to assess corporate performance and business impact in alignment with the SDGs. By working with and providing this information to all stakeholders, the WBA aims to build a movement where civil society, companies, financial institutions and governments can exert their full influence and ultimately help the private sector play its role in delivering the SDGs. Working in the spirit of SDG 17 (partnerships for the goals) is central to the WBA's approach. Index Initiative has moved its activities to the WBA Secretariat, that will lead the development and delivery of the WBA benchmarks. Index Initiative acted as the secretariat for SSI from 2015 through 2018.

The WBA is a fully independent organisation that is backed by an Alliance of over 90 institutions. For more information about the WBA, visit www.worldbenchmarkingalliance.org

Seafood Stewardship Index

performance, and ultimately catalyse action to accelerate progress on the SDGs. Financial institutions can use the SSI's results while engaging with seafood companies which they invest in or provide finance. Retailers, importers and exporters will be able to see the relative strengths and weaknesses of the companies from which they source their seafood products. Civil society organisations and governments can use the SSI to identify and engage with companies that have a significant influence on the impact areas that are closest to their own interests.

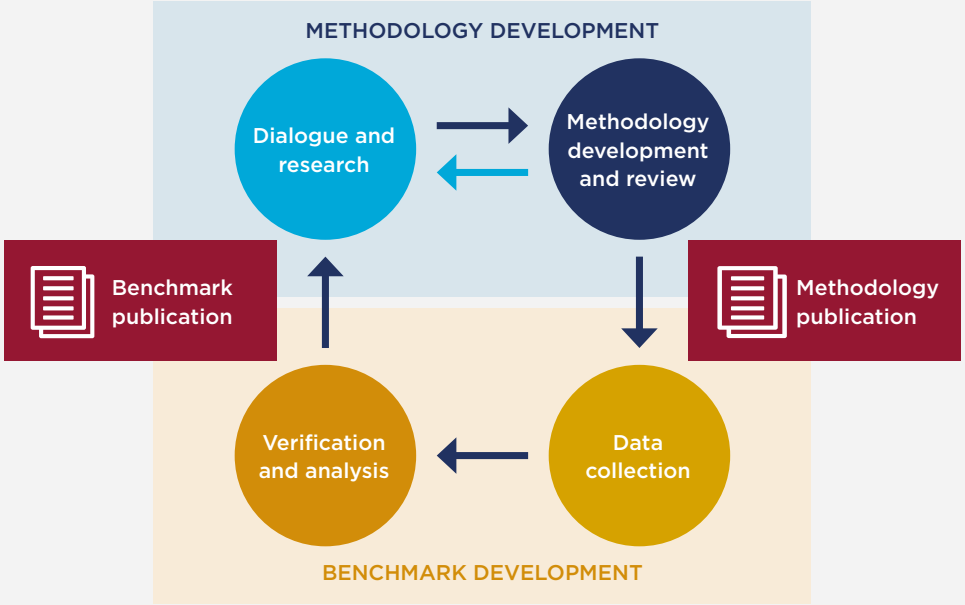
WHAT IS STEWARDSHIP?

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[8]." SSI 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 performing ethically, for example ensuring decent working conditions for all employees and respecting local communities.

Benchmark development cycle

The SSI is being developed according to a robust and structured process, outlined in Figure 1. The benchmark development process follows the WBA's 'Guiding Principles', which can be found in Annex 1.

Figure 1 | Benchmarking development cycle



DIALOGUE AND RESEARCH

Dialogue and research are crucial parts of the benchmarking development process, as they ensure the SSI and its methodology address the right themes and reflect stakeholders' expectations for the seafood industry. Throughout this methodology development process, continuous consultation and dialogue with stakeholders are taking place to gather input for the methodology and create awareness around the SSI.

The research began in September 2015 with Index Initiative's report "Unraveling the role of the private sector", a landscape study that identifies 15 industries that are best positioned to contribute to the SDGs. This study concluded that the seafood industry can make important contributions to 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), SDG 15 (life on land), SDG 16 (peace, justice and strong institutions) and SDG 17 (partnerships for the goals). It also revealed that while much effort has been made to improve and certify regional fisheries, still little is known about the corporate performance of the largest seafood companies, due to low levels of transparency around policies and practices.

Benchmark development cycle

Consultations with stakeholders on the SSI also commenced in 2015. Building on the results of Index Initiative's study, a roundtable was held in Jakarta in December 2016 to bring together different stakeholders to discuss and identify what stewardship entails for the seafood industry, what stewardship issues the SSI should cover and what stakeholders expect from the largest seafood companies.

Based on the outcomes of both Index Initiative's report and subsequent stakeholder consultations, a feasibility study for the development of the SSI was conducted. This study concluded that there is a strong case for developing this Index, given that seafood companies have an important role in enabling the transition to a more sustainable seafood production system.

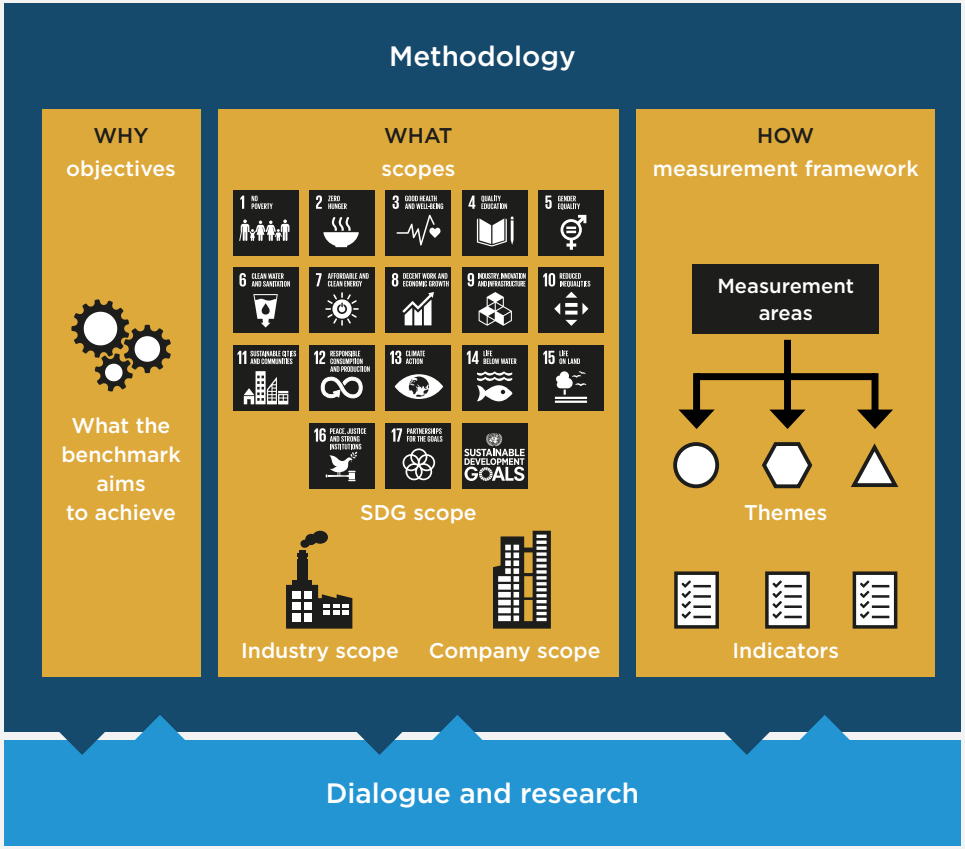
METHODOLOGY DEVELOPMENT AND REVIEW

The benchmark methodology of the SSI is presented in Figure 2. It consists of objectives, scopes and the measurement framework.

Objectives

The SSI aims to demonstrate how the largest seafood companies contribute to the sustainable management of world's oceans and ecosystems, as well as how they ensure responsible business practices are implemented in all stages of the supply chain.

Figure 2 | SSI methodology



Benchmark development cycle

Scope

The scope determines a benchmark's focus. The determination of scope includes:

- SDG scope: SDGs on which the benchmark shall focus;
- Industry scope: industries included in the benchmark; and
- Company scope: companies included in the benchmark.

Measurement framework

The measurement framework of the SSI explains the measurement areas, themes and indicators that are used to benchmark the companies in scope. Indicators are the cornerstone of the SSI methodology and are built from the outcomes of multi-stakeholder dialogues and research. Alignment with best available science, relevant principles and normative standards, reporting frameworks and sector-, product- and issue-specific initiatives ensures the SSI builds on and adds value to the existing landscape and increases relevance and impact of the benchmark results (see Figure 3). Examples of sources include the Food and Agriculture Organisation (FAO) Code of Conduct for Responsible Fisheries, the Sustainability Reporting Standards from the Global Reporting Initiative (GRI), and the Farm and Feed standards from the Aquaculture Stewardship Council (ASC). A full list of sources used can be found in Annex 2.

The methodology development process is being supervised by an Expert Review Committee (ERC) consisting of independent external experts who advise on the structure, scope, methodology and analysis. A full list of ERC members can be found in Annex 3.

Figure 3 | Sources for methodology development

Benchmark development cycle

The SSI methodology drafting period was from September 2017 to October 2018. This involved the drafting of a measurement framework for review by the ERC in December 2017, followed by a stakeholder roundtable in Tokyo in February 2018, where company executives, civil society organisations and government representatives were invited to discuss their expectations around the SSI. The dialogue continued at the Seafood Expo North America (Boston) and the Seafood Expo Global (Brussels) in March and April 2018. Feedback derived from these consultations and meetings helped strengthen the SSI measurement framework. Draft indicators were prepared as a result of this dialogue combined with extensive research, which were then reviewed by the ERC during an in-person meeting in London held over two days in June 2018. The SSI methodology was finalised after an eight-week online public consultation between October and December 2018 and a third round of reviews by the ERC in February-March 2019.

DATA COLLECTION

Once the methodology has been published, the data collection process begins. To measure the performance of the seafood companies in scope, information will be collected from public sources, such as company websites, annual reports, sustainability reports and other public materials. Companies in scope will also receive a request to provide additional data. 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. Confidential information can be provided under non-disclosure. Companies that choose not to participate in the data collection process will be scored on the basis of publicly available information only.

VERIFICATION AND ANALYSIS

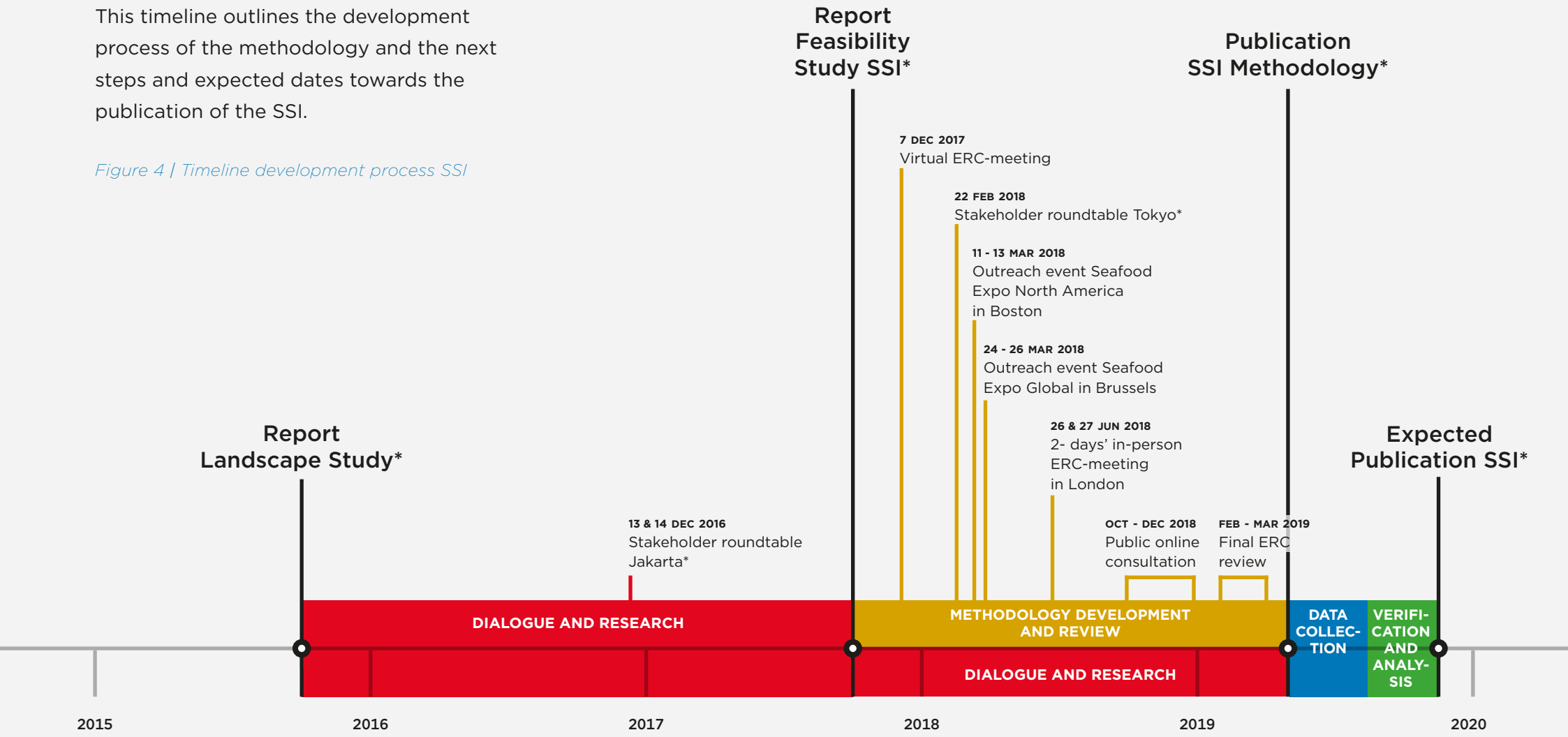
After all data is collected, it will be verified and analysed. The range of performance will then be assessed, and the draft scoring guidelines finalised. Then, companies will be scored and ranked. The results will provide the basis for company scorecards which will outline how companies performed in the SSI, including strengths and weaknesses, and highlight best practices. Company scorecards will be shared with companies prior to publication of the SSI report.

After publication of the SSI, Index 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, NGOs and policymakers. Feedback will be captured for the methodology review process for the next iteration of the SSI.

Development process

This timeline outlines the development process of the methodology and the next steps and expected dates towards the publication of the SSI.

Figure 4 | Timeline development process SSI



* Benchmark publication available on World Benchmarking Alliance website.

SSI SCOPE

SDG scope

In 2015, countries adopted the 2030 Agenda for Sustainable Development, its 17 SDGs and their corresponding 169 targets. Establishing scope by narrowing down to the most relevant goals and targets is necessary to focus the SSI where the seafood industry has the most significant impact.

An assessment of all 17 SDGs and 169 targets was conducted to identify the goals and targets on which the seafood industry has the largest impact and thus can contribute to the most.

Each of the 169 targets was assessed against the following criteria:

1. The seafood industry can make a meaningful contribution to achieving the target;
2. The target has a clear link with the seafood industry's core business;
3. The target is relevant to the scope of the benchmark; and
4. The target corresponds with stakeholder expectations for the seafood industry.

28 SDG targets met all four criteria (see Table 1) and they were included in the scope of the Index. These targets 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). This does not mean that the seafood industry does not have an impact beyond these identified SDGs, but rather that the seafood sector can make the most substantial contribution to achieving these seven goals.

SDG scope

Table 1 | SDGs and targets in scope and rationale

RATIONALE

Developing countries earn considerably more from seafood exports than from any other major food commodity, such as rubber, cocoa, coffee or sugar[1]. Also, about 60% of all international seafood trade originates in developing countries[1]. 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.

RELEVANT TARGETS

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.

RATIONALE

Fish is an extremely nutritious and a vital source of protein and essential nutrients, especially for people living in poverty[9]. Approximately 3 billion people, mostly in developing countries, are dependent on seafood for their animal protein intake[10]. 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.

RELEVANT TARGETS

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.
2.2	By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.
2.3	By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.
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.
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.
2.A	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.

SDG scope

RATIONALE

Women play an important role in the handling, processing and marketing of fish products[11]. 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 percent[12]. 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.

RELEVANT TARGETS

5.1 End all forms of discrimination against all women and girls everywhere.

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.

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.

RATIONALE

Around 60 million people are engaged in the primary sector of capture fisheries and aquaculture[1]. About 660-880 million people depend on the seafood industry for their livelihoods[2]. 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.

RELEVANT TARGETS

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.

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 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.

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.

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.

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 precarious employment.

SDG scope

RATIONALE

Global food losses and food waste in seafood supply chains are estimated at 35 percent[13]. In fishing, the efficient use of natural resources requires that target stocks are well-managed and also that the bycatch and discards are monitored and mitigated, particularly for protected and threatened species. In aquaculture, and generally across the supply chain, responsible production leads to less food losses and waste discharges.

RELEVANT TARGETS

12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

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.

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.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

RATIONALE

Overfishing is considered the second largest threat to the oceans after climate change. In 2014, almost 30 percent of wild fish stocks were considered overfished, 60 percent were fully exploited, and only 10 percent could be expected to allow further growth[9]. In particular, IUU fishing is an important threat to marine ecosystems, undermining national and regional sustainability and marine biodiversity measures. Managing fisheries responsibly and ensuring that sourced products come from traceable sources can contribute to the sustainable use of oceans and marine resources.

RELEVANT TARGETS

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.

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.

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.

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.

14.B Provide access for small-scale artisanal fishers to marine resources and markets.

SDG scope

RATIONALE

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.

RELEVANT TARGETS

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.

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.

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.

Industry scope

Building on extensive stakeholder dialogue and consultation, the SSI focuses on companies in the seafood industry that produce seafood and/or aquaculture feed. Although aquaculture feed companies do not produce seafood products, feed production impacts the sustainability of many other seafood products. Therefore, stakeholders asked SSI to include aquaculture feed companies in the Index. Including aquaculture feed companies also creates a link between the international seafood market and the domestic and regional production of aquaculture.

Company scope

The largest companies in the global seafood industry are well-positioned to accelerate the transition to a more sustainable seafood production system. The largest 30 companies represent a significant share of the global seafood market and often set the norm for others in the industry, due to their size and reach. The concept of 'keystone actors', which was introduced by Österblom and colleagues[5], suggests that the largest companies in a given industry have a disproportionate effect on the structure and function of the system in which they operate. Similar to the Seafood Business for Ocean Stewardship (SeaBOS) initiative, the SSI hinges on this concept.

The SSI relies on three characteristics of keystone actors[5] to formulate inclusion criteria and conduct a company assessment (see Table 2).

Table 2 | Keystone actor characteristics, SSI inclusion criteria and company assessment

KEYSTONE ACTOR CHARACTERISTIC	KEYSTONE ACTOR CHARACTERISTIC	KEYSTONE ACTOR CHARACTERISTIC
Companies dominate global production revenues and volumes within the sector.	Companies control globally relevant segments of production.	Companies connect ecosystems globally through subsidiaries.
SSI INCLUSION CRITERIA	**SSI INCLUSION CRITERIA**	**SSI INCLUSION CRITERIA**
The company is selected on the basis of its seafood- and/or aquaculture feed-related revenues.	The company has an important position within the supply chain, either by being active in multiple segments or dominating one segment.	The company has international seafood-related subsidiaries and offices, and it sources and distributes products globally.
COMPANY ASSESSMENT	**COMPANY ASSESSMENT**	**COMPANY ASSESSMENT**
The Undercurrent News' "World's 100 Largest Seafood Companies" report, published in November 2017[4], was used as source for identifying seafood-related revenues. As this report does not include aquaculture feed companies or aquaculture feed-related revenues from seafood companies, additional research and advice from ERC members and other experts was 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. This reassessment resulted in inclusion for one company. A preliminary list of companies in scope was cross-checked with the ranking of the Intrafish150 report.	Each company in the preliminary list of companies was assessed by which segments of the seafood supply chain it is active and the species and product groups it has in its portfolio.	Each company was assessed whether it sources from and distributes to international markets, and whether it has subsidiaries and offices in different countries.

Company scope

Based on these criteria and assessments, 30 companies have been included in the SSI (see Table 3).

Table 3 | Companies included in the SSI

	Name	Country of Origin	Ownership	Revenue in USD million*
1	Maruha Nichiro	Japan	Public	7,158
2	Nippon Suisan Kaisha (Nissui)	Japan	Public	5,707
3	Thai Union Group	Thailand	Public	3,752
4	Mowi [I]	Norway	Public	3,694
5	Mitsubishi Corporation	Japan	Public	3,400
6	Dongwon Enterprise	South Korea	Public	3,163
7	Red Chamber Group	United States	Private	2,575
8	Nutreco (Skretting)	Netherlands	Private	2,543 [II]
9	Trident Seafoods	United States	Private	2,400
10	Austevoll Seafood	Norway	Public	2,186
11	Kyokuyo	Japan	Public	2,123
12	Cargill Aqua Nutrition	United States	Private	2,140 [III]
13	Charoen Pokphand Foods	Thailand	Public	1,917 [IV]
14	Marubeni Corporation	Japan	Public	1,900
15	Pacific Seafood Group	United States	Private	1,370
16	Cooke Aquaculture & Cooke Seafood USA	Canada	Private	1,339
17	Schouw & Co (BioMar)	Denmark	Public	1,263 [V]
18	Nueva Pescanova	Spain	Public	1,134
19	Tri Marine International	United States	Private	1,050
20	SalMar	Norway	Public	1,044
21	Labeyrie Fine Foods	France	Private	1,040
22	Shanghai Fisheries General Corporation [VI]	China	State-owned	1,038
23	Royal Greenland	Greenland	State-owned	1,005
24	F.C.F. Fishery	Taiwan	Private	1,000
25	High Liner Foods	Canada	Public	956
26	Bumble Bee Foods	United States	Private	955
27	Yokohama Reito (Yokorei)	Japan	Public	940
28	Wales Group (Sea Value & Sea Wealth)	Thailand	Private	896
29	Parlevliet & Van der Plas	Netherlands	Private	848
30	Nomad Foods	United Kingdom	Public	800

* Revenue information comes from Undercurrent News' report 2017, referring to companies' 2016 turnovers, unless otherwise stated.

I Formerly known as Marine Harvest (until 01-01-2019).

II 2014 Revenues are EUR 2.1 billion. www.skretting.com. Applied exchange rate EUR 1 = USD 1.2110232824 (Exchange rate 31-12-2014 XE currency converter).

III 2016 Revenues of Cargill Aqua Nutrition are about 2 percent of Cargills total revenue of USD 107.2 billion. Source: www.cargill.com.

IV 2016 Sales from aquaculture amounted to THB 68,642 million. Source: www.cpf-worldwide.com Pdf (page 11). Applied exchange rate: THB 1 = USD 0.0279251606 (Exchange rate 31-12-2016 XE currency converter).

V 2016 Turnover is EUR 1,2 billion. Source: www.biomar.com Applied exchange rate EUR 1 = USD 1.0522549824 (Exchange rate 31-12-2016 XE currency converter).

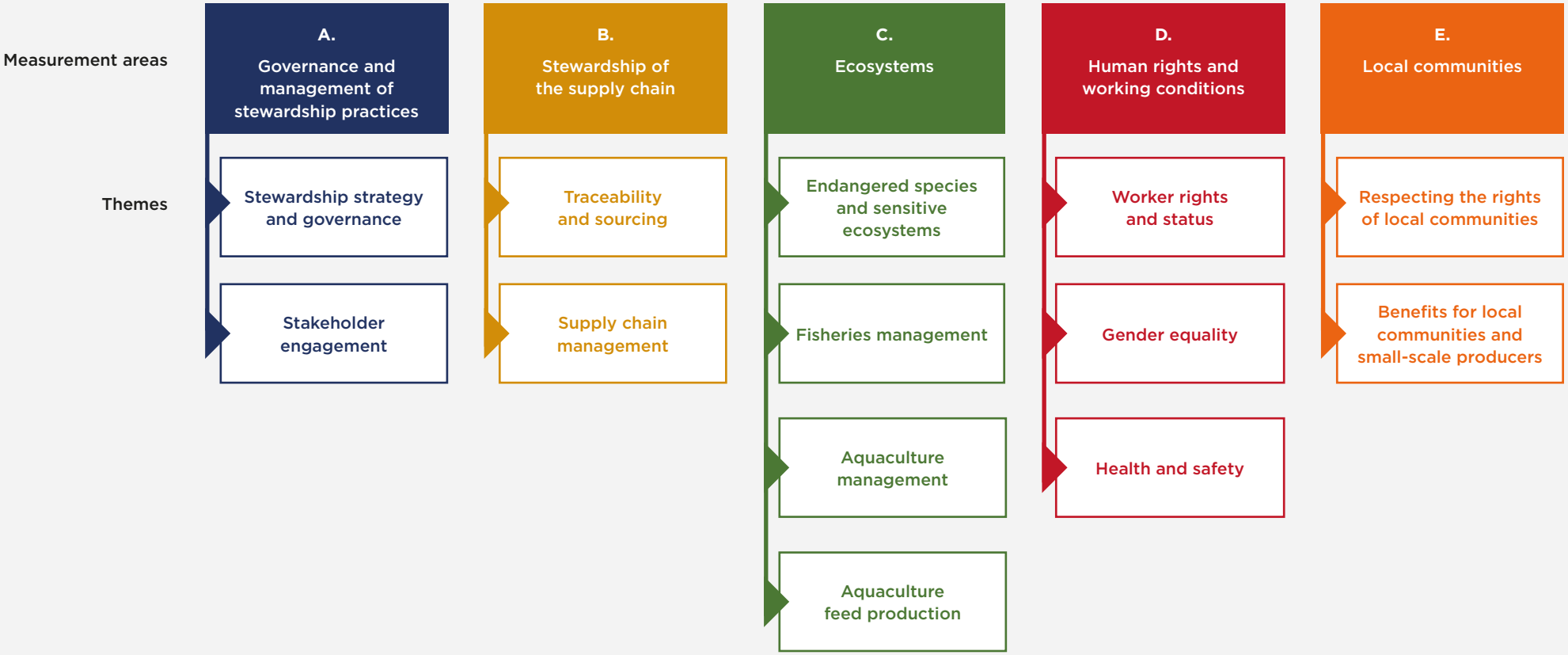
VI In 2017 Shanghai Fisheries General Corporation became a fully owned subsidiary of the Bright Food Group.

ANALYTICAL FRAMEWORK

Measurement areas and themes

The SSI will measure company performance across five different areas, which are inspired by the SDGs and defined by extensive research and stakeholder engagement. These areas reflect where stakeholders expect corporate action, as well as pinpoint where companies could have the most impact. Each measurement area consists of two or more themes and a subset of indicators linked to each theme. Figure 5 presents the SSI's five measurement areas and their associated themes.

Figure 5 | SSI measurement areas and themes



Indicators

Eight important sources provided the basis for preliminary indicators included in the SSI:

1. SDG targets;
2. Stakeholder expectations;
3. Best available science;
4. Principles and normative standards;
5. Corporate reporting frameworks;
6. Sector-, product- and issue-specific initiatives;
7. Current industry and best practices; and
8. Existing benchmarks.

A thorough assessment was completed to identify the best and most relevant scientific research. This was followed by the identification of relevant principles and normative standards, corporate reporting frameworks, and sector-, product- and issue-specific initiatives relevant to the scope of the SSI. This approach ensures that the indicators are aligned with existing instruments to avoid duplication. In addition, inspiration was drawn from existing benchmarks.

INDICATOR CATEGORIES

In order to accurately assess the stewardship efforts of seafood companies, corporate behaviour will be measured across three categories of indicators:

I. Commitment

Commitments, for example in the form of corporate policies or strategies, are the first step towards a more responsible supply chain and indicate what a company aims to achieve. Consideration will be given to whether the commitment is publicly available, supported by a clear approach and made at headquarter level of the parent or holding company. The SSI will use the information collected to track the extent to which companies implement and meet these commitments.

II. Transparency

Transparency creates accountability and promotes the sharing of approaches and progress. Transparency indicators will assess publicly disclosed information in relation to a company's stewardship policies and practices. The SSI will consider the type, relevancy and level of detail of information revealed in corporate disclosures and whether disclosure is at the headquarter level of the parent or holding company.

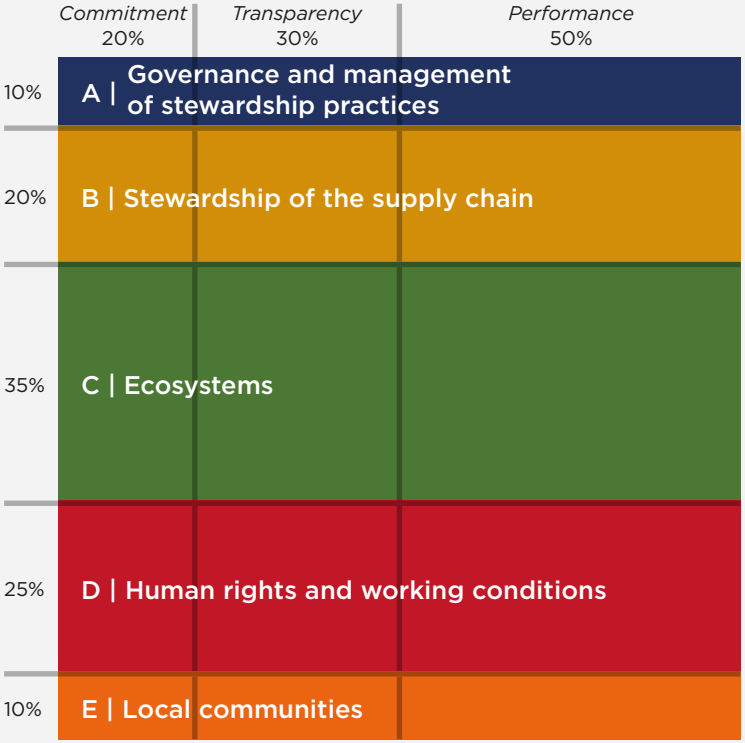
III. Performance

Performance is where a company's stewardship efforts have an impact. Performance indicators will assess the extent to which companies put their commitments, policies and strategies into practice. Consideration will be given to actual practices, programmes and activities implemented by companies, as well as to how companies manage their impacts. The SSI will focus on the overall performance of the parent or holding company.

Weighted approach

The SSI will use a weighted approach to measure and compare company performance. This approach ensures that the measurement framework is fair, balanced and reflects stakeholder priorities. It is important that the approach be as simple as possible, both to explain and understand, and can be fine-tuned for future versions of the Index as needed.

Figure 6 | Approach to weighting



The SSI weighted approach builds on a proven model of pre-set weights across two axes, developed by the existing Access to Medicine and Access to Seeds Indexes. The five measurement areas make up one axis of the SSI model – governance and management of stewardship practices (A), stewardship of the supply chain (B), ecosystems (C), human rights and working conditions (D), and local communities (E), while the three indicator categories sit on the other axis – commitment, transparency and performance. Weights were assigned to every category across the two axes, with the combined weights totalling to 100 percent along each axis. Figure 6 presents the weighted approach and indicates the weights for each category.

The weights across the indicator categories are based on the following considerations:

- During the consultations, a majority of stakeholders emphasised that performance is more important than commitment or transparency, as this is where companies can make an actual impact. All performance indicators, therefore, hold a combined weight of 50 percent.
- Several stakeholders emphasised the importance of greater transparency in the seafood industry. Disclosing information around corporate stewardship practices creates accountability and keeps stakeholders informed. Transparency indicators represent a combined weight of 30 percent.

Weighted approach

- Commitments must also be considered to reward companies for taking initial steps towards a more sustainable performance. These commitments also open up opportunities for further engagement. Commitment indicators carry a combined weight of 20 percent.

The weights across the measurement areas are based on the following considerations:

- The ecosystems measurement area (C) was given the greatest weight of all the measurement areas (35 percent), as the seafood industry relies heavily on ecosystem services and has a significant impact on the health of these ecosystems. Without well-functioning ecosystems, there would be no industry, no jobs and no income.
- The human rights and working conditions measurement area (D) was allocated the second greatest weight (25 percent), since millions of people rely on the work provided through the seafood industry. The vast majority of the industry's workers are involved in early stages of production where decent work deficits are most often documented, including child and forced labour. These poor working conditions continue to persist throughout seafood supply chains.
- Stewardship of the supply chain (measurement area B) was assigned a weight of 20 percent. Traceability and sourcing of marine ingredients are key issues in seafood companies' supply chains. Also, the companies in scope often have an important role within their supply chains and are in a strong position to address environmental impacts at the supply chain level.
- Governance and management of stewardship practices (measurement area A) and local communities (measurement area E) share the remainder of the total percentage, with 10 percent each. Governance and management of stewardship practices are important as they address how stewardship is integrated into the governance structure of companies and how companies engage with stakeholders to improve stewardship practices. The industrial activities of large seafood companies can impact local communities that live and work in the areas where they operate. To recognise the position of local communities, companies must ensure that their operations are respecting the rights and benefiting the livelihoods of people living in these local communities.

Weighted approach

NON-APPLICABLE INDICATORS

The SSI will benchmark the sustainability performance of the largest companies in the seafood industry, with the ambition of including all companies in one overall ranking.

However, there are indicators that are not relevant for all companies in scope. For example, a fishing company that is not involved in aquaculture cannot be scored on aquaculture-related indicators. When an indicator is not applicable to a company, it will not be scored for this indicator. In such cases, neutral scoring will be applied, where the neutral score will be based on the average scores in other relevant indicators. A neutral score will be determined after data collection, analysis and finalisation of the scoring guidelines.

Despite the fact that companies do not always have a direct influence on specific issues in the seafood industry, stakeholders felt that companies still have a responsibility for dealing with some of these issues. For example, a company that only sources aquaculture products, still has a responsibility for dealing with relevant issues in the primary production process, like the use of therapeutic treatments or how diseases are managed. This means that, although companies do not have a direct influence on these issues, they will thus be scored against related indicators.

Approach to scoring and ranking

Each SSI indicator will be scored against a set of predefined criteria. These criteria are based on stakeholders' expectations, the SDGs, guidance from the ERC and extensive research on existing initiatives and current practices. The SSI will use a standardised process to collect and analyse company information and score the indicators.

DATA COLLECTION, ANALYSIS AND SCORING

The SSI data collection, analysis and scoring process will consist of the following steps:

1. Development of questionnaire and online platform

Company data will be collected through a questionnaire. For each indicator, the questionnaire will contain one or more questions. These questions will gather information to assess and score companies based on the indicators. General questions about company structure and characteristics will also be included. The questionnaire will be built into an online platform, though will only be accessible for companies in scope and the SSI project team. Companies will be able to review a blank version of the questionnaire to have the opportunity to prepare their responses in advance.

2. Public domain research

Company information will be collected from a wide range of sources in the public domain to pre-populate the questionnaire. Information will be sourced from company websites, reports and codes of conduct, while independent reports will be used to cross-check company information.

3. Company reporting

The pre-populated questionnaire will be shared with each company individually via the online platform. Companies will be requested to review the data and provide supplemental information to complete the questionnaire within a fixed time period. Companies will be able to provide confidential information under non-disclosure. Companies that choose not to complete the questionnaire will be scored based solely on publicly available information.

4. Data analysis and clarification

The SSI project team will review and analyse the submitted questionnaires and contact companies to clarify or verify information.

5. Finalisation of scoring guidelines

Every indicator will be assessed against a set of scoring guidelines. These guidelines will be calibrated to the publicly disclosed data and the information provided by the company, after which they will be finalised. This assessment allows for a more accurate reflection of companies' leading and lagging practices. The final scoring guidelines will be published together with the SSI.

Approach to scoring and ranking

6. Company scoring

The final set of scoring guidelines for each indicator will be used to score company performance. Each set of scoring guidelines will have a 0-5 scale, where companies can receive a maximum score of 5 points for each indicator. Company scores will be reviewed by multiple analysts of the SSI project team to ensure that the scoring process is fair and consistent.

7. Company scorecards

The company scores and general company information will be used to develop individual scorecards for each company. The scorecards will outline how companies perform in the SSI and provide key insights. They will be shared with the companies prior to the SSI publication to inform them of their performance and ranking.

8. Publication of the SSI

Once published, the SSI will include the overall ranking, key findings and individual company scorecards.

TYPES OF EVIDENCE

Companies can provide different sources of information as evidence to support their data submission, such as company policies, statements, annual reports, sustainability reports, codes of conduct and guidelines. External sources of information, such as external assessments, audit reports, press articles or reports written for other purposes, can also be used as evidence if these sources contain credible information that is relevant and applicable to the SSI indicators.

Evidence to support the commitment indicators could be sourced from company policies where commitments are set and where the company explains its approach to implementing these commitments. The SSI will look for commitments that are supported with a clear approach, including specific information regarding how the commitment will be implemented (e.g. goals, objectives, targets, timelines).

Evidence for the transparency indicators focuses on publicly disclosed information. The SSI encourages companies to publicly disclose information and will consider the type, relevancy and level of detail of information in corporate disclosures.

The performance indicators should be backed by evidence that demonstrates actual practices, programmes and activities that the

Approach to scoring and ranking

company has already implemented, how it manages the impact of its operations and whether practices apply to the full scope of company operations. Examples of information that could be considered as appropriate evidence for scoring will be included in the questionnaire.

For several indicators, the questionnaire will also request additional information about the scope of a company's operations to determine whether the company's practices, programmes and activities apply to all operations and supply chains or only to a limited part.

COMPANY OPERATIONS AND SUPPLY CHAINS

Within the SSI, 'in its own operations' refers to the parent or holding company and subsidiaries for which the parent or holding company owns more than 50 percent of its shares. 'Supply chains' refer to all supply chain business relationships of the company.

MEASUREMENT FRAMEWORK

- A | Governance and management of stewardship practices
- B | Stewardship of the supply chain
- C | Ecosystems
- D | Human rights and working conditions
- E | Local communities

MEASUREMENT AREA

A | Governance and management of stewardship practices

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.

This measurement area has two themes:

- Stewardship strategy and governance
- Stakeholder engagement

Stewardship strategy and governance

Companies are expected to make clear commitments and strategies for stewardship which are then integrated into their operations. Most companies address this in their sustainability strategy. Setting and disclosing goals, objectives and targets for stewardship makes companies' actions more concrete and manageable, as well as drives accountability. To ensure the successful implementation of stewardship strategies, board-level oversight along with regular monitoring and measuring of progress is key.

A.I.1 *Commitment*

SUSTAINABILITY STRATEGY

The company has a sustainability strategy across its global operations.

INDICATOR RATIONALE

A company's sustainability strategy contains commitments on how the company addresses stewardship issues. This strategy is most impactful if it applies to all global operations of the parent or holding company.

LINK WITH SDG TARGETS

12.6

A.I.2 *Commitment*

GOVERNANCE AND ACCOUNTABILITY

The company's governance structure includes board-level responsibility and accountability for the implementation of its sustainability strategy.

INDICATOR RATIONALE

If responsibility for sustainability is set at the board level, it is more likely that sustainability objectives receive attention and thus will be achieved.

LINK WITH SDG TARGETS

12.6

A.II.1 *Transparency*

PUBLIC REPORTING ON SUSTAINABILITY

The company publicly reports on the goals, objectives, targets and outcomes of its sustainability strategy.

INDICATOR RATIONALE

Public reporting creates accountability and informs stakeholders of a company's goals, objectives and targets.

LINK WITH SDG TARGETS

12.6

A.III.1 *Performance*

IMPLEMENTATION OF SUSTAINABILITY STRATEGY

The company demonstrates it is monitoring and measuring the progress of the implementation of its sustainability strategy.

INDICATOR RATIONALE

By monitoring and measuring the implementation of its sustainability strategy, a company can track progress.

LINK WITH SDG TARGETS

12.6

Stakeholder engagement

Collaboration between stakeholders in the seafood supply chain is crucial for improving stewardship and achieving the SDGs, since the goals go beyond the influence and responsibility of a single stakeholder. Regularly engaging with stakeholders (e.g. local communities, governments, academia and NGOs) contributes to a company's understanding of the diverse and frequently opposing perspectives, can drive innovation, and helps to shape robust and inclusive approaches. Companies are expected to proactively engage in multi-stakeholder dialogues and initiatives related to stewardship challenges in the industry. Complaints, disputes or significant adverse impacts raised by stakeholders are to be addressed and resolved. Engagement processes are expected to produce a clear output or action and an acknowledgement of how stakeholder inputs are used.

A.II.2 *Transparency*

DISCLOSURE OF STAKEHOLDER ENGAGEMENT APPROACH

The company publicly discloses its approach to engaging with stakeholders on stewardship issues.

INDICATOR RATIONALE

A company's disclosing how it engages with stakeholders establishes accountability for company performance on stewardship issues.

LINK WITH SDG TARGETS

12.6

A.III.2 *Performance*

STAKEHOLDER ENGAGEMENT

The company demonstrates that outcomes of stakeholder engagement activities are incorporated into the company's operations.

INDICATOR RATIONALE

Evidence of a company employing outcomes from stakeholder engagement activities shows that the company takes stakeholder perspectives into account to address its stakeholders' needs and interests.

LINK WITH SDG TARGETS

12.6

A.III.3 *Performance*

ENGAGEMENT FOR POLICY ADVOCACY

The company demonstrates policy advocacy activities with the aim of implementing sustainability policies or strengthening legislation.

INDICATOR RATIONALE

A company can be an influential sustainability advocate regarding governments and/or other decision makers. A company's policy advocacy activities (individually or through industry associations) aimed at implementing sustainability policies or strengthening existing legislation can contribute to beneficial rules and regulations that will sustain fishing and aquaculture.

LINK WITH SDG TARGETS

12.6 14.2

MEASUREMENT AREA

B | Stewardship of the supply chain

This measurement area addresses how seafood companies manage and monitor environmental impacts throughout their supply chains. Good management of these impacts allows companies to build long-term value for all stakeholders involved in their supply chains.

This measurement area has two themes:

- Traceability and sourcing
- Supply chain management

Traceability and sourcing

Sourcing sustainably in addition to recording and reporting the origins of marine ingredients (i.e. ingredients from fisheries and aquaculture) and terrestrial ingredients (for aquaculture feed production) in companies' supply chains can ensure that products do not have a negative impact on the environment or society. Accurate data are needed to learn the environmental and social status of the fisheries' and farms' origins of products to eliminate unsustainable and illegal practices, such as IUU fishing or forced labour. Since traceability policies and systems capture product data, including the origins of marine ingredients, traceability practices can provide the answers companies need regarding the origins of their products across the supply chain. Stakeholders increasingly want to see evidence that products are traceable to legal sources (e.g. by using Catch Documentation Schemes (CDS)) and want to have proof of oversight where different origins of marine ingredients are mixed in the supply chain.

B.I.1 *Commitment*

TRACEABILITY OF ORIGINS

The company has a policy statement with a commitment to traceable origins in its own operations and supply chains for marine ingredients in seafood and marine and terrestrial ingredients in aquaculture feeds.

INDICATOR RATIONALE

A commitment to trace the origins of marine ingredients and terrestrial ingredients in aquaculture feeds is a first step for a company to establish accountability for its efforts.

LINK WITH SDG TARGETS

12.2 14.4

B.II.1 *Transparency*

DISCLOSURE OF SOURCING POLICIES

The company publicly discloses its policy for sourcing marine ingredients in seafood and marine and terrestrial ingredients in aquaculture feeds.

INDICATOR RATIONALE

Disclosure of sourcing policies creates insight into how a company sources its marine and terrestrial ingredients and what it does to prevent products from IUU fisheries from entering its supply chains.

LINK WITH SDG TARGETS

12.2 14.4

B.II.2 *Transparency*

DISCLOSURE OF MARINE AND TERRESTRIAL INGREDIENTS

The company publicly discloses the source of its marine and terrestrial ingredients.

INDICATOR RATIONALE

A company demonstrates responsibility and accountability for its sourcing when it is fully transparent about the source of marine and terrestrial ingredients in its operations

LINK WITH SDG TARGETS

12.2 14.4

B.III.1 *Performance*

MONITORING INGREDIENTS' LEGAL ORIGINS

The company demonstrates that it monitors and documents the legal origins of marine ingredients in seafood production and marine and terrestrial ingredients in aquaculture feeds within its own operations and supply chains.

INDICATOR RATIONALE

Monitoring can ensure that seafood products are made with marine ingredients from legal sources and a legal workforce.

LINK WITH SDG TARGETS

12.2 14.4

Traceability and sourcing

B.III.2 *Performance*

WELL-MANAGED SOURCES

The company demonstrates its activities towards increasing the proportion of marine ingredients in its own operations and supply chains from well-managed fisheries, farms and feed sources.

INDICATOR RATIONALE

By sourcing marine ingredients from well-managed sources, a company can limit its negative impacts on the environment and society. For sources that are not well-managed, a company demonstrates responsibility by investing in improvement programmes.

LINK WITH SDG TARGETS

12.2 14.4

Supply chain management

Seafood production creates environmental impacts across the supply chain. Stakeholders expect companies to demonstrate efficient and responsible use of inputs and natural resources, as well as minimise the production of negative outputs such as emissions, effluents and waste.

B.I.2 *Commitment*

ENVIRONMENTAL FOOTPRINT

The company has a policy statement with a commitment to minimise its environmental footprint and the use of natural resources and materials.

INDICATOR RATIONALE

A company's commitment to minimise its environmental footprint indicates that it recognises the importance of using natural resources and materials responsibly.

LINK WITH SDG TARGETS

8.4 12.2

B.II.3 *Transparency*

DISCLOSURE OF ENVIRONMENTAL FOOTPRINT

The company publicly discloses information about its environmental footprint and use of natural resources and materials.

INDICATOR RATIONALE

By publicly disclosing information on its resource use and production of negative outputs (e.g. emissions), a company increases transparency regarding its environmental impact.

LINK WITH SDG TARGETS

8.4 12.2

B.III.3 *Performance*

FRESHWATER USE

The company demonstrates that it is reducing its freshwater use.

INDICATOR RATIONALE

A company uses considerable amounts of water for seafood production. By reducing its water use, the company demonstrates its water management and how it controls water usage.

LINK WITH SDG TARGETS

15.1

B.III.4 *Performance*

GREENHOUSE GAS EMISSIONS

The company demonstrates that it is reducing its GHG emissions.

INDICATOR RATIONALE

GHG emissions contribute to climate change. By reducing GHG emissions, a company demonstrates how it manages its energy consumption and works to improve energy efficiency.

LINK WITH SDG TARGETS

12.6

Supply chain management

B.III.5 *Performance*

FOOD LOSSES AND FOOD WASTE

The company demonstrates that it is reducing food losses and food waste in production, including post-harvest losses.

INDICATOR RATIONALE

Food losses and food waste in global seafood supply chains are estimated at 35 percent[13].

LINK WITH SDG TARGETS

2.4 12.3

B.III.6 *Performance*

USE OF PLASTICS

The company demonstrates that it is recycling, reusing and reducing the use of plastics.

INDICATOR RATIONALE

Plastics are an important contributor to marine pollution. Microplastics are an increasing problem in marine environments, which can lead to health risks[14]. Plastics are also often used for distribution or transport of seafood products.

LINK WITH SDG TARGETS

12.4 12.5

MEASUREMENT AREA

C | Ecosystems

A key element of good stewardship practices in the seafood industry is managing the impacts of operations on ecosystems. This measurement area looks at what companies do to avoid, reduce and/or mitigate negative impacts.

This measurement area has four themes:

- Endangered species and sensitive ecosystems
- Fisheries management
- Aquaculture management
- Aquaculture feed production

Endangered species and sensitive ecosystems

Seafood companies can avoid, reduce and/or mitigate negative impacts to marine and terrestrial ecosystems and biodiversity if operations are located and designed in consideration of conserving endangered species and sensitive ecosystems. Companies can take steps to avoid degradation and species loss in their supply chains' surrounding ecosystems by mitigating the impacts of their operations, as well as actively collaborating with other stakeholders to conserve and restore sensitive ecosystems where possible.

C.I.1 *Commitment*

ENDANGERED SPECIES AND SENSITIVE ECOSYSTEMS

The company has a policy statement with a commitment to not engage in the harvesting and trading of endangered species and to avoid doing harm to sensitive ecosystems.

INDICATOR RATIONALE

Companies should refrain from harvesting and trading endangered species to prevent their extinction. Likewise, companies should not harm sensitive ecosystems, which are a vital element of biodiversity yet easily disrupted and often hard to restore.

LINK WITH SDG TARGETS

14.2 15.1 15.5

C.II.1 *Transparency*

DISCLOSURE OF IMPACTS ON ENDANGERED SPECIES AND SENSITIVE ECOSYSTEMS

The company publicly discloses information about the impact of its activities on endangered species and sensitive ecosystems.

INDICATOR RATIONALE

By disclosing information about the impact of its activities, a company shows awareness of its operations' impacts on the surrounding ecosystems.

LINK WITH SDG TARGETS

14.2 15.1 15.5

C.III.1 *Performance*

PROTECTION OF ENDANGERED SPECIES AND ECOSYSTEMS

The company demonstrates that it actively works to protect endangered species and sensitive ecosystems.

INDICATOR RATIONALE

Companies are expected to protect endangered species and sensitive ecosystems from their operations' potential negative impacts and to act in accord with best practices and pertinent international agreements.

LINK WITH SDG TARGETS

14.2 15.1 15.5

Fisheries management

Seafood companies show stewardship by contributing to improvements to the long-term sustainability of fish resources. Restoring fish stocks in the shortest time feasible requires support from seafood companies for effective harvesting regulations and improved catch methods. By sourcing from well-managed and sustainable fisheries and eliminating IUU fish from their supply chains, companies can contribute to the prevention of overfishing. Through improving unmanaged or poorly managed fisheries and actively participating in initiatives that contribute to improved fisheries management, companies can strengthen the sustainability of their sources.

C.I.2 *Commitment*

NO IUU FISH

The company has a policy statement with a commitment to not have IUU fish in its supply chains.

INDICATOR RATIONALE

IUU fishing is considered a key issue in fisheries management. IUU catches are estimated to represent 11-26 million tonnes of fish annually, with a value of USD 10-23 billion[15].

LINK WITH SDG TARGETS

14.4

C.I.3 *Commitment*

WELL-MANAGED SOURCES

The company has a policy statement with a commitment to fish and source from well-managed fisheries.

INDICATOR RATIONALE

Pressure on global marine fisheries is increasing; 33 percent of the global marine fish stocks is overfished, while 60 percent is fished at their maximum capacity[1].

LINK WITH SDG TARGETS

14.4

C.II.2 *Transparency*

COLLABORATION FOR IMPROVEMENTS IN FISHERIES

The company publicly discloses participation in multi-stakeholder initiatives that contribute to improvements in fisheries.

INDICATOR RATIONALE

By disclosing participation in multi-stakeholder initiatives on fishery improvements, a company indicates how it is contributing to better fisheries management.

LINK WITH SDG TARGETS

14.2

C.III.2 *Performance*

FISHING IMPACTS ON BYCATCH SPECIES

The company demonstrates that it is improving gear and fishing practices to minimise unwanted catch of bycatch species in its fishing operations.

INDICATOR RATIONALE

Bycatch occurs because modern fishing gear is very efficient, often covering an extensive area, and catches not only the target species but many other marine animals as well. At least 7.3 million tonnes of marine life are caught incidentally each year. In some fisheries, the percentage of bycatch far outweighs the amount of target catch[16].

LINK WITH SDG TARGETS

14.2

Fisheries management

C.III.3 *Performance*

SCIENCE-BASED MANAGEMENT PLANS

The company demonstrates that it is ensuring that fishing operations align with science-based management plans.

INDICATOR RATIONALE

Healthy fish stocks in healthy ecosystems that are well-managed replenish sufficiently for future catches. By employing science-based management plans, a company can contribute to restoring fish stocks.

LINK WITH SDG TARGETS

14.4

C.III.4 *Performance*

GHOST GEAR

The company demonstrates and/or contributes to preventing and reducing ghost gear.

INDICATOR RATIONALE

Abandoned, discarded or lost fishing gear represents a substantial portion of marine debris and contributes to marine pollution. The estimated annual amount of ghost gear in oceans is at least 640,000 tonnes[17].

LINK WITH SDG TARGETS

14.1

C.III.5 *Performance*

RISK-BASED APPROACH TOWARDS IUU FISH

The company demonstrates a risk-based approach towards IUU fish in its operations.

INDICATOR RATIONALE

A company that has procedures in place to assess and mitigate the risks that come with IUU fish in its operations can minimise its environmental footprint.

LINK WITH SDG TARGETS

14.4

Aquaculture management

The rapid growth of the global aquaculture sector has led to an increasing impact on marine and terrestrial ecosystems. Excessive use of antibiotics and other chemicals can pose risks to human health. Companies can demonstrate stewardship by implementing measures that reduce the environmental impacts of their aquaculture operations and avoid causing adverse human health risks. Companies can do this by implementing effective systems for the prevention and management of diseases, escapes, antibiotics and chemicals. Assessing and taking responsibility for the wider environmental impacts of their operations ensures more effective management of negative impacts.

C.I.4 *Commitment*

AREA-BASED MANAGEMENT

The company has a policy statement with a commitment to apply area-based management in the areas where it operates.

INDICATOR RATIONALE

A commitment to area-based management demonstrates that a company understands that its operations contribute to cumulative effects and that protecting the surrounding ecosystem is a shared responsibility.

LINK WITH SDG TARGETS

14.2 15.1 15.5

C.II.3 *Transparency*

COLLABORATION FOR IMPROVEMENTS IN AQUACULTURE PRODUCTION

The company publicly discloses participation in multi-stakeholder initiatives that contribute to improvements in aquaculture.

INDICATOR RATIONALE

By disclosing participation in multi-stakeholder initiatives on aquaculture improvements, a company indicates how it is contributing to better aquaculture management.

LINK WITH SDG TARGETS

14.2 15.1

C.II.4 *Transparency*

DISCLOSURE OF BROODSTOCK ORIGINS

The company publicly discloses the origins of the broodstock used at farm level of its aquaculture products.

INDICATOR RATIONALE

Aquaculture operators are expected to maintain and disclose accurate records of broodstock origins, including status as a farmed or wild captured species, and whether it is free or resistant to specific pathogens.

LINK WITH SDG TARGETS

2.5

C.II.5 *Transparency*

DISCLOSURE OF THERAPEUTIC TREATMENTS

The company publicly discloses the use of therapeutic treatments, that include antibiotics and chemicals, used at farm level, of its aquaculture products.

INDICATOR RATIONALE

By disclosing information about the use of therapeutic treatments, a company can show outcomes of its efforts to prevent water pollution, antimicrobial resistance and new disease cycles.

LINK WITH SDG TARGETS

12.4

Aquaculture management

C.III.6 *Performance*

IMPROVING TREATMENT STRATEGIES

The company demonstrates that it is actively improving treatment strategies to reduce the use of therapeutic treatments and their release into the environment.

INDICATOR RATIONALE

Overuse and misuse of therapeutic treatments can pose threats to human and animal health, environmental and ecological issues, and antimicrobial resistance. A company's improved treatment strategies can help to reduce these risks.

LINK WITH SDG TARGETS

12.4

C.III.7 *Performance*

MANAGING DISEASES

The company demonstrates its efforts to prevent and manage diseases to prevent stock mortality and the transfer of diseases to the wild.

INDICATOR 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.

LINK WITH SDG TARGETS

15.8

C.III.8 *Performance*

PREVENTION AND MITIGATION OF ESCAPES

The company demonstrates that it prevents escapes and, in the event of an escape, mitigates the impact.

INDICATOR 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 does occur can minimise these negative environmental impacts.

LINK WITH SDG TARGETS

15.8

Aquaculture feed production

Feed is a key input for most aquaculture practices. Plant and animal-based ingredients, including wild-captured fish, are sourced for aquaculture feed production. Aquaculture feed production and sourcing of feed ingredients have significant impacts on marine and terrestrial ecosystems. Companies demonstrate responsible production by using feed ingredients from well-managed feed sources. Stakeholders expect companies to produce and source feed in a way that reduces or prevents overfishing and provides full traceability of feed ingredients.

C.I.5 *Commitment*

AQUACULTURE FEED FROM WELL-MANAGED SOURCES

The company has a policy statement with a commitment that marine and terrestrial ingredients in aquaculture feed come from well-managed sources.

INDICATOR RATIONALE

This commitment shows that a company has made it a priority to avoid marine and terrestrial ingredients that are not sustainable for aquaculture feed production.

LINK WITH SDG TARGETS

12.2 14.4 15.5

C.II.6 *Transparency*

DISCLOSURE OF AQUACULTURE FEED INGREDIENTS

The company publicly discloses marine, terrestrial and other ingredients in aquaculture feed.

INDICATOR RATIONALE

Aquaculture feeds are comprised of diverse marine, terrestrial and other ingredients. By disclosing marine, terrestrial and other ingredients, a company provides insight into the level of sustainability of aquaculture feed ingredients.

LINK WITH SDG TARGETS

12.2 14.4 15.5

C.III.9 *Performance*

MARINE INGREDIENTS IN AQUACULTURE FEED

The company demonstrates more efficient use and/or reductions in the use of marine ingredients in aquaculture feed, while taking into account the overall environmental impact of its feed production.

INDICATOR RATIONALE

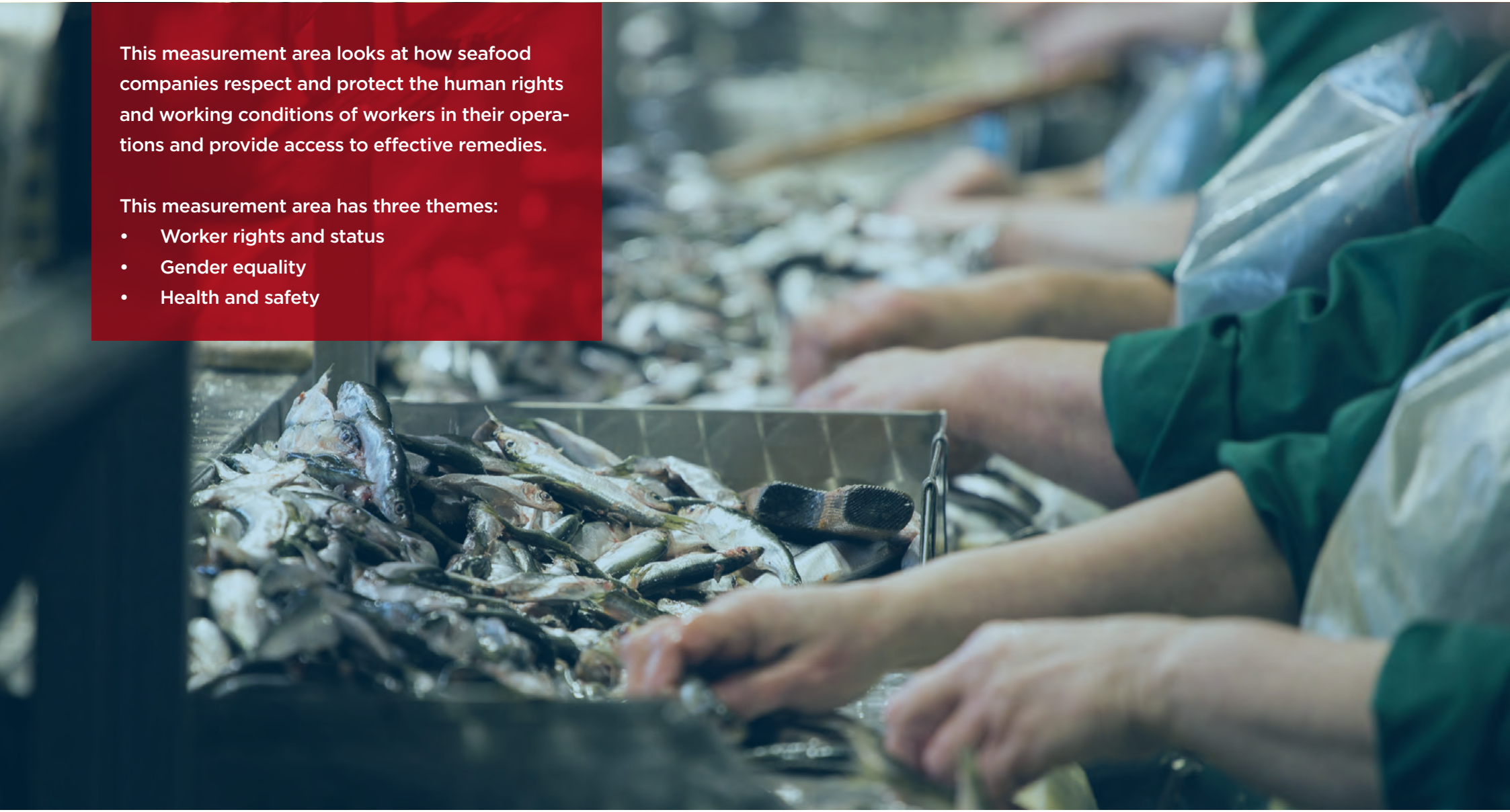
A company can actively contribute to improving the sustainability and efficient use of feed, for example by improving feed conversion rates and supporting research & development.

LINK WITH SDG TARGETS

12.2 14.4 15.5

MEASUREMENT AREA

D | Human rights and working conditions



This measurement area looks at how seafood companies respect and protect the human rights and working conditions of workers in their operations and provide access to effective remedies.

This measurement area has three themes:

- **Worker rights and status**
- **Gender equality**
- **Health and safety**

Worker rights and status

Companies are responsible for upholding the human and labour rights of their workers as defined in the International Bill of Human Rights and the Declaration on the Fundamental Principles and Rights at Work[18] [19]. The primary focus should be on ensuring that all workers are provided with wages and safe working environments, including subcontracted workers whose status is temporary or foreign. This is also defined in national laws of the country of work and international instruments like the Work in Fishing Convention[20]. The UN Guiding Principles on Business and Human Rights provide the "Protect, Respect, and Remedy Framework" for companies to use to address any risks resulting from human rights impact linked to their business activity[21] [22], such as remedying vulnerable conditions that could lead to forced labour in their supply chains[23] [24].

D.I.1 *Commitment*

RESPECT WORKERS' HUMAN RIGHTS

The company has a policy statement with a commitment to respect the human rights of all workers in its own operations and supply chains.

INDICATOR RATIONALE

Workers' human rights may be at risk in areas where labour inspections are inadequate or non-existent and enforcement is weak, as well as where wage and work terms are invisible, for example where migrant workers are paid through brokers[24]. Companies are liable for poor working conditions in their activities, products and business relationships that contribute to forced labour[21].

LINK WITH SDG TARGETS

8.7

D.I.2 *Commitment*

PROTECT WORKERS' LABOUR RIGHTS

The company has a policy statement with a commitment to uphold the labour rights and to eliminate risks of modern slavery of all workers in its own operations and supply chains.

INDICATOR RATIONALE

Companies are obliged to uphold the labour rights of their workers as declared by the UN and the ILO and enshrined in international law[18] [19].

LINK WITH SDG TARGETS

8.8

D.I.3 *Commitment*

NO DISCRIMINATION

The company has a policy statement with a commitment to eliminate discrimination in its own operations and supply chains.

INDICATOR RATIONALE

Companies are expected to uphold the elimination of discrimination with respect to employment and occupation[25], as declared by the ILO[19] [26].

LINK WITH SDG TARGETS

5.1 8.5

D.I.4 *Commitment*

LIVING WAGES

The company has a policy statement with a commitment to pay living wages to all workers in its own operations and supply chains.

INDICATOR RATIONALE

Many fishers, fish farmers and workers in processing are identified as working poor[24]. Wages are unfair where they fall below statutory requirements[21].

LINK WITH SDG TARGETS

8.5

Worker rights and status

D.II.1 *Transparency*

MONITORING WORKING CONDITIONS

The company publicly discloses the proportion of its own operations and supply chains where working conditions are monitored for compliance to core ILO labour standards.

INDICATOR RATIONALE

By monitoring working conditions for compliance to core ILO labour standards, a company can assess labour risks in its operations and supply chains[19].

LINK WITH SDG TARGETS

8.7 8.8

D.II.2 *Transparency*

GRIEVANCE MECHANISMS

The company publicly discloses the mechanisms available to workers in its operations and supply chains to report a grievance, including those related to human and labour rights issues.

INDICATOR RATIONALE

Companies are expected to have grievance mechanisms in place for their workers[21]. By publicly disclosing these mechanisms and procedures, a company demonstrates its responsibility to address adverse human and labour rights issues.

LINK WITH SDG TARGETS

8.7 8.8

D.III.1 *Performance*

WORKER CONTRACTS COMPLY WITH ILO LABOUR STANDARDS

The company demonstrates that it ensures all workers in its own operations and supply chains have a contract that complies with core ILO standards, is signed by the facility owner and worker and is written in a language that the worker understands.

INDICATOR RATIONALE

A worker's status is unsupported without a contract that is legally binding in the country of work.

LINK WITH SDG TARGETS

8.5 8.7 8.8

D.III.2 *Performance*

RECRUITMENT

The company demonstrates that it is reducing recruitment-related risks for its workers and prohibits deductions for costs of work in its own operations and supply chains.

INDICATOR RATIONALE

A company can address potential human rights risks by implementing responsible recruitment. Recruitment costs should be paid by the employer.

LINK WITH SDG TARGETS

8.7 8.8

Worker rights and status

D.III.3 *Performance*

WORKER VOICE

The company demonstrates that it is engaging and empowering workers in its own operations and its supply chains to promote human and labour rights.

INDICATOR RATIONALE

Worker voice is important for companies to understand. A company should improve the conditions, status and aspirations of its workers.

LINK WITH SDG TARGETS

8.8

D.III.4 *Performance*

REMEDY

The company demonstrates that is it provides remedy to workers in its own operations and supply chains in cases of human and labour rights violations.

INDICATOR RATIONALE

Companies are required by law to uphold the fundamental human and labour rights of all workers, including measures to provide workers with access to remedy where they experience infractions to their rights.

LINK WITH SDG TARGETS

8.7 8.8

Gender equality

For women in the seafood supply chain, gender equality would mean full and effective participation in decision-making and leadership. Companies can address gender equality by ensuring that workers receive employer protection against violence and sexual harassment in the workplace and by improving gender balance with equal pay, benefits and representation between women and men. Currently, the seafood industry worldwide has few women in leadership, though women are overrepresented in processing work (58 percent)[24]. Increasing women's incomes, status and position is essential for achieving gender balance and, ultimately, creating responsible fisheries and aquaculture systems[27].

D.I.5 *Commitment*

GENDER-BASED VIOLENCE

The company has a policy statement with a commitment that prohibits gender-based violence in all forms, including sexual harassment, in its own operations and supply chains.

INDICATOR RATIONALE

By committing to the elimination of gender-based violence, a company recognises the importance of addressing gender-based violence.

LINK WITH SDG TARGETS

5.1 5.2

D.II.3 *Transparency*

GENDER BALANCE

The company publicly discloses data on women's status and representation at every level of its operations in regards to participation, pay and benefits.

INDICATOR RATIONALE

By publicly disclosing women's status and representation, a company confirms that progress towards gender equality is important[28].

LINK WITH SDG TARGETS

5.1 5.5

D.III.5 *Performance*

WOMEN'S PARTICIPATION AND LEADERSHIP

The company demonstrates that it ensures women's full and effective participation across its own operations and supply chains and provides equal opportunities for leadership at all levels of decision-making.

INDICATOR RATIONALE

Full and effective participation of women in a company is one of the key mechanisms for achieving gender equality and empowering women.

LINK WITH SDG TARGETS

5.1 5.5 8.5

Health and safety

Fishing is considered one of the world's most dangerous occupations, causing more than 24,000 casualties per year. It is typically labour-intensive work and has high rates of occupational diseases and injuries[24]. Specifically, aquaculture work in hatcheries, grow-out facilities and feed mills involves the use of equipment, chemicals and biological agents. Health and safety hazards are related to the unsafe use of chemicals, heavy lifting, long hours of repetitive hand feeding, slips or falls on wet and slippery surfaces, and diving or being submerged in fish ponds. In fish handling and processing work, health and safety hazards are due to cuts and puncture injuries from sharp tools, fish teeth, spines or bones, as well as to heat and smoke exposure[24].

D.II.4 *Transparency*

DISCLOSURE OF HEALTH AND SAFETY REQUIREMENTS FOR ALL WORKERS

The company discloses health and safety requirements, as well as quantitative information on the health and safety of all workers in its own operations and supply chains.

INDICATOR RATIONALE

By publicly disclosing health and safety requirements and company metrics (e.g. health and safety manuals for workers, health and safety inspections, injury rates, fatality rates, lost day rates), a company indicates how important it is to addresses health and safety in its operations and supply chains.

LINK WITH SDG TARGETS

8.8

D.III.6 *Performance*

SAFETY IN HAZARDOUS CONDITIONS

The company demonstrates that it is reducing risks from hazardous conditions for all workers in its own operations and supply chains.

INDICATOR RATIONALE

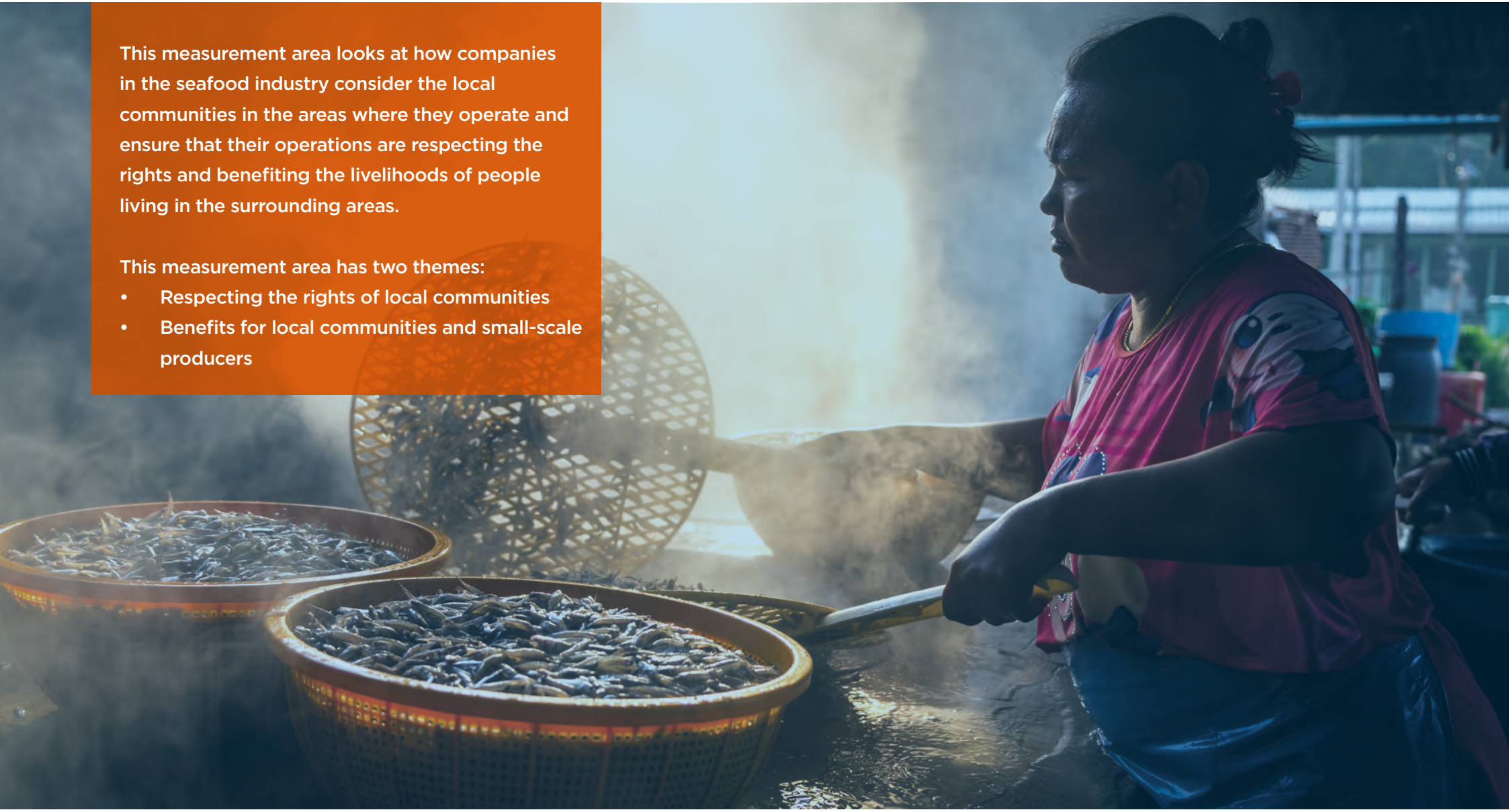
Companies should have mechanisms in place that reduce safety risks, reduce accidents and mortalities on the jobsite and increase workers' well-being and productivity.

LINK WITH SDG TARGETS

8.8

MEASUREMENT AREA

E | Local communities



This measurement area looks at how companies in the seafood industry consider the local communities in the areas where they operate and ensure that their operations are respecting the rights and benefiting the livelihoods of people living in the surrounding areas.

This measurement area has two themes:

- Respecting the rights of local communities
- Benefits for local communities and small-scale producers

Respecting the rights of local communities

Companies use fish and aquatic resources in local areas where local people also use them. To maximise the positive impacts for local communities, while minimising the negative, companies can start by recognising the rights of those people living in the surrounding areas where they operate. The sustainable food system described in SDG 1 (no poverty), SDG 2 (zero hunger) and SDG 14 (life below water) includes the access rights and customary rights of small-scale seafood operators and smallholders to harvest natural resources and food. Respecting local rights to access fish and aquatic resources helps to reduce poverty and prevent hunger, particularly where current industrial fishing practices remove food resources. When companies demonstrate respect for local rights and ecological knowledge, they are ultimately building a social license to operate in local areas.

E.I.1 *Commitment*

CUSTOMARY RIGHTS

The company has a policy statement with a commitment to respect the rights of local resource users, including the customary rights of indigenous communities.

INDICATOR 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 are obliged to recognise and respect customary rights when sharing or targeting the same resources.

LINK WITH SDG TARGETS

1.4 2.1 14.B

E.I.2 *Commitment*

LIVELIHOODS AND FOOD SECURITY

The company has a policy statement with a commitment to strengthening the livelihoods and food security of small-scale producers and local communities.

INDICATOR RATIONALE

Where a company removes fish resources, it can contribute to other forms of security in the local area, for example, by donating food to local food banks and school nutrition programmes, granting access to markets, or providing value-added and labour-intensive work.

LINK WITH SDG TARGETS

2.2 2.3 2.4 8.2 14.B

E.II.1 *Transparency*

DISCLOSURE OF ADVERSE IMPACTS

The company publicly discloses actual and potential adverse impacts of its operations on local communities.

INDICATOR RATIONALE

The industrial scale of fishing and aquaculture operations means that impacts to local communities will occur and may potentially cause negative spill-over effects on the people and environment. A company can prevent or minimise its adverse impacts once disclosed.

LINK WITH SDG TARGETS

12.6

E.III.1 *Performance*

RESPECTING CUSTOMARY RIGHTS

The company demonstrates that it is respecting the customary rights of local communities by ensuring fair allocation of the resources which are targeted by both local communities and industrial operations.

INDICATOR RATIONALE

Where there is joint use of fish and aquatic resources by industry and local communities, it is important for companies to respect local access and allocations by participating in co-management or agreements with Free, Prior, and Informed Consent (FPIC).

LINK WITH SDG TARGETS

1.4 2.1 14.B

Benefits for local communities & small-scale producers

Benefit-sharing occurs when companies provide opportunities to the people who work and live in the areas surrounding their operations, such as the transfer of economic benefits and knowledge through jobs, supply and service contracts, and capacity building initiatives.

E.I.3 *Commitment*

LOCAL CONTENT COMMITMENT

The company has a policy statement with a commitment to maximise local content via preferential employment for local communities, preferential use of local suppliers and capacity development for small-scale producers.

INDICATOR RATIONALE

Where a company removes resources from local areas, it can compensate by considering small-scale producers or people in the local workforce for employment.

LINK WITH SDG TARGETS

2.3 8.5

E.II.2 *Transparency*

LOCAL OPPORTUNITIES FOR WORK AND BUSINESS

The company publicly discloses how local employees and businesses are involved in recruitment or tendering processes, or in a local content development plan.

INDICATOR RATIONALE

Businesses in local communities can provide supplies and services, in addition to opportunity, to contribute to economic stability and sustainable growth. By disclosing procedures on how local employees and businesses can be included in potential recruitment or tendering processes, a company recognises their importance.

LINK WITH SDG TARGETS

2.3

E.III.2 *Performance*

CAPACITY BUILDING IN THE LOCAL AREA

The company is providing resources, technology, knowledge and training opportunities to communities within the local areas of its operations.

INDICATOR RATIONALE

A company can initiate or support capacity building activities for local communities. These communities can benefit significantly from access to a company's resources, technology, knowledge and training opportunities.

LINK WITH SDG TARGETS

2.3 2.A 8.2 14.A

Glossary

ASC	Aquaculture Stewardship Council
CITES	Convention for International Trade in Endangered Species of Wild Fauna and Flora
CDS	Catch Documentation Scheme
ERC	Expert Review Committee
FAO	Food and Agriculture Organisation of the United Nations
FPIC	Free Prior and Informed Consent
GHG	Greenhouse Gasses
GRI	Global Reporting Initiative
HCV	High Conservation Value
IFFO	The Marine Ingredients Organisation
ILO	International Labour Organisation
IUCN	International Union for Conservation of Nature
IUU Fishing	Illegal, Unreported and Unregulated Fishing
SDG	Sustainable Development Goal
SeaBOS	Seafood Business for Ocean Stewardship
SSI	Seafood Stewardship Index
UN	United Nations
VME	Vulnerable Marine Ecosystem
WBA	World Benchmarking Alliance

Key concepts and definitions

Area-based management

Area-based, or place-based management, can be seen as "a strategy that calls for integrated management of the full suite of human activities occurring in spatially demarcated areas identified through a procedure that takes into account biophysical, socioeconomic, and jurisdictional considerations[29]." From an aquaculture perspective, the purpose of area-based management is to "improve health and biosecurity management on the farm, with the ultimate goal of minimizing potential negative impacts on wild populations[30]."

Broodstock

"Broodstock, or broodfish, are a group of mature individuals used in aquaculture for breeding purposes. Broodstock can be a population maintained in captivity as a source of replacement for, or enhancement of, seed and fry numbers[31]."

Bycatch

Bycatch is the "incidental capture and mortality of non-target marine animals during fishing[16]."

Catch documentation scheme

A catch documentation scheme (CDS) is a "system with the primary purpose of helping determine throughout the supply chain whether fish originate from catches taken consistent with applicable national, regional and international conservation and management measures, established in accordance with relevant international obligations[32]."

Co-management

Co-management, or joint management, of natural resources, for example in a fishery or aquaculture area, is the sharing of power and responsibility between the government and local resource users, including small-scale and industrial resource users[33].

Customary rights

Customary rights are resource use rights defined by the law, local tradition or indigenous rights and status. 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[34].

Discrimination

According to Article 1 of the ILO Convention 111 on Discrimination in Respect of Employment and Occupation, discrimination includes "any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin which has the effect of nullifying or impairing equality

of opportunity or treatment in employment or occupation; such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the Member concerned after consultation with representative employers' and workers' organisations, where such exist, and with other appropriate bodies[26]."

Diseases

A disease in aquaculture is a "clinical or non-clinical infection with an etiological agent[35]" (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, including the IUCN Red List with 'Vulnerable', 'Endangered' or 'Critically Endangered' status[36] and the CITES Appendices I, II and III [37].

Environmental footprint

Within the SSI, the environmental footprint is referred to as the impact that seafood production has on the environment. This relates to the amount of resources and materials that seafood companies use for production and by-products of the production process (e.g. Greenhouse Gas (GHG) emissions, water use, waste).

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[38]."

Food losses and food waste

Food losses and food waste are described as the "decrease of food in subsequent stages of the food supply chain intended for human consumption. Food is lost or wasted throughout the supply chain, from initial production down to final household consumption. The decrease may be accidental or intentional, but ultimately leads to less food available for all[39]." Food losses occur during fishing or farming, harvesting, processing, transporting and marketing of seafood products.

Key concepts and definitions

Food security
The FAO defines food security as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life[40]." Food security has four dimensions: food availability, economic and physical access to food, food utilisation and stability over time.

Forced labour
Forced labour is defined by ILO Convention 29 as "any work or service exacted from any person under threat of any penalty and for which the said person has not offered himself voluntarily[41]." As a legal matter, in addition to a serious violation of fundamental human rights and labour rights, the exaction of forced labour is a criminal offence[21]. The use of forced labour is prohibited for all UN member states in binding legal instruments, including ILO Conventions 29 and 105, the Protocol to the Forced Labour Convention, and the Declaration of Fundamental Principles and Rights at Work[25].

Free Prior and Informed Consent
FPIC is a specific right that pertains 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[42]."

Gender-based violence
"Gender-based violence is violence directed against a person because of their gender. Both women and men experience gender-based violence, but the majority of victims are women and girls[43]." Four forms of gender-based violence exist: physical, sexual, psychological and economic.

Ghost gear
Ghost gear refers to "any fishing equipment or fishing-related litter that has been abandoned, lost or otherwise discarded[44]." Ghost gear can also refer to discarded or lost equipment from aquaculture operations.

Grievance mechanisms
Guiding Principle 29 of the UN Guiding Principles on Business and Human Rights expects companies to "establish or participate in effective operational-level grievance mechanisms for individuals and communities who may be adversely impacted[21]."

Key concepts and definitions

Human rights
Companies are responsible for upholding the human rights of their workers. The UN Guiding Principles on Business and Human Rights provide the "Protect, Respect, and Remedy Framework" for companies to use to address any risks resulting from human rights impact linked to their business activity[21]. Human rights due diligence consists of the processes and steps that companies take to become aware of the impacts on the human rights of people associated with their business and the risks of those impacts, as well as to take appropriate action to prevent and address those impacts[22].

Illegal, Unreported and Unregulated (IUU) fishing
IUU fishing is "fishing that is conducted contrary to legal conservation and management measures currently in place around the world[45]."

Labour rights
The ILO's Declaration on Fundamental Principles and Rights at Work is in force in most countries' national labour legislation to protect the labour rights of individuals. Fundamental principles and rights at work include "freedom of association and the effective recognition of the right to collective bargaining, the elimination of all forms of forced or compulsory labour, the effective abolition of child labour, and the elimination of discrimination in respect of employment and occupation[46]."

Livelihoods
"Livelihoods allow people to secure the basic necessities of life, such as food, water, shelter and clothing income[47]."

Living wage
A living wage should provide a "decent standard of living for a worker and his or her family based on a regular work week not including overtime hours. A living wage is sufficient to cover food, water, clothing, transport, education, health care and other essential needs for workers and their entitled official dependents and provide some discretionary income[47]."

Local communities
Local communities provide the social context for fishing, farming and seafood processing activities in the areas of a company's operations. In the SSI, this term is used to mean all people living in the area surrounding the company's operations, including small-scale fishers and aquaculture producers, and all people relying on the area's natural resources, including indigenous peoples and coastal communities.

Key concepts and definitions

Local content
Local content refers to the goods and services, such as labour, from local communities and small-scale producers that companies can include in their operations. Companies can have a local content development plan that specifies how local employees and businesses can be included in the company's operations and supply chains[48].

Marine ingredients
Marine ingredients are defined by the Marine Ingredients Organisation (IFFO) as "nutritious products used mainly for human consumption or animal feed and are derived from marine organisms such as fish, krill, shellfish and algae[49]." Within the scope of the SSI, marine ingredients also include wild-captured fish as well as organisms from freshwater fisheries and from aquaculture.

Modern slavery
Modern slavery is the term used to "capture the range of multifaceted and complex crimes, which includes all forms of human trafficking, forced labour, debt bondage, forced or servile marriage, and the worst forms of child labour[50]." The term is "consistent with international efforts and legislation, including the UK Modern Slavery Act[50]."

Recruitment-related risks
Recruitment is the employer's process of hiring and situating workers and involves the charging of recruitment fees. Recruitment-related risk occurs for workers recruited in impoverished areas who cannot pay the whole fee, so the recruiter provides a debt facility. The worker risks an unlimited debt burden if the recruiter adds fees for travel, accommodation and food. The worker also risks forced labour if recruiters place them in work in a different job category or a different destination country than they agreed to initially[51].

Remedy
According to Guiding Principle 22 of the UN Guiding Principles on Business and Human Rights, companies that have caused or contributed to adverse impacts "should provide for or cooperate in their remediation through legitimate processes[21]."

Science-based management plans
When sourcing seafood, companies can take measures to enhance sustainable fisheries management. Targeted fish stocks should be managed on a scientific basis, including science-based measures for monitoring, control and enforcement, and in compliance with regional fisheries management organisations as well as relevant bodies and arrangements[52].

Key concepts and definitions

Sensitive ecosystems

Ecosystems that can be seriously or irreversibly impacted by fisheries or aquaculture, in structure or function, are sensitive ecosystems. The FAO uses the concept of Vulnerable Marine Ecosystems (VMEs) to define and identify sensitive marine ecosystems. VMEs are "groups of species, communities or habitats that may be vulnerable to impacts from fishing activities. The vulnerability of an ecosystem is related to the vulnerability of its constituent population, communities or habitats[53]." Corals and sponge fields are examples of sensitive ecosystems, while mangroves are an example of non-marine sensitive ecosystems. Sensitive ecosystems are areas with a High Conservation Value (HCV)[54].

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[55] [56]."

Statutory minimum wages

Workers' wage rates must meet or exceed statutory minimum wages, which are set into law in the company through the decisions of a competent authority, wage board or council, or an industrial or labour court or tribunal[57].

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[8]." SSI 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 performing 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[45]." When SSI indicators refer to supply chains where a company is active, this includes all its supply chain business relationships.

Key concepts and definitions

Sustainability strategy

A sustainability strategy links a company's commitment to stewardship of its operations and supply chains to its plan of action. The strategy demonstrates the connection between actions and improved impacts and ideally includes both 'do no harm' and 'do some good' elements. It often can be found in a sustainability report published by a company or organisation presenting the organisation's values and governance model and documenting the economic, environmental and social impacts caused by its everyday activities[58].

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. rice bran, palm oil).

Therapeutic treatments

Therapeutic treatments are regarded as the treatments of fish and shrimp in aquaculture which include the use of antibiotics and chemicals[59]. 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[60]."

Traceability

Traceability within the context of the SSI refers to full traceability across the supply chain. Full-chain traceability can be understood as the "linkage from the point of capture to the consumer of one stage of production at a time, from any stage of production to any other point along the entire supply chain (often through documentation)[45]."

UN Guiding Principles on Business and Human Rights

The UN Guiding Principles on Business and Human Rights[21], emphasise corporate responsibility to respect human rights. This means that companies should avoid infringing upon, and actively protect, the human rights of all people impacted by their operations. Specifically, business enterprises should have in place policies and processes appropriate to their size and circumstances to meet this responsibility, including:

- A policy commitment to meet their responsibility to respect human rights;
- A human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights; and
- Processes to enable the remediation of any adverse human rights impacts they cause or to which they contribute.

Key concepts and definitions

Well-managed sources

When sourcing seafood, companies should confirm that the origins of their marine ingredients come from well-managed sources, for example fisheries and aquaculture operations that are managed to ensure long-term productivity for all stakeholders. 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[61]." For assurance, companies sourcing seafood often look for sources that have been certified.

Worker voice

When an initiative to uphold labour rights demonstrates a meaningful role for workers and their organisations, it can be said to include 'worker voice'. This term means the workers concerned "form associations to collectively bargain for better conditions on an equal footing with employers[62]."

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Annexes

ANNEX 1

Guiding principles WBA

The WBA developed a set of Guiding Principles to guide its work and reflect its values and mission. These Principles have been formed in collaboration with global stakeholders throughout the consultation phase, refined based on input and feedback from the roundtable consultations, online surveys and expert meetings.

The Principles are divided into three categories: operational principles explain how the Alliance functions, benchmark development principles address how benchmarks are designed, and content principles cover what the benchmarks assess.

Currently, the Guiding Principles reflect the outcomes and findings from the global consultation phase. However, the world is changing rapidly, and additional insights and perspectives are likely to emerge over time. These Principles may evolve – in consultation with stakeholders – to reflect new findings and realities.

OPERATIONAL PRINCIPLES	
Inclusive	The WBA actively engages with and involves all stakeholders in building the Alliance and the benchmarks.
Impartial	The WBA and its benchmarks are equally responsive to all stakeholders.
Independent	The WBA and its benchmarks are independent from the industries and companies they assess.
Focused on impact	The WBA and its benchmarks promote dialogue and measure impact on the SDGs to create positive change.
Collaborative	The WBA collaborates with stakeholders and Allies to enhance alignment of corporate performance with internationally agreed sustainability objectives.
Free and publicly available	The 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	The 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 2

Sources for indicator development

Several principles and normative standards, reporting frameworks and sector-, product-, and issue-specific initiatives were used for the development of the SSI methodology. In addition, inspiration was drawn from existing benchmarks.

PRINCIPLES AND NORMATIVE STANDARDS

Food and Agriculture Organisation (FAO)
- Code of Conduct for Responsible Fisheries (1995)
- Technical Guidelines for Responsible Fisheries 8, Indicators of Sustainable Development of Marine Capture Fisheries (1999)
- Technical Guidelines for Responsible Fisheries 9, Implementation of the International Plan of Action to prevent, deter and eliminate Illegal, Unreported and Unregulated Fishing (2002)
- Fisheries Technical Paper 443: The Ecosystem Approach to Fisheries (2003)
- Technical Guidelines for Responsible Fisheries 10, Increasing the contribution of Small-Scale Fisheries to Poverty Alleviation and Food Security (2005)
- Technical Guidelines for Responsible Fisheries, Fisheries Management, Managing Fishing Capacity (2008)
- Technical Guidelines for Responsible Fisheries 11, Responsible Fish Trade (2009)
- Technical Guidelines for Responsible Fisheries 12, Information and Knowledge Sharing (2009)
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- Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries, Revision 1 (2009)
- Technical Guidelines on Aquaculture Certification (2011)
- Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2015)
- Scoping study on decent work and employment in fisheries and aquaculture: Issues and actions for discussion and programming (2016)

International Finance Corporation (IFC)
- Guidance Notes to Performance Standards on Environmental and Social Sustainability (2012)

International Labour Organisation (ILO)
- Forced Labour Convention C029 (1930)
- Declaration on Fundamental Principles and Rights at Work (1998)
- Worst Forms of Child Labour Convention C182 (1999)
- Work in Fishing Convention C188 (2007)
- Tripartite Meeting on Issues relating to Migrant Fishers (2017)

Organisation for Economic Co-operation and Development (OECD)
- OECD Guidelines for Multinational Enterprises (2008)
- OECD Due Diligence Guidance for Responsible Business Conduct (2018)

United Nations (UN)
- Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organised Crime (2000)
- Guiding Principles on Business and Human Rights (2011)

United Nations Global Compact
- The Ten Principles of the UN Global Compact (2018)

CORPORATE REPORTING FRAMEWORKS

Fishery Progress (FisheryProgress.org)
- Fishery Improvement Project Progress Tracking Database & Tools (2018)

Global Reporting Initiative (GRI)
- GRI Standards 2016

GRI and UN Global Compact
- Business Reporting on the SDGs (2017)

International Integrated Reporting Council (IIRC)
- The international I/R Framework (2013)

Shift Project
- U.N. Guiding Principles Reporting Framework (2018)

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Sources for indicator development

SECTOR-, PRODUCT-, AND ISSUE-SPECIFIC INITIATIVES

Amfori Business Social Compliance Initiative (BSCI)
- BCSI Code of Conduct

Aquaculture Stewardship Council (ASC)
- Abalone Standard Version 1.0 (January 2012)
- Bivalve Standard Version 1.0 (January 2012)
- Pangasius Standard Version 1.0 (January 2012)
- Freshwater Trout Standard Version 1.0 (February 2013)
- Shrimp Standard Version 1.0 (March 2014)
- Seriola and Cobia Standard Version 1.0 (October 2016)
- Salmon Standard Version 1.1 (April 2017)
- Tilapia Standard Version 1.1 (April 2017)
- Feed Standard Second draft, published for public consultation period 2 (21 August 2017 – 21 October 2017)

Certification and Ratings Collaboration
- Framework for Social Responsibility in the Seafood Sector (2018)

Conservation Alliance – for Seafood Solutions
- Guidelines for Supporting Fishery Improvement Projects (2015)
- A Common Vision for Sustainable Seafood (2018)

Environmental Justice Foundation, World Wildlife Fund, Pew Charitable Trusts, Oceana (2017)
- PAS 1550 (2017)

Ethical trading initiative (ETI)
- ETI Base Code (2014)

Fair trade USA – Capture Fisheries Standard
- Capture Fisheries Standard Version 1.0 (2014)

Global Aquaculture Alliance – Best Aquaculture Practices (BAP)
- Seafood Processing Plant Standard Issue 4.2 (2015)
- Mollusk Farm Standard Issue 1.0 (2016)
- Finfish and Crustacean Farm Standard Issue 2.4 (2017)

Global Dialogue on Seafood Traceability
- Framework for Interoperable Seafood Traceability (2018)

Global Sustainable Seafood Initiative (GSSI)
- GSSI Global Benchmark Tool, Version 1 (October 2015)

International Fish Meal and Fish Oil Organisation (IFFO)
- Global Standard for Responsible Supply of Marine Ingredients – Requirements for certification, Version 2.0 (2017)

Institute for Human Rights in Business (IHRB)
- 2018 Global Forum on Responsible Recruitment and Employment (2018)

International Labour Rights Forum (ILRF)
- Taking Stock: Labour Exploitation, Illegal Fishing and Brand Responsibility in the Seafood Industry

Marine Stewardship Council (MSC)
- Chain of Custody Standard: Default Version, Version 4.0 (2015)
- Fisheries Standard Version 2.01 (2018)

Monterey Bay Aquarium - Seafood Watch
- Seafood Watch Standard for Fisheries, Version F3.2 (October 2016-Present)
- Seafood Watch Standard for Aquaculture, Version A3.2 (October 2016-Present)

Ocean Health Index
- Global Scores (2015)

Oxfam
- Ripe for Change: Ending human suffering in supermarket supply chains (2018)

Seafish - Risk Assessment for Sourcing Seafood (RASS)
- RASS Scoring Guidance (2016)

Seafish - Responsible Fishing Scheme (RFS)
- Responsible Fishing Scheme Standard, Version 1 Issue 2 (2016)

Seafood Business for Ocean Stewardship (SeaBOS)
- Joint Statement from the 1st Keystone Dialogue (2016)

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Sources for indicator development

Sustainable Fisheries Partnership – FishSource
- FishSource Scores (2018)

Sustainable Fisheries Partnership – Ocean Disclosure Project (ODP)
- Ocean Disclosure Project (2018)

The Sustainable Trade Initiative (IDH)
- Aquaculture: moving beyond certification and the farm level (2017)

World Wildlife Fund (WWF)
- Traceability Principles for Wild Caught Fish (2015)

EXISTING BENCHMARKS

Access to Medicine Foundation
- Methodology for the 2018 Access to Medicine Index (2017)
- 2016 Access to Medicine Index (2016)

Access to Nutrition Foundation
- Access to Nutrition Index – Global Index 2018 (2018)

Access to Seeds Index
- Methodology for the Access to Seeds Index 2016 (2015)
- 2016 Access to Seeds Report (2016)
- Methodology for the Access to Seeds Index 2019 (2018)

Corporate Human Rights Benchmark (CHRB)
- Corporate Human Rights Benchmark Methodology 2018
- Corporate Human Rights Benchmark Key Findings 2017

Equileap
- Gender Equality Global Report & Ranking (2017)

Farm Animal Investment Risk & Return (FAIRR)
- Coller FAIRR Protein Producer Index (2018)

Know the Chain (by Humanity United)
- Benchmark Methodology – Food & Beverage Sector Version 2 (2017)

Responsible Mining Foundation
- Responsible Mining Index 2018 (2018)

ShareAction
- Workforce Disclosure Initiative (2017)

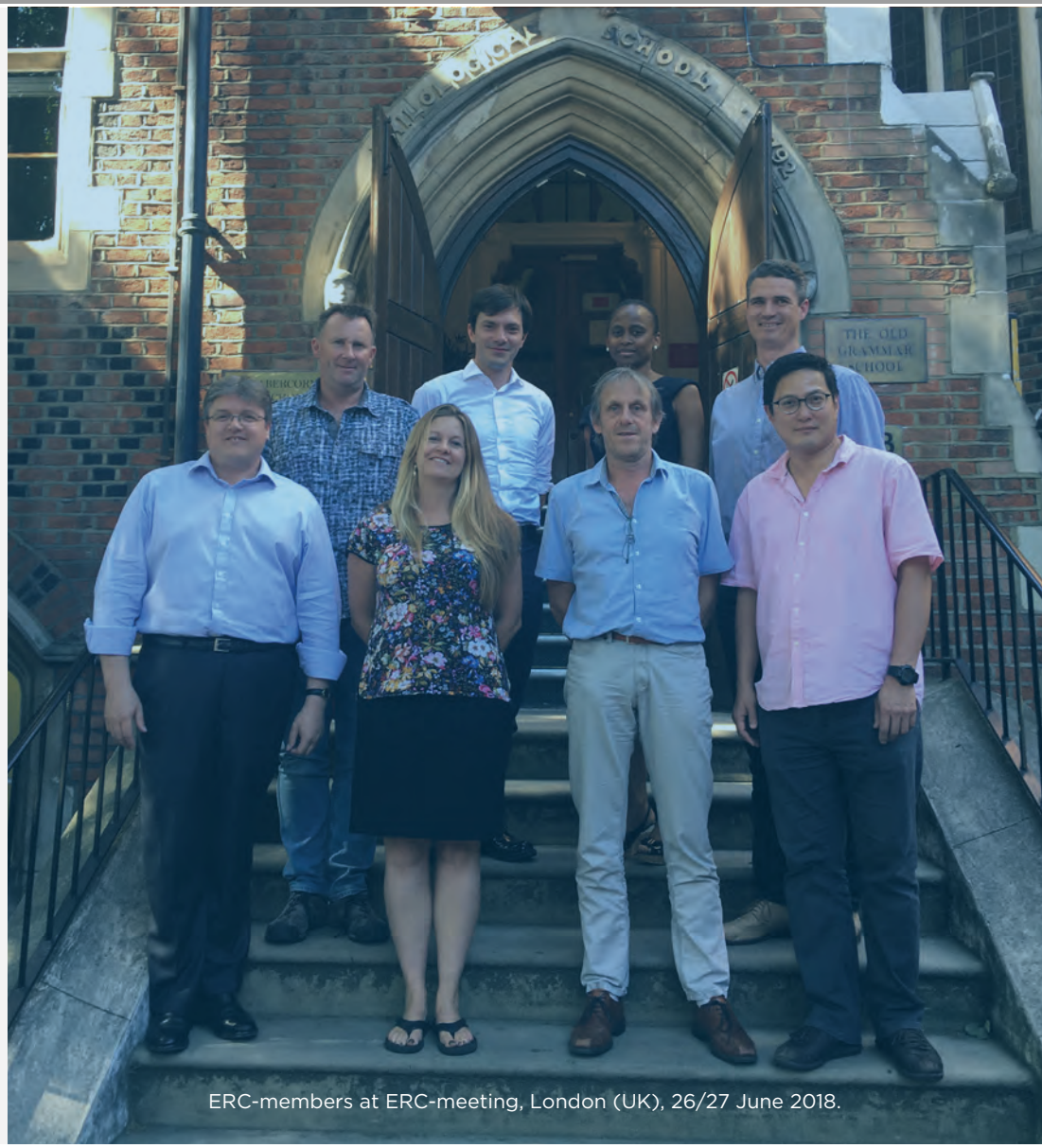
ANNEX 3

Expert Review Committee

The Expert Review Committee (ERC) is a key component in the stakeholder engagement process. The ERC is made up of individuals from a variety of stakeholder groups, all active in some capacity on the seafood stewardship agenda. The expertise of the members of the ERC cover all relevant areas within the scope of the SSI. ERC members provide the SSI team with strategic guidance, recommendations and advice on the scope, structure, content and methodology of the SSI. The diverse composition of the ERC ensures that different viewpoints and perspectives are taken into consideration when developing and refining the SSI methodology.

The following experts are member of the ERC:

Robert Blasiak	Stockholm Resilience Centre (SRC)
Bertrand Charron	Aquaculture Stewardship Council (ASC)
Clarus Chu	Worldwide Fund for Nature (WWF)
Jennifer Dianto Kemmerly	Monterey Bay Aquarium (MBA)
John Garner	Retired seafood representative
Abigail Herron	Aviva Investors
Duncan Leadbitter	Fish Matter
Blake Lee-Harwood	Sustainable Fisheries Partnership (SFP)
Oluyemisi Oloruntuyi	Marine Stewardship Council (MSC)
Henk Peters	Oxfam
Huw Thomas	Offshore Shellfish Ltd



ERC-members at ERC-meeting, London (UK), 26/27 June 2018.

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